

Office of Licensing and Guidance, Environmental Protection Agency, Headquarters, P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.

nearby and on the birds of the SPA.

c/o 15 Castle Park, Sandymount, Dublin 4.

27/9/2006.

Dear Sirs,

With reference to the proposed incinerator/waste to energy plant beside the Pigeon House Road on the Poolbeg Peninsula, Dublin 4. we are deeply concerned and worried about the impact this proposal will have on the surrounding environment and on the fauna and flora of the adjacent SPA, SAC and pNHA at Sandymount and Merrion strands and South Dublin Bay. We are also concerned about the impacts of the biocides used in water treatment for the plant and the effect of these plus the increased water temperature at the outfall point on the fish and marine life in the Liffey, and indirectly on the terns which nest on the dolphins in the Liffey

The estuary and river was at one time a salmon fishery. It is at this point in time, as far as we are aware, a salmonid river. According to the EIS for the proposed development the temperature plume of the estimated cumulative effects spreads over a much wider area than it did for first one and then two power stations. In addition the outflow for the sewage plant enters the river via the same cooling water channel for the ESB/Synergen power station at the same point as the proposed incinerator. The storm overflow tanks for the sewage plant also discharge into this channel near its junction with the Liffey.

We understand that the quantities of biocides and other chemicals used in water and flue gas treatment can vary quite considerably according to the waste types being treated, e.g. plastics, and are concerned that if sewage sludges of unstated amounts are introduced into the process, the estimates given in the EIS would not necessarily tally with those required during actual operation of the plant.

The cooling water channel sediment was the subject of extensive remediation when the ESB/Synergen plant was under construction because of the number of unauthorised sewage outfalls discharging into it

The channel was also contaminated with some chemicals and oils. We feel that it is possible that even after the cleaning some contaminates could remain in the sediments.

It is proposed to dredge part of the channel during constuction for the intake pipe and pumphouse which will disturb these sediments and in any case lead to turbidity of the water that could affect fish and other marine life.

The effects of bioaccumulation are described as "not significant". For birds which have already been placed under stress there is the possibility that they will be unable to withstand the effects as easily as birds inhabiting an unpolluted, undisturbed healthy environment.

The cautionary principle should, we feel, be adopted in this case if serious ecological consequences are to be avoided.

There is no necessity for siting the proposed incinerator here - there are other alternatives.

Consent of copyright owner required for any other use.

There are no details of the proposed storage and treatment methods to be used for residues resulting from the incineration process whatsoever, nor of the precise sites to be used for these purposes. The EIS simply states that the residues will be exported until such time as decisions have been made as to its disposal in Ireland. It is difficult for us to understand how licensing conditions would solve this problem. There is no provision shown for by-pass wastes or recovered metals.

The lands adjoining the proposed incinerator site are in regular use by the birds from the SPA for drinking water, [there are rainwater ponds on these lands] and for resting and refuge during stormy weather at all seasons of the year. This section of the South Dublin Bay area hosts both summer and winter migrants, as well as resident birds, of both terrestrial and maritime habitats. The "temporary construction" lands are the only remaining level area left available to complement the compensatory habitat for Brent geese. In this regard it should be explained that the compensatory habitat provided following the construction of the sewage works was not additional habitat but a reinstatement of that which had previously existed. The small area of grassland presently existing within the confines of the waste water treatment plant is destined for the proposed extension of that plant and will be a further loss.

We note that excavated materials are destined for disposal on land or sea. The site is contaminated and has a number of "hot spots". [Contaminants above Dutch intervention levels]. Aside from the question of whether or not it is acceptable or desirable to dispose of any soils in the sea it would be extremely difficult to ensure that no contaminated soil would be dumped on e.g. the Burford or Kish Banks.

Even the best regulated plants are subject to a variety of accidence including fire and spillages. We feel that the possibility of run off or discharge into the river, sea or onto adjoining lands cannot be discounted.

Contamination of ground water and sea during construction works on this contaminated and unstable site is a very real possibility especially having regard to the site geology section of the EIS. Monitoring itself does not prevent problems of your just it merely records what has already happened. Is a special licence required for monitoring equipment containing radioactive components?

We enclose a copy of our submission to An Bord Pleanala. The effects on highly sensitive environments cannot be undone.

Lorna Kelly, p.p. Sandymount and Merrion Residents Association.

We apologise for the deficiences in this submission - as a Residents Association, albeit one that has its origin and main interests based on environmental matters, it is difficult for us to produce a comprehensive evaluation of all the aspects involved.

Yours sincerely,

Lorra Kelly

EPA Export 25-07-2013:20:13:00

Consent of copyright owner required for any other use.



The Secretary, An Bord Pleanala, 64 Marlborough Street, Dublin 1.



c/o 15 Castle Park, Sandymount, Dublin 4.

26/9/2006.

Dear Sir,

Enclosed is our preliminary submission regarding the proposed incinerator to be sited on the Pooolbeg Peninsula.

We trust that during the oral hearing into the proposal we will be able to expand on the issues mentioned within.

We were unable to comment on the important issues of fire prevention and hazard and on the

We were unable to comment on the important issues of fire prevention and hazard and on the form/s of emissions monitoring to be used due to lack of sufficient information in the EIS. We do however, wish to raise them at an oral hearing of this proposal.

As we feel sure you will appreciate, it has been impossible for us to discuss in full and complete detail all the issues we have raised in this written submission which, in spite of the generously expanded timeframe allowed for comment which we realise is longer than that usually afforded for planning appeals, would require several months work.

Yours very sincerely,

Lorra Kelly

Lorna Kelly, p.p. Sandymount and Merrion Residents Association.



The Secretary, An Bord Pleanala, 64 Marlborough Street, Dublin 1. c/o 15 Castle Park, Sandymount, Dublin 4.

26/9/2006.

Applicant:

Dublin City Council

Development: Mass burn incinerator.

Site:

Poolbeg Peninsula/ Pigeon House Road. D.4.

Dear Sir,

This appeal submission follows as far as possible the headings of the non-technical summary of the EIS, cross-referenced to the appropriate chapters and sections of the Main Report and Appendices, volumes 1,2,and 3.

