HALTON ACTION GROUP
AGAINST THE INCINERATOR

Energy from Waste
Combined Heat and Power Generating Station
at Weston Point, Runcorn.

Application Number 07/00068/ELC

The Action Group's
Further Comments Relating to the Proposal

October 2007

Executive Committee

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Summary of our Further Comments Regarding the Proposal

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1. Introduction

In our "Statement of Concerns" (June 2007), we outlined our reasons for our opposition to the Ineos Chlor Proposal, concluding that for the residents of Halton it has no identifiable benefits, only enormous risks. We therefore recommended that the Precautionary Principle should prevail and that the Proposal be rejected, or referred to a Public Inquiry.

Three months on, the precise nature of the Proposal remains a mystery, and, despite revisions made by Ineos Chlor, there are too many unanswered questions and outstanding issues relating to major factors, too many assertions or reassertions rather than explanations and evidence based responses, too many revisions whose further implications have not been spelled out.

In our view, these adversely reflect on the credibility of the Proposal and it should be rejected. Otherwise, a Public Inquiry is essential if these issues are to be properly aired and addressed.

These 'Further Comments Relating to the Proposal' identify the issues and our views on them.

2. The Location

Weston Point, Runcorn, must be one of the worst possible locations for an Energy from Waste Incinerator, probably UNIQUELY, combining all the features, which have caused concern elsewhere:-

a. This is a densely populated area with some 16000 people living within 2 kilometres of the site, some only 50 metres away, three pre-schools, three primary schools and a further education college. Thereafter, the higher ground of Runcorn is densely populated as far as the nearby towns of Widnes and Frodsham;

b. It is one of the most polluted areas in the UK, with large areas of contaminated land due to its industrial legacy, especially heavy air pollution levels due to traffic flows to and from the Jubilee Bridge and their emissions, and increasing fallout from air traffic as the Liverpool John Lennon Airport expands;

c. The prevailing winds are south and west, therefore exposing all these residential areas to downward wind fallout 78% of the year, whilst in the 'calm' periods (approximately 12%) with minimum dilution of emissions, causing fallout in greater concentrations on houses and schools closest to the site;

d. The terrain is hilly, the incinerator being sited 200 metres from an 80 metre hill, with residential properties located downwind on its slopes. This escarpment is a major factor, leading to particular concerns about the chimney stack and associated modelling studies which are identified below;

e. The Borough has a dreadful health record, with a Standardised Mortality Rate 23% above the national average, exceptionally high rates for cancers, coronary heart disease, circulatory diseases, strokes, suicides and infant mortality, and the highest early death rate from cancers in the Country, in short, the very medical conditions identified in areas located downwind from incinerators elsewhere.

In our view, the likely cumulative effect of the combination of these factors must be regarded as a major concern. The Proposal to build the largest EFW Incinerator in the UK in such a location is highly irresponsible.

3. Incompatibility with Halton Unitary Development Plan 2003

As our 'Statement of Concerns' (June 2007) points out, the Proposal directly conflicts with the Borough Council's Unitary Development Plan, its 'Vision for Halton', the Proximity Principle, and Government advice relating to the location of incinerators in densely populated areas. The Council's Policy relating to Waste Incineration (MW14), clearly and categorically states, "Proposals for waste incineration Plants must meet all the following criteria", thereafter listing ten, of which we have identified five, (a,c,d,e and i), which would not be met.

The Strategic Director – Environment's Report to the Special Development Control Committee of the 31 July 2007, refers to the significant number of policies, (including MW14) which are relevant to the proposed Ineos Proposal stressing that "it must demonstrate that it meets all the criteria", but, thereafter, makes no observation as to whether it does. Further, this important matter was not raised or discussed in the Meeting, or recorded in the Minutes.

It has, therefore, been effectively disregarded, breaching HBC policies and rendering the Proposal invalid.

4. The Massive Increase in Pollution

a) The obligation on Ineos Chlor "to demonstrate that its Proposal will reduce harm to the environment including the impact on climate change" (Strategic Director – Environment's report to the HBC) remains to be addressed. No evidence has been produced to suggest that it will happen.

In fact, the reverse is true. Waste incineration produces CO_2 as its major pollutant. Every ton of waste burned generates a ton of carbon dioxide, while every three tons produce a ton of ash, of which the most hazardous residues, contaminated by dioxins and heavy metals, will go to Randle Island as hazardous waste.

The proposed incinerator, the largest in the UK, would dramatically increase pollution through its emissions, after burning some 850,000 tons of treated waste per year (of which only 4% would derive from Halton's own waste), increased traffic emissions arising out of the transportation of fuel and waste, and the dumping of the equivalent of 25 years of Halton's own hazardous waste each year.

