James Stafford,
Trabolgan,
Roches point,
Whitegate,
Midleton,
Co.Cork.
021-4661451

04 November 2008

Reference: P0830-01

Office of climate,
Licensing & Resource Use,
EPA headquarters,
P.O. Box 3000,
Johnstown Castle Estate,
County Wexford.

Dear Sir or Madam,

I am lodging an objection to the proposed determination based on the following points. I question the validity of the application based on the absence of site notices being present from the sated date of July 2007. I and others have no recollection of notices present. I do note that 1 week after my original submission was made to your office that there were notices placed in 3 separate locations all dated back to July 2007. I would regularly pass the locations in which they were displayed which is why I am confidant of there absence originally. One of the notices that were stated as being left in place at the entrance to the power plant off the Fort road is a private road with extremely limited public access. I questioned the regional inspector in reference to this and was told that neither he nor any of his staff inspected or could verify that these notices were present for public awareness. Surely this is the most basic requirement of any licence application. Please find enclosed copy of letter sent to your office on the 9th October 2008.

I want to make the following points to highlight my perception of how Board Gais Eireann (B.G.E) go about business, and why I am concerned about the stream in which I have been using for the last 18plus years. I am making these points because I strongly believe that their attitude to rules and regulations are dealt with after the fact. For example Board Gais Eireann's construction company applied to Cork County Council for a discharge licence for sewage into the Glanagow stream this was only withdrawn after large local objections. Please note that B.G.E head of corporate affairs told a local newspaper that this water would not be safe to drink but would be suitable to swim in.
B.G.E were also to have in place a traffic management plan to ensure the safety of young students attending the primary school and the general public in the vicinity in which their H.G.V were travelling, none of this happened until the Board of Management of the school withdrew its objection to An Board Pleannala very recently, but long after they started work on the site.

They are also supposed to adhere to time constraints regarding the movement of the H.G.V in and out of their site and note that this is not the case blatant disregard of planning stipulations.

I object as a third party that I have not been informed of the landfill decommissioning plan that is ongoing and the effect that it could be having on the water quality of the Glanagow stream.

I also have concerns to the fact that BGE is surrounded by 2 sevico directed sites. BGE are not governed by this directive. Enclosed are 2 maps showing the specified areas.

I need to repeat a point that I made in a previous submission and that is that as a landowner south of BGE plant that my position is very vulnerable and would like to be assured that the measures put in place will protect the quality of the stream water and my interests. I would expect that as already stated in the inspectors report of 23rd September 2008 that only 'STORMWATER' (rainwater) will be discharged from the site to the Glanagow stream.
I also note that ongoing monitoring of the discharge for total organic carbon (TOC) will there be a base line assessment to judge this from? Will I as an interested party be informed if those limits are exceeded, in my opinion it should be a condition that I will get access to all their up to date ongoing monitoring data? Does the TOC monitoring have an alert system which will shutdown the outlet valve in the event of levels rising above the permitted parameters? Are the TOC's expected to increase and what category of organics are being assessed.
Why is there not a condition in place for a biological test of the Glanagow stream annually with the results being available for inspection?
I believe that at the very least if these conditions with the others proposed the potential to damage the water source that I use and the welfare of my Family, staff, customers, animals, crops, and the public who use Whitebay bathing beach will be fully protected.
I Expect the BGE plant to be run in an "environmentally responsible manner" and not to just "maximise institutional profit", accountability has to be clearly shown.

I expect the EPA, CorkCountyCouncil and any other relevant bodies to watchdog this plant as I assure you I will.

Please find enclosed my submission of 12th September 2008 for your reference.
I also enclose my observation of 9th of October 2008.
Enclosed news paper article with regard to Whitebay beach.
Enclosed relevant fee for objection to the proposed determination.

Yours Sincerely,

James Stafford.

Whitegate resident speaks out against potential effluent at Whitebay Strand

On Thursday, February 28th, the following notice appeared in the East Cork Journal:

"Gamma Power Systems are applying to Cork County Council for a license to discharge treated effluent from its temporary construction site facilities at Corkbeg and Glanagow to Glan Na Gow, Glanagow, Whitegate, Co. Cork."