The full report on Community Gain by Trutz Masse in association with Brady Shipman and Martin, although briefly referred to in relation to comments re the above report volumes, is treated seperately because it identifies a number of highly important issues in respect of the methodology used in the promotion of this project by the local authority to date.

A. Waste management plan for the Dublin Region.

At the head of the waste management pyramid and EU policy is the prevention of waste arising. The emphasis on waste management/reduction in the Dublin Region, as it is throughout Ireland, is on recycling and disposal methods. While it is acknowledged that recycling has a serious role to play in waste management there is no real attempt being made at National government, and therefore also local level, to introduce measures to reduce the amount of waste produced, with the exception of the plastic bag levy. The very term "waste management" implies the management of waste already produced in the absence of any serious attempt to reduce the quantity at source.

This is a serious flaw in the consideration of any <u>waste policy</u> as distinct from waste management.

The consumer as the end user has no power to influence the vast quantity of non-recyclable, non-reusable packaging on the goods presented for sale. In only very few instances does the consumer have a choice. The type of packaging used is also an issue - there is still far too much plastic, as distinct from biodegradable packaging, in use when some form of packaging is necessary. Recommendations from Dublin City Council in this regard should be examined and acted upon at Government level as a matter of urgency. In other EU countries <u>producer</u> responsibility is being tackled.

There is still a vast amount of demolition rubble and construction waste, approximately 4,000,000 tonnes, by far the greatest proportion of the waste under consideration, being sent to landfill without anyone asking the question whether the property being demolished could in fact be reused.

Existing regulations in regard to construction waste do not apply to all development, only to those of a certain size. The large number of smaller infill developments and sizeable extensions produce a considerable quantity of such waste that is simply disposed of, most of which cannot be burnt in any case.

The inclusion of this waste fraction in the feasibility study as part of the total percentage that could be diverted to incineration skewed the figures.

The review of the Waste Management Plan for the Dublin region 2005 does acknowledge that prevention has the highest priority in the EU waste heirarchy and that the policy goal is to decouple waste generation from economic growth. The Review states " Some of the main barriers to waste prevention have been the low level of understanding of the concept and the lack of a standardised definition and method of measurement." The National Waste Prevention Programme recommended definition in the Clean Technology Centre document says "Prevention: - Elimination or reduction at source of material and energy consumption, waste arisings [solid, gaseous, heat and liquid] and harmful substances."

However, it is on the basis of a management [disposal] policy as distinct from a neration purposes only any other prevention/reduction policy that the proposals for an incinerator, and its excessive size, have been produced.

B. Site Selection.

The review of the Waste Management Plan in 2005 did not examine the question of overall suitability of the Poolbeg site, or the need for an incinerator in the first instance if and when real waste prevention measures and all recycling plants are in full operation.

The elected representatives and a large number of the submissions to the review expressed opposition to this proposal on various grounds but were not in a position to influence what has been made an executive function.

Planning and Waste legislation has been altered on the basis that incineration, and in particular certain selected/pre-determined proposals of which this is one, can be imposed on citizens by removing all opportunity for democratically based discussion, consultation and reasoned decision.

Effectively, an individual can make a decision to build an incinerator on the site reclaimed from coastal wetlands in Sandymount with the main purpose of burning as large a quantity of waste as possible.

The lack of real consultation has only been seriously tackled by Trutz Haase in his report, at what is a very late stage in the process. Had he been appointed earlier in the proceedings the contract for incineration on the stated site of the Poolbeg may well have been reconsidered.

The Waste Management Plan Review 2005 under the heading Coastline in the section headed Study Area states "Much of the coastline of the study area is classified as a Natural Heritage Area as shown in map 6."

Under Land Use it states "It is the policy of each of the Local Authorities that environmentally sensitive and High Amenity Areas be protected."

Table 2.5 lists the National Heritage Areas, Special Areas of Conservation and Special Protection Areas. Among them is South Dublin Bay which includes the entire area of Sandymount and Merrion Strands which have all three designations.

These are all designations described as areas to be eliminated in the site selection process. In addition it is a policy of the City Development Plan to make a Special Amenity Area Order for the Souh Bay area including some of the reclaimed land.

This was deliberately ignored in the 1999 siting study and yet again in the <u>Site Selection</u> section of this EIS. The EIS also ignores the fact that the compensatory habitat for Brent geese and waders from the designated area actually adjoins the "preferred "site on Poolbeg.

The 1999 study [see table 4.1 of section 4 of the EIS] refers to the Poolbeg site as site A and states "although currently just satisfactory, road access is set to improve in line with the timescale for development of the thermal plant."

Table 4.2 of section 4, volume 1 of this EIS states as an advantage of the Poolbeg site "Road access will be good upon completion of current projects."

There is no indication to what projects this statement refers. The previous siting study relied heavily upon an Eastern by-pass being in position by 2004.!

Traffic on the local approach roads is, at this stage, at full capacity.

There is no question of an eastern by-pass being constructed within the next ten years.

The Dublin Port Tunnel with the East Wall carriageway and the Macken Street bridge will certainly not improve the situation on the southern and south western local approach roads to the site

Basically, both the 1999 feasibility study and the present EIS acknowledge that the road access to the Poolbeg site is inadequate. Wishful thinking about what the situation may be at some indeterminate future date does not alter or improve the existing situation. It is far more likely that the excessive proposed construction in the Ballsbridge and Blackrock areas will make the road access even more congested.

It would be extremely difficult to select a site with worse access than this particular site. [See also comment on Traffic section.]

Sections 4.2.43, and 4.2.44 of chapter 4, volume 1 of the EIS refer to the importance of avoiding locations upwind of residential areas and the need to pay attention to potential impacts on health which can be long-lived.

Thoughout this EIS the erroneous assumption is made that weather conditions at Dublin Airport match the micro-climate of Dublin Bay and surrounding areas.

During August of this year [2006] alone, there were a number of days when mist was prevalent over the Poolbeg and sea . Fine warm sunny weather in this area, by heating the sands, leads to low sea mist coinciding with the incoming tide. It is a common occurrence to see the ESB chimneys becoming shrouded in mist as the tide turns.