This needs to be viewed in the context of the very high levels of pollution, which already exist.

b) With regard to the large areas of existing contaminated land, identified in the Halton Health Report (2003), the extent of which remains unknown, the Strategic Director – Environment has confirmed that information provided by Ineos Chlor to date can only be regarded as preliminary, and that it is still required to undertake detailed investigations.

Previous research findings concluded that, "If the sampled sites are taken to indicate the general state of land contamination in Halton, then it is probable that significant risks to public health and to the environment exist in areas previously used for industrial purposes" (Halton Health Report 2003). The proposed site remains such an area, bearing the scars of past and current land pollution, combining with 'especially heavy' air pollution caused by increasingly heavy road and air traffic, in what is one of the area's worst 'black spots'. Identifying the presence of a large number of toxic substances, the Halton Health Report stressed their dangers singly and in combination (the 'cocktail effect'), and of the particular dangers of dioxins and particulates for health.

c) The site lies within one of the largest Chemical Industry complexes in Europe and already houses two incinerators, the EIP (Environmental Improvement Project Plan), removing primarily chlorinated hydrocarbons, and the Lurgi Incinerator burning liquid chlorinated carbons such as hexachlorobutadiene,

(HCBD) (dumped previously in Weston Quarry). We are not aware that Ineos Chlor has produced any 'worst case scenario' considering possible combinations of emissions from these incinerators with emissions from the proposed Incinerator in the event of malfunction.

This is not idle speculation on the part of residents, who have vast past and current experience of industrial activity on the site and its adverse effects on their lives. Twenty years ago, the Luvella Incinerator was built very close to the proposed location of the Ineos Incinerator. Local residents spent three years fighting a campaign before successfully seeing it demolished on grounds of safety and the effects on their everyday lives. The Village of Weston, overlooking the site, provides vivid evidence of the impact of pollution on land, buildings and the health of residents, caused by the past dumping of toxic waste from the site below. As a result, houses were sealed or demolished, polluted areas landscaped and identified as unfit for development, and people forced to relocate outside the Village.

d) We have been informed that The Proposal 'assumes' that, because existing industry has been in the area for so long, emissions from these sources have shaped background pollution levels and therefore include the cumulative effects of existing industry (the 'cocktail' effect). Assumptions are not enough where possible effects on health and the environment are concerned! Independent technical advice, sought by the Action Group, indicates that if the emissions from the other large sources on the site had been included explicitly in the modelling rather than implicitly in the background data, this would have given a much more reliable calculation of short term impacts due to the combined sources.

e) Ineos claims that the Project will minimise pollution using "appropriate abatement" techniques, and ensure air quality effects through a stack of "an appropriate height". Both claims lack substance, because there are no abatement techniques, which can deal with the highly dangerous ultra-fine particles, which are our major concern, and the safety of the stack is highly disputed, as we demonstrate below.

f) Similarly, the familiar claim (reported by The Strategic Director – Environment), that pollutants from incinerators, if complying with regulations, are not regarded as significantly contributing to concentrations of monitored particles in ambient air or background levels of air pollution, fails to recognize the fact that ultra-fine particles are not subject to current regulations and are, therefore, unmonitored.

g) Ineos Chlor has still to substantiate its claim that emissions from traffic are not considered to have adverse effects on air quality because the 'worst scenario' has

been assumed. This does not equate with any supporting information reflecting conflicting accounts given by Ineos in relation to traffic movements by rail or road in the transportation of fuel and waste! HBC has identified the movement of fuel in and out of the Borough, as a major outstanding significant issue, including its impact on Halton's road and rail infrastructure and the environment.

Further, Ineos fails to address the cumulative effect of increased traffic emissions, emissions from the EFW Plant and existing pollution, where existing NO_2 levels have already been confirmed by both HBC and ENTEC as elevated, due to road traffic, and close to the limits for acceptable air quality standards.

h) Similarly, claims describing noise and vibration effects as insignificant, and visual aspects of this massive development as "unlikely to be out of accord with its surroundings", do not accord with the experience of residents closest to the site or 'reconstructions' of their likely outlook. (See Figs 1 & 2)

i) In relation to the transportation of hazardous waste to Randle Island HBC identified "no detail of the design of the construction of vehicles, nor safety procedures to prevent unwanted dispersion nor how residential areas will be protected". Subsequently, Ineos has now confirmed that fly ash will be dampened down, but no information is given as to what this entails, how it will be carried out on site, loading and unloading, or any implications for previous estimates of its transportation to Randle Island. The Primary Care Trust has confirmed that its concerns regarding the transportation of fly ash and the effects of wind-borne dispersion on residential areas and other sensitive sites remain an issue.