Many residents of Whitegate were unaware as to where Glanagow was - James Stafford was not one of them.

James is one of several residents in the area who is concerned about the discharge of effluent into Whitebay.

As a resident of the area, James' livelihood depends on good irrigation, dependant as he is on growing vegetables. 'I grow potatoes and salad crops and it's effectively a case of from the field to the table. If this effluent is released into the water at Whitebay, my livelihood could suffer.'

Kathleen O'Sullivan, Head of Corporate Affairs, Bord Gáis, when questioned about this issue, informed the East Cork Journal that any effluent released will be up to EPA / Council approved standard and will be treated before it enters the stream. 'It won't be of drinking quality water,' Kathleen states, 'but no one will have to worry about swimming in it.'

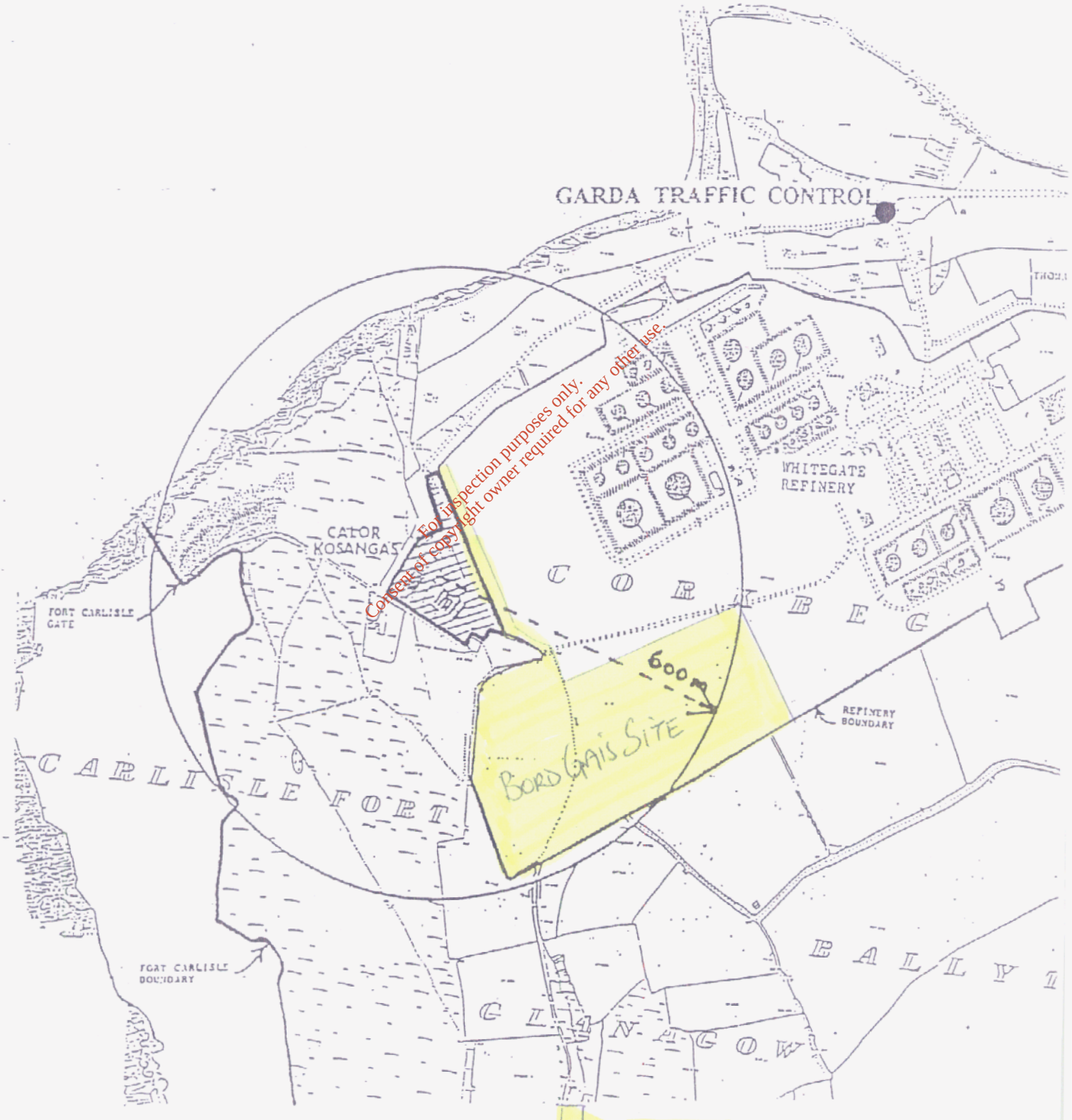
And, as the summer approaches ever faster, this is a secondary issue which James also believes could affect Whitebay. 'I take my children to Whitebay and I know that many other people do to. We need assurance that the water will be perfectly safe for them. There is a stream on the beach and children always go straight to it to paddle – if there is effluent in it, it could easily deter people from coming to the beach here.'