It is stated that the prevailing wind is westerly as if any other wind direction were a rare occurrence to be discounted. The smell from the waste water treatment plant that has pervaded the surrounding residential areas and has been experienced as far away as East Wall and Ballsbridge/Ranelagh should, in itself, be sufficient evidence that any emissions from the proposed plant will be carried to highly populated residential and commercial areas of the City.

Table 4.3 gives the assessment of the site in accord with WHO selection criteria. Under "coastal areas subject to flooding" sensitivity of the site is given as low, yet in the plant design it is deemed necessary to raise site and floor levels to 4m and 5m OD minimum.

Whether this would be sufficient to cope with rising sea levels resultant from climate change affecting the plant is debateable. It does not deal with the probability of access roads to the site over a wide area becoming flooded. [See EPA reports on climate change and flooding] The time scale of construction and operation given for the plant [25-30 years] increases the probability of the proposed plant becoming isolated from the catchment areas by flood waters during its lifetime.

Coastal wetlands are also stated as unsatisfactory site areas; to be eliminated. This site is reclaimed from the coastland wetlands of South Dublin Bay with contaminated, unstable, waste materials yet the site selection section of the EIS states that this is not relevant!

5.1.4.[a]. of the non-technical summary and chapter 5, section 5.5.39 of volume 1 suggest the possible piping of sludge from the WWTP for incineration as a further justification for the choice of site. There is little, if any, further consideration of the possible consequential effects of, and design parameters required if this is a serious suggestion. Appendix 5.1, nos 5.1.81 and 5.1.82 claim that BAT guidelines 76 and 64-82 are not applicable because the plant is not dedicated mainly to incineration of sewage and or pre-treated or selected municipal waste, hazardous waste, sewage sludges and chemical waste. Without further discussion of this latter claim and any detail of quantities and precise types of waste to be burnt it is difficult to judge the veracity of this claim. It does lay doubt on the claim that the plant design and operation will involve only best available technology.

It is of note that despite the question of whether se was intended to use the plant to incinerate sewage being asked on a number of occasions by residents at information sessions, the idea was always categorically denied.!

Chapter 5 of vol.1 [main report] describes the process to be employed which would be similar for any incinerator of the same type. Design details are not included. We note that where operational emission levels are concerned 5.1.42 has the qualification that "the facility is generally expected to observe levelsassociated with the use of BAT 35." Note no 1 to table 5.2 states "..... they are not legally binding emission limit levels" We take this to mean that there is no guarantee that the levels quoted will be observed but are anticipated levels "bearing in mind the balance of costs and advantages inherent within the definition of BAT"

Items 5.1.4.[b] [c] and [d] are debated in later sections of this submission except to say that they appear to have been introduced to justify a pre-determined intention to site an incinerator on an unsuitable site.

Item 5.1.4.[e] District heating infrastructure is usually subsidised in those european and scandinavian countries where it exists - it is an additional cost to the taxpayer. In an already built up City it has no economic or socio-economic advantage. Use of waste heat from an incinerator in a new town or in a new industrial/commercial sector close to a new town where it could be installed from scratch may have some merit. In the context of this site it has none since the difficulties, cost and disruption of installing it for the benefit of an infill/renewal development in an already existing densely populated city would far outweigh any conceivable advantage. It is not difficult to imagine the reaction of the taxpayer and/or citizens of Dublin on discovering the costs they would be asked to pay for something from which they would not benefit. [see also section on material assets/sustainability of this submission]

Item 5.1.4[f] simply verifies how little consideration has so far been given to the residue disposal problem. The suggestion that the choice of site is influenced by the fact that, until such time as it is decided how to deal with residues, the solution is to export the problem comes close to being an insult to our intelligence. [See also later section on residues & consumables.]

C. Landscape and visual impact

The EIS, in both the non-technical summary and in volume 1, chapter 6 of the report, acknowledges the uniqueness of the reclaimed land of the Poolbeg and speaks of its significant landscape and visual character within the arc of Dublin Bay. We agree.

In regard to the site itself it says it has a visually degraded industrial appearance and seeks to denigrate the better aspects such as the Hibernian molasses site which has been well landscaped and is immaculately kept. It also ignores the attractive hedgerows and wild roses, opposite the grass verge and trees which are a bird and insect paradise.

No one would pretend that the scrap metal yard was anything but an eyesore, ugly and intrusive and the source of several fires. It is one of the dirty industries deliberately located here in an attempt to downgrade what was, and still could be, a priceless asset in a pivotal position in Dublin Bay.

The argument being advanced seems to be that because the Peninsula has been, and still is, deliberately badly treated and regarded in planning terms as a place to "dump" each and any dirty, unsightly, un-landscaped industry that to one else would accept, it is a good reason to further degrade its visual impact within the Bay with a gargantuan glass and metal structure that will overwhelm even the very sizeable power stations and sewage plant. No amount of eulogising of the design will change the fact that its visual impact on the Bay, the Peninsula, the Nature Park enjoyed by thousands of citizens and tourists, the beach and promenade at Sandymount and Merrion, and the Village of Sandymount itself will be anything but excessive

It would seem that by using aluminium and glass in its construction the idea is that its impact will be lessened and be more visually pleasing. Quite apart from the fact that after a time aluminium becomes dirty and extremely expensive to clean, particularly near the sea, it will stick out like a sore thumb both day and night.

From Blackrock Park and Maretimo Gardens the sewage plant is easily visible, why should we imagine that this massive construction will be any less intrusive.?

The associated lighting, contrary to the statements made in the EIS, will have a significant adverse effect on the southshore and residential areas, and on the birds of the SPA which roost on the immediately adjoining land. Again, the argument seems to be that because there is some lighting on the power station chimneys for aircraft safety reasons [the peninsula is on the flight path for Dublin Airport] and distant small lights on the port gantries, it is acceptable to inflict a considerable amount of light pollution much closer to the roosting sites, the southshore and residential areas.

Chapter 6. sections 6.4.32 and 6.6.3 Volume 1 refer to the Poolbeg Framework Plan as part of the justification. It is not a plan but a draft schematic study produced by the local authority planners in conjunction/consultation with prospective developers. It has no legal status whatsoever in that it has not been agreed by the Council and there has been no consultation

with residents who would be most affected by any such plan. The study consists of two books that do not even agree with each other on a number of points!