A major concern relates to the massive increase in the amount of toxic waste at Randle Island, amounting to some four million tons over the twenty-five year life span of the Plant, being dumped on top of the existing toxic waste buried over the last sixty years. Apart from the problems generated by wind borne pollution of fly ash, the site is next to the River Mersey and in close proximity to residential areas in Astmoor, Moore, Daresbury and Widnes and the Astmoor Business Park and Daresbury Science Park. Concerns remain about the dumping of toxic waste close to medical, food and scientific establishments, its capacity, and possible leakages into the River Mersey, unidentified risks due to flooding, and its close proximity to the proposed second bridge.

j) Despite claims by their manufacturers, EFW incinerators are not 'green', or in any way environmentally friendly. There is no doubt that the Incinerator would massively increase pollution in the Borough and that it would produce toxic emissions and residues, posing threats to the health of residents and adverse

effects on the environment. In this respect, it also conflicts with the Proximity Principle, which requires waste to be disposed of as close to the place of production as possible. This avoids passing the environmental cost of waste management to communities who are not responsible for its generation and reduces the environmental costs of transporting waste. This Proposal represents a massive additional burden in environmental costs on a Borough where those costs are already amongst the highest in the country.

5. Effects on Health

a) We are not alone in expressing the view that the single most important issue in the Proposal is its likely impact on the health and well being of the residents of Halton and surrounding areas. It coincides with the view expressed by the Strategic Director – Environment in his Report, and is reflected in the Director of Public Health's Report, and the Borough Council's Resolution that it would ask that the Secretary of State is fully satisfied that the Proposal will not have any adverse impacts upon the health of the Borough's residents before authorising the Proposal.

   Particular attention is drawn to the observations of the Director of Public Health and the request for further information made therein. It figures most in the objections made by residents and neighbouring Councils, and concerns expressed by local MPs and members of the local medical fraternity, of which a prominent member is a member of the Action Group's Executive Committee.

b) Our concerns about the risks to health are fully documented, with reference to appropriate sources, in our 'Statement of Concerns' (June 2007), also drawing upon advice we have received from acknowledged specialists in the field. Those concerns culminated in our conclusion, also recommended in the Halton Health Report (2003) and subsequently adopted by the Borough Council, that in the light of available evidence relating to the adverse effects of pollution on health, the Precautionary Principle should be applied. In her report, the Director of Public Health also makes this recommendation in line with a similar recommendation by the Committee for Medical Effects of Air Pollution.

c) In spite of repeated unsubstantiated denials by Ineos, the criticisms made by Professor J C Dearden in his 'Report on Human Health Risk Assessment' (February 2007) remain intact and damning. His criticisms of the HHRA, in ignoring the contribution to toxicity of particulate emissions, and, in particular, of the extremely dangerous fine and ultra fine particles, from the EFW Plant, have since been reflected in the advice we have received from specialists in the field, and the Committee for Medical Effects of Air Pollution's pronouncement that there are clear associations between daily and long term average concentrations of air pollutants, in particular fine and ultra fine particles, and their effects on the cardio vascular system.

   The Executive Director - Environment, has described the HHRA provided by Ineos as "limited in its evaluation of the possible effects on the health of all populations likely to be exposed to emissions from the Plant", lacking the comprehensiveness of a more detailed Health Impact Assessment.

   The Director of Public Health has recommended that Ineos be required to

quantify the effects of the additional particulate air pollution generated on the health of Halton residents, that a Health Impact Assessment be commissioned, and that the movement of fly ash is controlled.

d) Incinerators are a major source of particulates (PM10's), fine particulates (PM2.5's) and ultra fine particulates (PM0.1's), toxic metals and persistent organic pollutants (POP's), including known carcinogens, dioxins, mutagens and hormone disrupters.

The smaller the size of these tiny particles, the more dangerous the health effects. Their miniscule size allows them to be breathed deep into the lungs and absorbed into the bloodstream. The human body has no natural defences against these manufactured compounds.

In 2006, a highly respected critical review of over five hundred papers, relating to the health effects of fine particulates, concluded that the findings provided persuasive evidence that exposure to fine particulates has adverse effects on cardiopulmonary health. This has been acknowledged by the Primary Care Trust, which also accepts that pre-existing health conditions are likely to be exacerbated by exposure to these particles. The World Health Organization has also concluded that fine particulate air pollution has a strong effect on mortality, and that there is no safe threshold below which fine and ultra fine particulates have no effect on health.

Of greatest concern is the bioaccumulation of air pollution, (the 'cocktail' affect), and its long-term effects on health, especially to the developing embryo and infants. A large number of studies have shown higher rates of adult and childhood cancers, birth defects and increased mortality rates downwind of incinerators.