'There has, as far as I am aware, never been a licence before for effluent discharge onto this beach and I won't be happy until the amount of effluent is zero.'

James is determined that this issue be resolved prior to GE/Gama's (who have been appointed by Bord Gáis to build its €400 million Power Plant at Whitegate) application to Cork County Council on April 29th, 2008 for the licence and urges anyone who has an issue with this application to make their voice heard.

'I want this issue to be highlighted in the public domain,' James concludes while Kathleen O'Sullivan informed the East Cork Journal that she would be delighted to make contact with James to discuss this issue further.

THE SPECIFIED AREA, CALOR TEO, WHITEGATE



THE SPECIFIED AREA - IRISH REFINING PLC

Scale: Circles are 1km radius

- GARDA TRAFFIC CONTROL POINTS

Davis

Sonja Smith

From: Sean O'Donoghue
Sent: 09 October 2008 16:10
To: Sonja Smith
Subject: FW: observation re:PO830-01

From: Emer Stafford [mailto:jandestafford@eircom.net]
Sent: 09 October 2008 13:41
To: Sean O'Donoghue
Subject: observation re:PO830-01

EPA
Regional Inspectorate,
Inniscarra,
Co.Cork.

Trabolgan,
Whitegate,
Midleton,
Co.Cork.

9th October 2008

Ref:PO830-01

Dear Sir/Madam,

I would like to make an observation that the week after my submission dated 12th September 2008 was lodged with the EPA that there were **new** site notices erected dated back to 11th July 2007. You might note that in my previous observation (re 4b) I had not seen any site notices re this application.

It is very obvious to me and others that these notices had just been put up.

Does that now mean that the set period for the issuing of the proposed determination of the application for an IPPC licence for Bord gais Eireann (PO830-01) will be extended or how is the application affected by this fact?

Yours truly,

James Stafford.

Sub (2)

Roches Point,
Trabolgan,
Whitegate,
Midleton,
Co.Cork

12 September 2008

E.P.A Headquarters
Licensing Unit,
P.O box 3000,
Johnstown castle estate,
Co.Wexford.

Submission to reference PO830-01

Dear Sir /Madam,

I refer to the application for an integrated pollution prevention control licence (I.P.P.C) by Bord Gais Eireann at their site in Corkbeg/Glanagow, Whitegate, Co.Cork.

I wish to point out that I am a landowner of farmland southwards of Whitegate Independent Power plant and that the stream in which W.I.P.P propose to discharge into, flows into 2 irrigation dams/ponds situated 1,200meteres downstream of their site. They have blatantly omitted and failed to mention this very important point in their reports. Please refer to reference no. 5/08/10126 dated 26th September 2006, where Michael Savage Senior Executive Engineer states it is recommended the applicant submit a detailed study of this stream before a decision is made.