Since the draft scheme has been introduced as a part justification however, we submit that the impact on the residential and mixed use development and the additional traffic associated with those draft suggestions make a nonsense of assertions relating to proximity of the plant to residential areas and traffic predictions in the EIS, should any part of those ideas be put into effect.

D. Traffic Methodology and Mitigation.

Section 8 [non-tech summary] and Chapter 7 [volume 1] states "Overall in transport terms the site is well located and will not impact on the local community or the road network provided proposed traffic management measures and the associated mitigation measures are implemented. "In itself this is an admission that, in transport terms, the site is far from ideal.

The final report of the South Bank [Poolbeg] framework study by DEGW under 3.1.1. describes the area as "unique in its relative isolation, reinforced by the cul-de-sac structure of the peninsula," going on to refer to the "limited infrastructure capacity, poorly connected to access networks, road congestion already high....."

The methodology used in impact assessment seems to use the base of 5% increase to establish whether the impact will be significant. This approach is only valid in cases where there is an existing margin above that amount in road capacity. An increase of 1% or 2% in vehicular traffic of any description on local roads such as Strand Road and Beach Road and the residential conservation areas of Sandymount in general is sufficient to take up all or any available capacity margin, aside from the effects of the noise, air pollution and danger created from any further increase in existing vehicular traffic of any size or weight.

The proposed HGV limitations envisaged in the the proposed cordon for Dublin City do not affect vehicles of less than five axles. Assuming that it is actually possible to limit all deliveries from the municipal transfer stations into the cordons to the evening hours, it still means that this traffic will be accessing the national road network during the earlier time when peak hour traffic is still a reality, in order to reach the cordon as early as possible. Details of the envisaged permit system have not yet been decided.

It is suggested that waste transfers will also be from privately owned transfer sites. How is this traffic to be regulated?

Vehicles delivering directly to the plant will, naturally, take the shortest available route, which in many instances is via the narrower residential roads, prior to their eventual arrival at Sean Moore Road or the Port Tunnel. There is no limitation on or route constraint in regard to these smaller vehicles.

The total quantity of vehicles carrying waste may or may not be increased in the overall regional context, but the number funnelled into the residential local roads closer to and immediately approaching what is basically a cul-de-sac quite obviously will be considerably greater, consisting of both municipally owned and operated vehicles and those of private waste contractors originating from a wide regional catchment area during a fourteen hour daily period.

The effects of this traffic on health, including stress, have not been considered.

7.8.3. Chapter 7 vol.1 Construction traffic mitigation measures are nothing more than statements of what should be normal good practice for any construction site wherever situated. It is to be regretted that it is not necessarily a fact of life.

The suggestion that "Where possible construction materials will be delivered outside of peak commuter hours" completely ignores the fact that traffic volume to and from the Port areas bears little relation to peak hour commuter traffic. Port traffic is to a large extent dependent on and related to shipping movements which in many instances is affected by the tidal regime in Dublin Bay. When Port and other traffic coincide it can take up to one hour to traverse this route from north to south and vice versa. It is difficult to see how additional vehicles to and from the proposed incinerator, constuction or operational traffic, will have "no additional impact" as claimed. When HGV's avoiding/by-passing the inner city centre and traffic diverted from the M50 are added, [once the port tunnel is operational,] the situation is hardly likely to improve!

These comments are in addition to the wholely unacceptable impact that the above mentioned vehicular traffic will have on the residential areas through which it passes. The assumption that traffic that is deemed to be deleterious to commercial areas is not equally or more so to residential areas, is almost beyond belief.

E. Air quality and climate.

It would seem that in every proposal for built development on the south side of Dublin Bay there is the automatic assumption that the area where land was reclaimed from the public beaches and sea was always of an urban and industrial nature. For many decades it was an area that acted as a lung for the City, an area of clean fresh sea air so desirable that an earlier fever hospital [St Catherine's] situated beside the Pigeon House Road was later used as a convalescent home for patients from the city until the 1960's.

The basic premise in regard to the South bay would appear to be that because a number of chimneys have been placed here, with the consequent deterioration in air quality, it is a good and desirable reason to add more. Fine particulates combined with the effects of dust inhalation from the over-concentration of cement plants in the area, we contend, are in themselves sufficient to suggest that there is a distinct possibility of harmful impact on health.

Mitigation measures in regard to dust arising during construction are simply the normal quotes of what is or should be best practice. - see *paras. 8.5.3. and 8.5.4.* A visit to the Poolbeg area any day of the working week will amply confirm that aspirations do not coincide with the situation on the ground.

It is noted that the results of the monitoring station on Sandymount Promenade are discounted because the traffic on the Strand Road affected them! Many of our residents live on the other side of the road and are already affected by these air pollutants. Traffic to and from the proposed incinerator is an integral/essential element in its operation. The cumulative effects of both the estimated emissions from the all the chimneys together with all traffic should not be ignored or selectively seperated at any point.

The nearest residences to the proposed plant are in Sandymount, at Beach Road, approximately three quarters of a kilometre from the site in a direct line.

Annual or periodical averages tend to hide the actual exposure of young children and the elderly to all emissions over shorter periods. [see 8.2.5. vol.1]

It should not be accepted without question that it is a good, desirable or acceptable action to gradually increase average concentration levels up to the annual limit values.

A week of misty weather, not uncommon in this area, taken together with levels exceeding the

A week of misty weather, not uncommon in this area, taken together with levels exceeding the 24hour limit values is quite sufficient to affect the health of more vulnerable people.

8.4.37-8.4.39 of Vol.1 confirm that the net contribution of the incinerator, excluding traffic emissions, to savings of GHG emissions in Ireland will be negligible.

F. Noise and Vibration.

Calculations of operational noise levels seem to be comprehensive but it should be noted that before the plant is in actual operation they remain only estimates.

Steam or soot blowing activities associated with existing power stations does <u>factually</u> impact upon the fauna of the SPA, SAC, NHA and upon the residents of this area. Such noise is not confined to daytime.

The ESB usually notify us when these operations are to be undertaken in the course of essential maintenance work.