Increased traffic pollution, train movements and noise levels from a Plant operating twenty-four hours a day, leading to sleep deprivation and mental stress will be additional health hazards, as the PCT has also acknowledged.

e) The threats to health described above must be evaluated in the context of Halton's appalling health record. That evaluation must pay particular attention to the fact that Halton already has high morbidity rates in the medical conditions associated with the location downwind of other incinerators. Past experiences show the costly consequences of disregarding early warnings of these hazards, as for example in the case of asbestosis, a long-term condition suffered by Halton residents working in associated industries.

However, Ineos has maintained a monastic silence so far as the issues relating to ultra fine particles are concerned, whilst its responses to questions regarding its claims that modelling shows effects to be "neutral", "insignificant" or "minor", assert that "worst case" data or scenarios have been used or "assumed".

Thus, in relation to PM10's it claims that limits have been achieved, and, recently, although there are no limits for PM2.5's, the model has been "rerun to show ground level concentrations are considered to be neutral". These claims, together with the reassertion of the validity of their original claims, form a large part of what is offered as evidence and explanation. In turn, it is often repeated by HBC Officers in their Report without comment.

We therefore have no evidence of whether the claims and the accompanying data have been independently verified or critically examined. The Director of Public Health has pointed out that Ineos has not identified any significant concerns regarding emissions, but that this cannot be independently verified in the absence of operational data. Similarly, although we are aware of the limitations of modelling, and the criticisms of the problems associated with it, Ineos, and HBC Officers, do not appear to recognise them.

For example, Ineos claims, in relation to the models of air quality, it has used "worse case" data. On the other hand, HBC Officers refer to the data being drawn from "a wide area" around Halton, in the case of furans and dioxins, from Manchester, over thirty miles from Halton! We are, therefore, bound to wonder if estimates of existing pollutant levels are reliable. Nor is it clear, as ENTEC points out, to which years this data refers.

Professor Dearden has pointed out that the HHRA appears to indicate that an acceptable risk of cancer from the EFW Plant is 1 in 100,000 whereas the USEPA recommended cancer risk is 1 in 1,000,000. On that basis, he argues, at twenty-three of the thirty-seven resident receptors around the area the predicted cancer risk is greater than one in a million, i.e. over the recommended limits. Since this relates only to the risk from the EFW facility, and does not include existing risks from other pollutants or increased traffic emissions, it follows that the EFW Plant would raise the risk of cancer to an unacceptably high level in the town with the worst cancer record in the UK.

Issues relating to the modelling of the stack are referred to below. And there are others, which have caused us to ask how much weight can be put on the predictions, which have been presented to us.

f) Ineos continues to repeat the standard response from companies operating

incinerators that they operate to statutory standards, guaranteed by stringent and regular independent monitoring, and, if properly run, therefore safe. As we have already noted above, current regulations do not require the monitoring of emissions below PM10, and the fine and ultra fine particles therefore remain unmonitored. Further, these tiny particles cannot be filtered at source, and there is no abatement equipment, which can restrict their emissions. The reality is that the independent monitoring of dioxins only takes place twice a year, and all other monitoring on a self-reporting basis. In any case, the Environment Agency has confirmed that companies are forewarned of these visits, and that any plant in breach of regulations would not, realistically, be shut down. The claim to "regular, stringent monitoring" lacks any conviction!

g) Halton residents have no illusions about this site. They know, from current and past experience, that 'normal working' is an illusion, interrupted by malfunctions, associated with start up and shut down, blowouts etc, and emissions damaging to their health. Two recent Reports (2007, listed in our Statement of Concerns) have highlighted the excess risk of kidney disease and morbidity already existing in the population living closest to this site, and there are other such conditions. They have every right, therefore, to distrust any assurances that this incinerator will not make things worse.

6. Other Major Factors

The other major issues raised in our 'Statement of Concerns', inter alia, relate to the location of the incinerator, the stack height, the nature, specification, reliability, quality control and sources of the proposed fuel, the logistics of the incineration process, start-up, shut down, or malfunction, the nature of the emissions and the specification of the incinerator itself, the adequacy of any abatement equipment, filtration, comparative information on 'similar' incinerators, the transportation of toxic waste and its dumping at Randle Island, traffic movements by road and rail, congestion and noise.

a) Ineos has variously described the incinerator as "modern", "state of the art" and "tried and tested". No information has been forthcoming other than that "similar" plants are operating in Europe and, latterly, in response to repeated requests for information, we have been told that a "similar" incinerator is in operation at Cologne. We await the specification. If it is "new", then we would not, of course, expect any information to be forthcoming relating to the long-term effects on health we have identified above. However, it is surely reasonable to expect that we would be told in what respects it is "similar" to that proposed here. To make 'like for like' comparisons, we would need to know details relating to its specification and history, together with crucial information such as the proximity of residents, population density, the topography of the terrain, wind direction, and the nature and specification of the fuel in a country with a recycling record of some 70%, compared with the UK's 25%. There are no signs that the information will be forthcoming.

b) Again, there has been little information regarding the technology. Latterly, we have learned that it is to be WCMG (Water Cooled Moving Grate), the same technology used in the Luvella Incinerator at Weston Point 20 years ago, which continually malfunctioned and caused considerable distress to residents, many of whom are now once again threatened. As we have already indicated, it was closed as a threat to health.