Para. 9.3.11. vol.1. admits that there will be a noise problem during construction, in particular referring to this occurring throughout day and night.

The EIS mentions the site preparation stage. Construction will also involve piling [the chimneys alone would necessitate piling] which will extend the period of maximum noise. Residents of this area have endured a number of periods of disturbed sleep during construction of the power stations and the sewage works. Acceptance of this depended on the acknowledgement that such works were necessary in the public interest; it did not lessen the actual impact. That acceptance does not apply to the proposed incinerator for which there are alternatives both of waste management methodology and siting.

Para. 9.2.18 asserts that it is not possible to hear industrial noise from the industrial site during the night time. If this assertion refers to one particular site it may, at present, be accurate if only because no activities take place at night on that particular site - in terms of noise originating from general activities on the Poolbeg peninsula it is grossly inaccurate.

Assumptions are made that birds and human beings become accustomed to certain noise levels and therefore that such noises have no effect on their overall health and well-being. There is no scientific proof of this assumption. It is true to say that they do learn not to fear it - that it represents no immediate physical threat or danger requiring an urgent response. Disturbed rest even when the cause is known and not feared does, on the other hand, have a more gradual effect on health and work performance. One of the main complaints of people living at a certain distance from one of the Copenhagen incinerators relates to noise.

Construction involves piling which obviously means noise. Given the nature of the site it is quite probable that extra sheet and bored piling will be necessary, - more so than on a more suitable, stable site where some of the building components could be constructed without additional piling. The effects of this aspect on both human and wild bird life have been greatly under-estimated.

Many people subjected to continual noise over a twenty four hour prolonged period become more not less sensitive to it. In this area, where residents have been subjected to 24hr. noise for long periods on at least two occasions in recent times, [necessary power station and sewage plants], that increased sensitivity already exists.

G. Residues and consumables.

It is remarkable that after eight to nine years consideration of the siting of an incinerator on the Poolbeg, or indeed anywhere in the Greater Dublin Region, the question of disposal and end treatment of the residual waste products has not been seriously considered. The happy-go-lucky approach to this important issue does not inspire confidence in regard to other aspects of the EIS.

paras. 10.4.7.-10.5.7. volume 1 refer to leachate testing and classification of residues into inert and hazardous without giving any information as to how and where this will be carried out.

Claims that bottom, boiler, and flue gas residues will be transported to at least two separate destinations in the south port area for transhipment until the question of final disposal in Ireland has been decided, taken together with the statements in para 10.5.3. that "the bottom ash will be pre-treated off site prior to re-use"

"the bottom ash will be aged, screened and crushed"

"the bottom ash pre-treatment will not be undertaken at the Dublin WtE facility" are sufficient to set alarm bells ringing.

Similarly para. 5.1.65. volume 1. says "ferrous and non-ferrous metals from bottom ash will as far as practicably and economically viable, be seperated from bottom ash off-site"

Are we seriously expected to believe that all residue shipment to another EU country, [with or without pre-testing and pre-treatment] will continue throughout the entire lifetime of the plant.?

Why and in what manner is flue gas/hazardous residue to be stored, at a site shown 1,300m from the proposed plant off the South Bank road for this purpose, prior to trans-shipment?

Bottom ash has a very low commercial value and limited possible re-use.

Under the heading <u>Earthworks</u> in chapter 18 volume 1 the question of excavated material from the proposed site and from the ESB cooling water channel is given similar cavalier consideration.

It is not sufficient to simply state that such wastes will be disposed of to landfill or at sea. Site and press notices do not give any indication that it is proposed to apply to the Dept. of Communications, Marine and Natural Resources for a "dumping at sea" license.

H. Soils, Geology and Groundwater.

The probability that these issues could be of seriously important relevance to the proposal was obvious and should have been taken into consideration in both of the feasibility siting studies in the earlier stages. That they were not is further evidence of the lack of impartiality and objectivity in the process as a whole. It simply underlines and corroborates the suspicion that a knee jerk, political decision was taken to opt for a mass burn incinerator on the Poolbeg peninsula to dispose of waste materials in the absence of a properly considered prevention, reduction, recycling, policy. It is additional proof, if any were needed, of the perfunctory manner in which the feasibility and siting studies were carried out.

The principle used seems to be, as we have been told on several occasions in regard to draft development proposals for the Poolbeg peninsula, "we're going to do it anyway".

This well researched section of the EIS makes it clear that the effects of building on this site have a much greater than average probability of resulting in air and water pollution of the surrounding areas. High sulphate concentrations, elevated levels of lead, copper and zinc and other pollutants, above Dutch intervention levels in parts of the fill material, necessitate additional excavation and disposal that on a suitable site would be unnecessary. [see 11.3.31 and 11.3.32]

The groundwater levels which are influenced by the tides, particularly with rising sea levels due to climate change, not only make construction more difficult and expensive but are another factor that increases the probability of contamination of the Liffey and sea. It is noted that the tests show some evidence of mixing - [brackish water.]

Para. 11.7.5. vol 1. refers to <u>minimising</u> the effects of run-off causing turbidity in outfall areas. These issues have not been fully considered in the chapters relating to impacts on terrestrial and marine ecology or on the flora and fauna of the designated areas nearby.

During the construction of the ESB/Synergen power station it was found necessary to carry out extensive and expensive remediation of their contaminated cooling water channel. The contamination, we hasten to add, was in <u>no</u> way caused by any action of the ESB/Synergen. It was the result of unauthorised discharges about which this association had complained and in regard to which no action had been taken by the competent authority.

In furtherance of the proposed incinerator it is now proposed to interfere with this channel. The ESB blocked off the channel during remediation works, preventing contaminated sediments from entering the Liffey. Since the channel is essential for the operation of the Synergen/ESB power station and the Waste water treatment plant we find it difficult to envisage how the channel could be closed off without affecting the operations of these two plants. The obvious corollary is that sediment disturbed during the envisaged dredging of the channel will enter the Liffey and be carried by tidal influences on to EU designated beach habitats on both sides of the Bay.

The deleterious effects will be increased by the additional works proposed to take place in the river itself for intake water. Silt traps are not 100% effective.

Para 12.5.2 and 12.5.3 referring to mitigation measures for the predicted increased temperature and biocide levels at the outfall seem to us to more be concerned with the effect these may have on the operation of the incinerator than with the effects on the receiving environment.

"Temperature and quantity of cooling waters will be continuously monitored to ensure the optimal running of the facility"

"The addition of biocides will be monitored and optimised according to the requirements of the intake water....."

Presumably the same need for the variation in biocide application also applies to the intake water for the two power stations. Maximum desirable levels will be applied to the three plants at the same time, which may well be when flow rates in the Liffey are reduced.

12.7.1. under the heading Flooding Risk uses old standards of 100yrs for fluvial flooding and 200yrs for tidal events. It has recently been established that these return time estimates are overly optimistic where Dublin Bay and the rivers entering the Bay are concerned - e.g. with tidal events, [exceptional tides] occurring approximately every eighteen and a half years.

Whether these tides then result in flooding depends on coincidental weather conditions totally beyond human control. There is no predictable or established pattern to the occurrence of periods of low pressure although there can be seasons in any one year when the likelihood is greater. Even if such events could be predicted with certainty we can only seek to minimise the worst effects; we cannot prevent them.

I. Human Beings.

This section will be dealt with under our comments on the report on Community Gain by Trutze Haase and Brady Shipman and Martin.

J. Terrestrial ecology.

The main difficulty with the baseline study arises from the stripping and degradation of part of the site and adjoining lands to accommodate pipe assembly during the recent construction of the Waste Water Treatment plant. Since the completion of the plant these lands were in the initial stages of recovery but have been further downgraded by reason of the Local Authority granting permission for a third concrete batching plant on part of the lands and by the "mountains" of slag cement [GGBS] stored here in the absence of any application for planning permission.

The baseline was completely different when the initial feasibilty studies and proposals applied. A large area of the adjoining lands constituted a naturally formed wild flower meadow, with ponding and grassland in other parts used by birds of both the Nature Park and designated wetlands for fresh drinking water, resting and feeding. It hosted up to 100 pairs of nesting skylarks which are a declining species. Frogs and dragonflies occurred on these areas, as they also did and maybe still do, on the adjoining ESB site-[the pitch and putt course - see EIS for the combined cycle power plant of February 1999.] Two site visits for the present EIS would not necessarily have been sufficient to discover them. The existing heronry in the ESB lands was definitely overlooked.

In spite of the additional cement plant etc,. the adjoining lands to the south -west are still being used by a variety of birds from land and sea, including Brent Geese, for resting and drinking purposes simply because they now have no other alternative! [photographs exist of the before and after,[surface stripping,] situation up to date.]

The elected Councillors voted unanimously to have this area zoned as open space in the final draft of the City Development Plan. The the City Manager responded by saying "I'm not accepting that" without any explanation. This land is now shown in the EIS as temporary storage/temporary construction area for the proposed incinerator, the first time this has been suggested.

Para.14.1.5. refers to the disturbance effects of construction activities on the Brent geese attempting to use the strip of compensatory habitat between the foot of the Nature park and the boundary fence of the sewage plant, suggesting that throughout the three years construction period they have many other sites to retreat to. Apart from the fact that this suggestion is against the articles of the Wildbirds Directive we would query where exactly it is suggested they could feed, drink and roost. Actions of the Local Authority have already deprived them of the use of Irishtown Stadium and Sean Moore Park.

Other protected birds from the SAC/SPA/NHA which use this land as the last remaining refuge at high tide or during stormy weather will similarly be affected by what is loss of essential habitat and disturbance.

Under EU law actions resulting in disturbance and habitat loss for protected species is only permissible in the case of <u>essential works of public necessity when there is no other alternative</u>. In the case of the proposed incinerator there <u>are alternative</u> methods and sites available and any argument otherwise would be impossible to uphold.

Para.14.3.28. of chapter 14 vol 1. suggests that from a terrestrial perspective, the closest designated sites are the Dolphins in the Liffey and Booterstown Marsh, omitting the designated strands which include the small areas of sand dunes, possibly because the EIS differentiates between terrestrial, and marine and estuarine ecology. The difficulty with this distinct seperation lies in the fact that there is an essential ecological link between the two. Impacts upon one seriously damage the other. The boundary between land and shore has, in addition, its own distinctive flora and fauna which, possibly for the reason suggested above, has been overlooked

14.5.2. states "reference has already been made to the possible impact on the brent geese in the area.... None of the other wetland bird species of Dublin Bay frequent the area of the proposed development" This is not correct.

14.7.1 We find this to be an incredible statement which shows little if any concern for the importance nationally and internationally, of the South Bay designated areas. The appendix includes the reasons for the designations which are largely ignored in this chapter as a whole.

In the evaluation of the site and surrounding lands there would seem to us to be a dismissive attitude to the importance of non-protected flora in terms of ecology and the dependence of insect, bird and mammal species on them. Fungi in the Nature Park seem to have been totally overlooked - not all of them are common species.

K. Marine and Estuarine ecology.

Chapter 15 addresses the littoral and sub-littoral biotopes and species which, of course does not include the flora of the South Bay designated areas. Whether air borne emissions would or could affect the zostera beds and algae and, indirectly, all species that feed upon them is not therefore covered.

Section. 15.7 exhibits some concern regarding impacts on marine ecology particularly in regard to cooling water discharges and suggests that "provided that license conditions take combined effects into account" and "careful monitoring following commissioning" will be sufficient to deal with any problems and harmful effects that may at that stage be discovered. This is a little akin to shutting the stable door after the horse has bolted. The admission that there will some degree of adverse effect should be sufficient reason to reconsider the entire scheme including its unsuitable siting in this highly vulnerable environment.

L. Material Assets and Sustainability.

A number of these issues have already been addressed in the preceding chapters of the EIS and in this submission under other headings.

Effect on property values, as this section in the Appendices agrees, depends on individual perception. For buyers, affordability, value for money, type of property, surrounding environment and traffic, access to amenities, work, schools, health services, churches etc. all play their part.