   Ineos claims the abatement equipment will "minimise" emissions from the stack, and refers to the use of bag filters and "scrubbing". We have already pointed out there is no abatement equipment which will inhibit the emission of the extremely dangerous fine and ultra fine particles. Bag filters, which were also used in the Luvella Incinerator, do not remove particles less than 10 microns in size. They were also known to be unreliable and to malfunction. Scrubbing and bag filters do not guarantee removal of the toxic substances arising from incineration, or that particles of 10 microns or above will not escape through malfunction. It is, therefore, highly likely that emissions will contain CO_2, dioxins and heavy metals in addition to fine and ultra fine particles.

There is also a lack of information in relation to the problems associated with start up and shut down periods, producing unregulated emissions due to variations in temperature, and as to how buoyancy to the plume will be maintained if the temperature drops below the 140ºC which Ineos claims will be a "constant".

We cannot overstress that it must be recognized that residents have vast experience of the chemical industry, and that a great many have worked or do work on this site. They are therefore, well aware of the problems which can and do arise, and of the associated dangers.

c) The Borough Council has identified the movement of fuel, in and out of the Borough, as a major significant, outstanding issue. There are no existing waste processing facilities in neighbouring authorities and no approved plans to build any. Therefore, the sources of fuel for this incinerator are unknown, though Manchester has indicated an interest.

There is, therefore, no information available about the composition of the processed waste feed, or of any specification requirements except an Ineos emphasis that it must be of a high calorific value.

This is very worrying! The nature of the fuel will be variable, could include anything put into dustbins because there are no specification requirements or overall quality control, and is highly likely to contain heavy metals, plastics and other potentially toxic materials because these would provide the high calorific value required, at the expense of recycling and reuse, and to the detriment of health and the environment. Given the variability that will occur in the waste from which the fuel is derived, there can be no steady state conditions. The nature of the fuel, and the responsibility for its quality, will therefore lie with its sources, as yet unknown. This seems highly risky.

Consideration must also be given to the fact that achievement of the Governments' future recycling targets will raise questions as to future supplies of fuel. If a recycling target of 50% were achieved, for example, this would lead to a shortfall of some 300,000 tons per annum of RDF against the estimated requirement of 850,000 tons per annum by the Incinerator. How, then, could the operation be sustained unless other sources of treated waste were secured? From where and at what cost to its quality, and to the environment and health? This is an issue raised in the ENTEC Report, whilst MEAS (Merseyside Advisory Service) points out that failure to meet the targets proposed could lead to Merseyside becoming a long term importer of waste.

In the absence of the necessary information relating to these important issues, we cannot see how this Proposal is credible.

d) The issue of the stack has figured large in local discussions of the Project. Ineos has repeatedly denied that its proposed height has been dictated by limitations imposed on the height of buildings in the flight path to Liverpool John Lennon Airport. However, first suggested by Professor J C Dearden, this has been subsequently confirmed by Halton Borough Council and in the ENTEC Report.

On the basis of supporting modelling studies showing complete dispersion, Ineos proposes to build a 105 metre high chimney stack at the bottom of an 80 metre hill, surrounded on three sides by houses and three adjacent schools, in the direction of the prevailing wind, which would, thereafter, cover most of Runcorn and surrounding areas. This compares with the 100 metre high chimney deemed appropriate for the proposed smaller Ince Incinerator, burning 200,000 tons less fuel, located on flat ground and with no residential housing nearby. How, then can it be claimed that the Ineos Incinerator only needs to be built 5 metres higher when it is located upwind and adjacent to an 80 metre hill? Common sense suggests that the stack would need to be 40 metres higher to avoid the adverse effects of the escarpment. This would, of course, conflict with regulations relating to the John Lennon Airport.

Ineos has repeatedly argued that its modelling studies have shown that the hill is not a factor, and that, in effect, a chimneystack of 105 metres will guarantee safe dispersion. Residents are totally unconvinced by this response, which flies in the face of common sense, and also conflicts with local knowledge and experience of the eddies and flows which occur. Latterly, the ENTEC Report has confirmed that the residential properties on Runcorn Hill are of particular importance as with a tall stack there is potential for plume grounding in this area.