The extra attraction of Sandymount as a choice is due to its still not totally unspoilt village and Green, and its situation beside the sea and amenity parkland, - the perception that here is an area of Dublin where it is still possible to escape from the noise, traffic and enclosed streets of the urban environment into a semi-natural rural and marine environment close at hand. All other issues being approximately equal, it is this particular attraction that influences the buyer. In deciding on a particular area in which to settle, the surrounding environment plays a major part in the decision.

No amount of education will change the individual's perception of the ugliness of the proposed incinerator and other proposed developments that the Local Authority policies are determined to foist upon the residents of this area, nor of the associated noise, dust and traffic fumes, and the loss of the existing pleasant environment. If this were not so, why are so many people of this area either engaged in selling their homes and/or considering moving if their circumstances permit.?

Every estate agent will agree that "location, location" influences property prices.

Decisions of the local authorities and governments, in general, do not appear to be based on impartial analysis of long term effects and desirable, sustainable planning, but upon balancing the short term budget and facilitating construction growth as if the future economy would derive only benefit. The associated problems that will probably arise from this approach could well affect the future economy adversely. Traffic problems and lack of water are already arising as a result of past, short term, political decisions.

In regard to all proposals for the Poolbeg peninsula [the Poolbeg framework study has been introduced as justification of the site choice for this incinerator] the present and future effects have not been given impartial, objective consideration of future sustainability and cost.

17.5. of volume 1 speaks of mitigation measures which are little more than meaningless aspirations and assertions

17.5.5 suggests that advance notice of "temporary interruption of service" for service providers will either solve or mitigate the effects of moving the main electricity cables serving the Dublin region. The cost to the ESB is not stated, neither is the resultant effect on users of affected supplies. This is a major issue, not a question to be dismissed so lightly. Are there other service disruptions that have not been mentioned to date?

<u>District heating</u> and its costs/benefits have been briefly discussed earlier in this submission. <u>Appendix 13 of volume 3.</u> agrees that "Installation of an underground district heating network is a large effort demanding comprehensive construction work." The same section agrees that it will entail traffic problems. There are some disturbing revelations in this section under the heading <u>Promotion of District Heating in Dublin</u> and in the earlier paragraphs in terms of preliminary discussions and commitments with at least one developer, which suggest an acceptance of certain development proposals <u>prior</u> to the statutory planning procedures. The terms "development nearby" and "Merrion Gates" are used. There is no indication as to how it is envisaged installing the large pipes required between the incinerator site and Merrion Gates without adverse interference with the designated habitats. The exact definition of the nearby development is not given. If it is intended to refer, in part, to the Zoe and IGB sites it is prejudging the statutory planning procedures.

In any case, development of these two sites would involve further traffic and access problems both during a 10-15 year construction period and later from the 7000 inhabitants plus additional workers using the local roads. These problems would exist for the estimated life of the incineration plant.

Any suggestion that there is some form of gain in reduction of CO2 emissions by using waste heat from this proposed incinerator for district heating, would be offset by the amount of energy derived from fossil fuel sources used in constructing large scale development in the vicinity to use it, as well as in the construction/manufacturing processes involved in installation of the system itself. Traffic emissions could increase the GHG's and energy use of fossil fuels by reason of the distances travelled to reach the plant.

Any district heating system dependent on an incineration source certainly requires the continued production of waste materials, which have used fossill fuel sources in manufacture, for its supply.

If for some reason, climatic, economic or other, it becomes necessary to decommission the incinerator before or at the end of its suggested life from where is the heat source for these undesirable, unsustainable, large scale developments to be derived?

In any case it is difficult for us to believe that the use of waste heat from this proposed incinerator will have any serious effect on the reduction of CO2 emissions on a global scale.

Under the heading <u>Promotion</u> in this section it is stated "Dublin City Council, in conjunction with RPS COWI and Codema has now formalized arrangements to promote District Heating in Dublin City in anticipation of the project coming on stream" It goes on to state that assistance for this promotion is being sought through the National Development Plan. Public moneys are being used to promote this scheme in its entirety in the absence of any prior consultation or, by reason of statutes introduced to facilitate it, any real opportunity for those affected to seriously influence these arbitrary decisions, with the possible exception of this appeal.

Technology for combined heating systems is not confined to waste heat from incinerators. e.g. Cloughjordan Village development and biogas plants.

Para. 19.1.4. non-technical summary states "sustainability is about three main issues: environment, economy and community" and suggests that the WtE project accords with such objectives. We disagree.

The environment has been given scant consideration except to suggest that mitigating measures will be sufficient to deal with the identified problems and impacts of placing such a development on an unsuitable site.

The problems, many of them unique to this site, of access, traffic, site soil and geology, water supply, site remediation and disposal of constructional and operational waste materials [including hazardous wastes in both instances], visual impact, microclimate affecting emissions, noise, loss of amenity, adverse impact on EU designated habitats and internationally

important wildlife, climate change and rising sea levels, effects on property values etc. will not be solved by the, mainly aspirational, mitigation measures contained in this EIS.

Economic considerations should include costs of site acquisition, full costs of relocating existing leaseholders and commercial concerns, including VAT, costs of moving electricity cables and any other affected services on and adjoining the site, [such costs should also include compensation for potential losses for businesses affected by disruption of supply], full costs of service provision and road infra-structure, costs of dredging and waste disposal associated with site preparation/construction etc. Many of these costs will fall to the local authority and consequently be borne by the taxpayer, -10,500,000 euros have already been incurred in the promotion of this project. [source- reply given to question asked by local Councillor]

Even a rudimentary, objective, cost/benefit analysis comparison with a number of alternative sites would have shown that construction and environmental costs of an incinerator [or any other development] sited on the Poolbeg peninsula are far greater than elsewhere, assuming that incineration in one large plant is the best solution to waste problems.

Contract terms are considered to be a "commercial secret". During tendering procedures there might be said to be some need for an element of commercial secrecy. Once the successful tenderer has been chosen, as in this case, the citizens are entitled to know the details of the proposed final contract and what is involved. e.g. Risk sharing between the local authorities and private partner, risk sharing between the four local authorities, put or pay costs, possible acquisition cost to the municipal authorities in the event of was atisfactory performance and/or unforeseen problems requiring closure or take-over of the facility, decommissioning costs and how are these to be bonded, etc.

The tender documents identified six risks to be borne by the local authorities at that stage.

Community interests, real consultation and involvement have been ignored.

On these grounds alone, environmental, economic and community, we submit that the conclusion that the project is in accord with sustainable development objectives is unjustified.

M. Community Gain.

The full report by Trutz Haase and Brady Shipman and Martin is like a breathe of fresh air. For the first time it is recognised that the mere promise of financial or other sops are not sufficient compensation in themselves to coerce any community into acceptance of further environmental loss and pressures on their quality of life; - that "information is no substitute for real consultation and negotiation."

The report identifies the necessity to "identify the real issues, needs and aspirations of the communities" and clearly defines the wider concept of community gain. It clearly states that "..key to the concept of Community Gain being successful in the building of concensus are negotiated agreements between the local communities affected and the devlopers who will be in charge of the facility."

In clarifying the issues the report refers to the "long history of the use of the Poolbeg peninsula to provide for the needs of Dublin and the region as a whole, with little consideration given to the cumulative effects which this may have on the residents of adjacent communities".

Our residents feel that there is and has been, over a long period, an element of *social exclusion* for the communities of this area where various plans are made and decisions taken in the complete absence of any prior consultation whatsoever. We feel that social exclusion and social deprivation/social disadvantage issues cover other aspects of equality and quality of life and are not necessarily confined to those of perceived poverty. We accept that this view is debatable but feel that the debate should perhaps be part of the wider question of the ongoing issues affecting the communities bordering the Poolbeg Peninsula, of which this proposal is but a part.

There is no equality of treatment when the communities of any one area are expected or forced to accommodate *all* the facilities to serve a wide region. Apart from the question of whether or not it is practicable, the wider public of the region could be expected to accept their fair share of essential facilities, or perceived requirements, that can be located elsewhere.

For our residents, as also for those of the adjacent communities of Ringsend and Irishtown, enough is enough.

We see no conceivable gain or equitable compensation that will make this proposed incinerator on the Poolbeg Peninsula acceptable. In light of the history of the peninsula, starting with its reclamation from public beach with municipal waste and the conditions we were compelled to endure in the process, and the continuing developments and proposals, we no longer have any faith in assurances, promises or commitments that may be given:

In fairness, we should mention the genuine efforts of the ESB to consult, agree, and implement mitigation measures where necessary, in the construction of the power stations and other necessary works in which they have engaged in the area. Their approach is in marked contrast to that of the local authorities in general.

On page 33 of the Report, Mr Haatze mentions the fact that the study area is divided into electoral areas and that these can <u>not</u> be grouped in such a way as to provide data for the actual communities of Ringsend, Irishtown and Sandymount.

This fact results in the Poolbeg Peninsula which is actually reclaimed from Sandymount Strand being designated in this instance, as being part of Irishtown. Sometimes planners and or politicians give it the designation of Ringsend.

We have no quarrel with our neighbours in either of these areas but the fact remains the peninsula is for the greater part in Sandymount, yet the change in electoral boundaries has led to the total exclusion of Sandymount residents from discussions and decisions relating to the peninsula, which is historically part of Sandymount, and which have a major effect on their lives

[It really makes no electoral sense either since nobody lives, as yet, on the reclaimed land from Sean Moore Road eastwards to the remaining beach.]

Arbitrary political lines redrawn for whatever, unknown, purpose should not be used to exclude an entire community when plans are being considered and decisions are being made for what is the area where they, [some families for generations,] live.

A similar division is beginning to take place in regard to the Strands - reference being made to "three beaches" and to the foreshore as being "the foreshore between the three beaches between the Great South Wall and Sean Moore Park".

There is in this case *one* beach with small sand dunes in three areas of that beach, all of them lying within the designated areas of SAC, SPA and pNHA adjacent to the proposed incinerator.

That beach, in its entirety, is a major recreational amenity for all three nearby communities as it also is and has been for Dubliner's in general, over generations.

The proposed incinerator will have a seriously adverse effect on their enjoyment of this traditional playground.

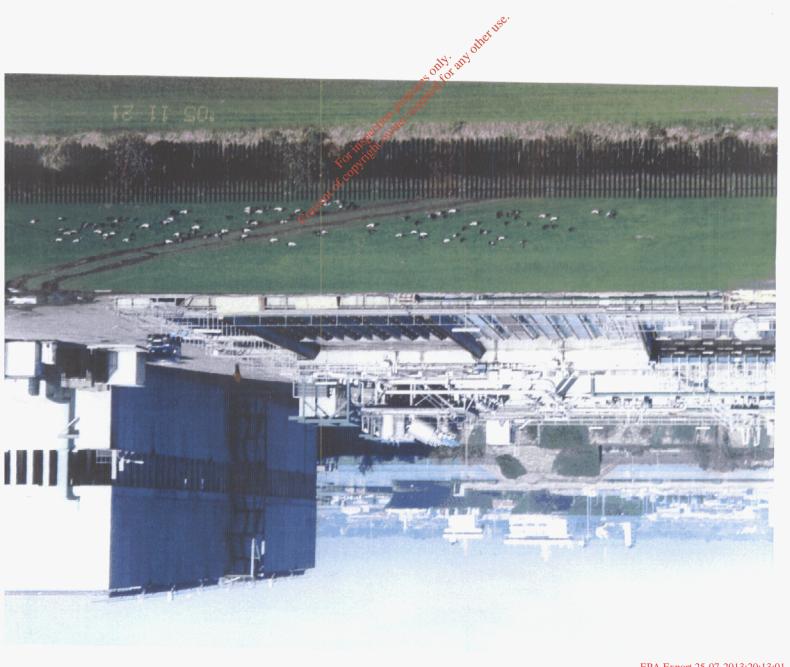
We apologise for the length of this submission, occasioned by attempting to correlate and briefly comment on the three large and two smaller volumes constituting this EIS.

Yours sincerely,

Lorna Kelly

Lorna Kelly, p.p. Sandymount and Merrion Residents Association.

Consent of copyright owner required for any other use.



Consent of copyright owner required for any other use.



EPA Export 25-07-2013:20:13:02

Consent of congright owner required for any other use.



Consent of congright owner required for any other use.