In the light of widespread concern, Halton Borough Council commissioned an independent evaluation by ENTEC. Its report was not available at the Development Control Committee Meeting of the 31 July 2007, but an oral report by officers quoted ENTEC's conclusion that it had been unable to identify any major technical discrepancies in the Ineos Report, and that the modelling they had undertaken agreed with that conclusion. This is not surprising given that they had rerun the model, using the same data! However, on reading the Report since, we have noted a number of observations, which, as with computers, demonstrate that, the information derived from modelling is only as good as the information put in, and the assumptions on which it is based.

Table 1.1 of the ENTEC Report lists 18 outstanding issues in relation to the Air Quality Assessment Review and 3 in relation to the modelling checklist. The

main significant issues identified relate to the background concentration selected, which may be an under estimate of what is likely to happen at a number of the sensitive receptors, and a coarse receptor grid (300m spacing) which may miss the location of the highest pollutant ground level concentrations. It therefore recommended that the background concentrations are investigated in more detail and that the receptor grid resolution is refined, which may impact on the worst-case meteorological data assessment, which might also need to be reassessed. It is also significant that the ENTEC Report questions Ineos' use of the 'worst case scenario' in relation to some of the data quoted, with reference to NO_2 and NO_x pollutants, and recommends alternatives.

The two main issues identified by ENTEC are that "A receptor grid spacing of 300m would seem too large… it would be more appropriate to have a finer resolution where potential 'hot spots' could exist…. With a large grid spacing the maximum ground level concentration could be missed", and that "Although residential properties are identified approximately 50 metres to the south and 240 metres to the east, only vulnerable population centres have been included in the model… it is suggested that the closest residential properties to the site should be included. The properties on Runcorn Hill are of particular importance".

Professor Dearden had earlier pointed to the absence of receptors in Frodsham and Helsby despite Ineos' claims. Subsequently, his approach to Cambridge Environmental Research Consultants, the developers of the ADMS model, confirmed that it was "strange" that the hill appeared not to have an effect on the dispersion of pollutants from the chimney. We have discussed ENTEC's Report with Cambridge Environmental Research Consultants. Their comments are as follows:-

i. The stated receptor grid spacing of 300 metres is too large and not in line with Environmental Agency rule of thumb, which is to use not more than 1.5 times the stack height. 100 metres would have been more suitable for the range of stack heights modelled.

ii. The coverage need not to have extended out to 15 km around the stack. 3 km would have sufficed, allowing a higher resolution receptor spacing and higher resolution terrain data. The terrain data used would have had to be fairly low resolution to have allowed the modelling to cover an area of 15 km around the site, and so the model may not have adequately picked up the terrain local to the site. This could explain why the terrain effects are minimal.

iii. If emissions from the other large industrial sources on the site had been included explicitly in the modelling rather than implicitly in the

background data, this would have given a much more reliable calculation of short-term impacts due to the combined sources.

In effect, then, using the large scale grade could mean that the first point of reference would be on the lower part of the upslope of Runcorn Hill, the second over the crest of the hill and thereafter on the lower downward slope, explaining why the terrain effects would be regarded as minimal.

Since Ineos' case relies solely on the computer model, it is vitally important that the issues we have raised above are resolved. It should also be pointed out that the Development Control Committee were not aware of these issues when making their decisions.

It remains our view that the hill will have a significant effect on dispersion, causing turbulence in high winds and plume grounding on properties in areas nearest to the stack. No convincing evidence has been produced to show that the 105 metre stack proposed will ensure safe dispersion.

e) We have already identified above concerns relating to the transportation of toxic waste to Randle Island, and to the 'pre treatment', which Ineos has recently outlined in response to criticisms relating to the transportation of fly ash. No indication has been given of its effects on traffic volumes and increases in emissions on a highway, flanked by residential properties and sensitive business areas, leading to the dump immediately adjacent to the Wigg Island Country Park.

f) Wider concerns relating to traffic movements, emissions, and congestion have still to be addressed. As we indicated earlier, Ineos claims that the Proposal will have no significant effect on the highway network. This view is not shared by Halton Borough Council, which believes that the movement of fuel in and out of the Borough is a major, significant outstanding issue, with no information on its impact on roads and rail infrastructure, and the environment.

The Borough's roads are already heavily congested, and, in particular, those nearest to the Jubilee Bridge and to the proposed site, which are signposted warning of "Queues Ahead". This is best illustrated by the fact that a second bridge is to be built across the River Mersey to relieve congestion, whilst the Jubilee Bridge is identified as one of the Borough's pollution 'hotspots' due chiefly to traffic emissions. There are major concerns that Ineos' estimate of an extra 400 vehicles transporting fuel every day, will gridlock the Bridge and surrounding roads and vastly increase pollution. At the same time, these are only estimates, and could reach 600 vehicles a day depending on whether the fuel is

transported by road or rail.

After initially claiming that fuel will be delivered by road and rail, and possibly water, Ineos has latterly stated that it would prefer all suppliers to transport treated waste by rail, but that the decision lies with the supplier. The uncertainty this has created means that currently there is no indication from where and how this treated waste will be transported. In turn, this means that original estimates of 10 trains a night would need to be doubled or even trebled to cope with the switch from road to rail. However, this raises major questions about the suitability of the currently rarely used track, which is to reopen, and to its effect on the main railway network. No information has been provided to prove its feasibility.

At the same time, these developments cannot be divorced from other major developments relating to the Expansion of Runcorn Docks and the Halebank Multi-Modal Depot, which will, in themselves considerably increase traffic movements by road and rail, and, therefore, pollution and noise, in the same area as the site of the proposed Incinerator. Again, so far as we are aware, there is no information available which demonstrates the cumulative effects.

In summary, current uncertainty, relating to the issues we have identified above, means that we can have no precise details about vehicle movements, volume of traffic or their sources, levels of pollution, congestion and noise.

Residents, particularly those living nearest to the proposed site, are understandably concerned about the effects on their daily lives, both in the constructional and operational periods. Ineos has continued to claim that there will be “minimal” effects in terms of noise. This has failed to convince those living near to the site and to the rail track. Again, past experience suggests that there will be unacceptable noise and vibration effects emanating from passing diesel engines throughout the night. Apart from their feasibility, there are also questions about the effects of any increases in train traffic in increased noise and vibration levels, passing houses at roof top level.

7. The Perceived Threat and Public Hostility

a) Ineos has shown little understanding of the widespread hostility in the community to the Proposal, or of the fears residents have about its impact on their health and daily lives, and particularly on their children. Knowledge and experience of past and current activities on the site, and their adverse effects are widely shared across the town.

As we have indicated above, the future for those living nearest to the site can only be bleak. G.P.'s confirm the considerable stress and distress suffered by residents affected by the Weston Village disaster and the Luvella saga, in addition to the daily problems living close to this site brings. They have good reason to fear the new threats this incinerator would bring to their lives. Faced with the prospect of twenty-four hour traffic past their houses by road or rail, the bedlam of dust, noise and disruption in the three years of construction and later in its operation, and the loss of visual amenity blocked out by the Plant and its associated buildings, many residents have informed us that they are seriously considering moving out of Halton. But of course, many cannot afford to do so! Predictably, there is already evidence that the threat to build the incinerator in itself is affecting house prices, generating more stress and distress. In our view, this can only increase.

b) In our 'Statement of Concerns' we concluded that we could identify no benefits to the residents of Halton arising out of the Proposal, only costs and great risks, detrimental to its regeneration, image, the health and quality of life of its residents, and its future social and economic development.

Throughout, Ineos has predictably played the 'job card'. Generally, this has taken the form of veiled threats that if this Proposal is not approved then current jobs on the site will be at risk. The threat has not impressed residents who have experienced similar threats or idle promises over the years from companies on the site. Latterly, Ineos has changed tack, choosing to claim that, if the Proposal is not approved or if it goes to a Public Inquiry, then its financial viability will be at risk, as will be the future of the site. In our 'Statement of Concerns' we outlined our reasons for believing this to be an empty threat. Moreover, there are further questions relating to the substantial Ineos and DTI investments recently made into the existing plant, which Ineos now claims to be at risk.

The European Commission's letter of 10 December 2003 relating to "State aid in favour of Ineos Chlor" confirmed the £40 million grant and a £10 million non-interest loan were approved to secure Chlorine supply in the UK and "the safeguard of 1,230 jobs". It is difficult to understand why these should now be at risk, when gas prices are fluctuating! Nor is it consistent with the statement that the Proposal is necessary to supply 20% of its energy needs.

c) We have already indicated that residents are overwhelmingly opposed to the Proposal and in favour of a Public Inquiry. In this they are supported by the majority of Runcorn's Councillors, and all Liberal Democrat and Conservative Councillors in the Borough, on whose behalf letters have already been sent to the Secretary of State expressing that view. Further support and expressions of concern have come from the Borough's two M.P.s, Mr Twigg and Mr Hall, other interest groups in the town and neighbouring local and parish Councils.

Failure on the part of the Development Control Committee to specifically request a Public Inquiry is currently the cause of great anger and disbelief in the town! Various explanations have been offered, but none to the satisfaction of residents or other non-members of that Committee.

A number of issues relating to the insistence that the matter be referred to the Development Control Committee and treated as a planning application, rather than to the full Council for an opinion as the Action Group argued, the exclusion of a member, and certain procedural issues relating to the conduct of the meeting itself, are all currently being pursued with a view to further action if necessary.

Meanwhile, it is important that it is understood that the Development Control Committee's membership ensured a majority of Widnes Councillors, who are not accountable to the Runcorn electorate, making a decision relating primarily to Runcorn. Understandably, this has caused a great deal of anger in Runcorn. It should be made clear therefore that the majority support of Runcorn's Councillors is for a Public Inquiry.

8. The Need for a Regional Decision for a Regional Incinerator

The Ineos Chlor Proposal is clearly for a Regional Waste Incinerator, and is solely motivated by its own commercial interests. It has, therefore, vigorously campaigned throughout for a speedy decision in its favour and against a Public Inquiry, because there are some three other proposals in the Region competing for the same waste. As we have argued above, there are major issues of concern, which remain unresolved. A decision should not, therefore, be taken hastily, leaving our community burdened with this incinerator for the next 25 years!

Clearly, Ineos Chlor's preoccupation is with the production of electricity at the lowest possible cost, and the opportunity to sell surpluses at profit to the Grid, rather than the disposal of waste. Strategically, it is difficult to believe that Government would wish to see future energy policy dictated by piecemeal, pre-emptive developments of this kind!

We have already pointed out that the Proposal contravenes the Proximity Principle. If this is to be disregarded, then it leaves open the question of how decisions are to be made regarding major proposals of this kind, to protect the interests of local communities and, at the same time, the wider public interest.

Certainly, this pre-emptive bid should be considered on its merits, not on a 'first come, first served' basis, and, as a Regional Incinerator, it should be considered on a regional basis, with a proper comparison of the merits of all competing proposals, their advantages and disadvantages.

Our reading of the Government's White Paper, "Planning for a Sustainable Future", suggests that it envisages changes to current planning procedures on these lines, in relation to future regional and national projects. This Proposal is for the largest EFW Plant built in the UK to date. It is, therefore, a major project whose appraisal requires scrutiny, by the best technical expertise available, to determine its coherence, robustness and veracity!

We urge the Secretary of State to consider the merits of the competing proposals for this Regional centre, before making a decision.

9. Summary

1. The precise nature of the Proposal remains a mystery. There are too many unanswered questions and outstanding issues relating to major factors, too many unsubstantiated assertions, revisions whose implications have not been spelled out, and little evidence of independent scrutiny and verification.

2. Weston Point, Runcorn, must be the worst possible location for the largest EFW Plant in the UK, uniquely combining population density, a highly polluted environment, contaminated land, prevailing wind, hilly terrain and the worst health record in the UK.

3. The Proposal does not comply with the Halton Unitary Development Plan, the Precautionary Principle and Government advice relating to the location of EFW Plants in densely populated areas. Its incompatibility with the Halton Unitary Development Plan renders it invalid.

4. The Proposal would vastly increase pollution in one of the most highly polluted areas in the UK. The 'cumulative effect' requires fuller investigation as recommended by the PCT.

5. Opinion across the Borough has identified concerns about its impact on health as the single most important issue, for an area, which already has an appalling health record, amongst the worst in the UK.

6. Issues which still need to be resolved relate to technology and specification, stack height, reliability, quality control and sources of the proposed fuel, the logistics of the process and its malfunction, the adequacy of abatement equipment, filtration, comparative information on 'similar' incinerators, the transportation of fuel and toxic waste, its dumping at Randle Island, traffic movements by road and rail, congestion and noise.

7. Ineos has underestimated the overwhelming hostility across the community to this Proposal, which is widely perceived by residents as likely to have disastrous effects on their health, daily lives and environment. This view has been supported by the majority of Runcorn Council Members. The Proposal also conflicts with the Borough's image and will certainly affect its social and economic re-development.

8. The Proposal, for a Regional Centre, needs a Regional decision. All competing proposals require scrutiny by the best technical expertise available and should be considered on a regional basis, with proper comparisons of their merits and their disadvantages.

10. Conclusion and Recommendation

From the foregoing, it is clear that the Proposal presents little or no information on the most critical and important issues, and fails to convincingly address the concerns, which have been raised. Essentially, this speculative bid is flawed, lacks clarity, coherence and rigour. Unfortunately, residents of Halton will be the unwitting guinea pigs in this massive experiment, which could have disastrous consequences for their health, quality of life and environment, and the image and regeneration of the Borough.

On the evidence currently available, the Action Group recommends that the Proposal be rejected or referred to a Public Inquiry, so that the issues can be properly aired and addressed.