- I have used those dams since the early 1990s to provide irrigation to my crops of field to table potatoes and vegetables (i.e. lettuce, cauliflower and cabbage) and also to provide water for animals and other farm uses.
- The Glanagow stream then flows on through my land to the fine bathing beach of Whitebay to enter the sea. This is a very popular destination all year round for walkers and hobbie fishermen and especially in the summer time where thousands of parents bring their children to swim and play. This point needs to be given serious investigation as the stream fans out on a large area of the beach before entering the sea. It attracts young children in particular who sit and play in it for hours. Water will come in contact with children, safety of children and the general public is paramount, water quality cannot be compromised.
- 1. (a) I must point out that I have never cropped, tilled or put animals on the lands around Glanagow due to its environmental sensitive nature. This was a conscious decision made at great cost to myself.

- 1. (b) Any discharge into the Glanagow stream that has the possibility to pollute this watercourse has to be stopped or I will be seriously financially damaged.
- 1.(c) The environmental impact statement dated 8th august 2006 which was prepared by Arup consulting engineers on behalf of the applicant describes the groundwater source and flow into the Glanagow stream as a locally important (LI) aquifer and with an extreme vulnerability rating(E). I fear that there has been major interference in the Geological structure at the source of this vulnerable stream.
- 1. (d) the applicant has already constructed a culvert for a considerable distance along the stream route and have effectively covered the source of the water for the stream with compacted hardcore and site roads. Rainwater runoff from an industrial environment also untreated into the stream and then into my dams and onto the public beach.
- 1. (e) With very little fresh water available for local and migratory wild bird life in the area this water source is very important.
- 1.(f) I have invested a large amount of time and money into this system to pump water 1.5 miles in 6 inch pipe underground to the rest of my land. No thought or consideration has been given to my enjoyment of this very important water course nor has it been highlighted in the EIS report.
- 2(a) Human health and safety must be protected against the possibility of inadequately treated effluent or the unacceptable levels of dangerous substances such as phosphorous and nitrogen.
- 2 (b) I must emphasis my need for irrigation for my crops because of my location i.e. strong winds drying out the light soils common to my area the elevation , types of crops grown and also quality required. Climate change will have major implications for me going forward. I purchased this land at Glanagow knowing that I would have the benefit of the water course that runs through it.
- 2(c) In the future I hoped to look into fish farming or fresh water course fishing on my dams.
- 2(d) Interference with the rises see "field inspection" 12.4.3 map showing fields 1,2,3 fig.12.4 and the course of the stream has effected the natural collection catchments of the Glanagow stream and will effect its flow/capacity and (if it survives) its supply to my dams.
- 3 (a) The increased flow of water in the Glanagow stream during and after heavy rainfalls now directly discharged into the stream instead of percolating over and through the ground as it did previously. Where is the impact study on volume of water expected off a 25acre (10ha) site. These need to be quantified and the expected discharge rates demonstrated and the effect on the stream.
- 3(b) I question the monitoring of the noise levels (db) upwind of the site taking that the prevailing winds are south, southwest. The use of cork airport weather station over Roche point?.

- I question if the ecology of the area will be altered.
- 3 (c) Attention needs to be given to "worst case" potential impacts (i.e.) if there were diesel spills, if there were problems with chemicals off loading to tanks. Fire flow should be stated (wcs) worst case scenario.
- 3(d) soil sample leach ate samples. Have these samples been accessed by independent bodies and how often sampled for and results available.
- 3(e) Residual impact on the Glanagow stream and whitebay bathing beach. Outlet flow monitoring and sampling need to be put in place.
- 4(a) Has occupational exposure limits (OEL`S) such as hydrogen sulphite 10ppm exposure limits been looked at in detail ref. employees, local land owners or the general public.
- 4(b) I question if there has been a site notice erected for the IPPC licence correctly, I do not recall seeing such a notice.
- 4(c) I conclude by submitting that discharge from bord gais (wipp) must be NORTHWARDS in order to ensure protection of the environment.
- Please give your full attention to all my submission so as GLANAGOW water course can be fully protected.

James Stafford
Enclosures (5)

teagasc

Clonakilty Agricultural College

Darrara, Clonakilty, Co. Cork, Ireland
Colaiste Talmhaíochta Chloich na Coillte,
Darrara, Chloich na Coillte, Co. Chorcaí
Tel: 023-32500 Fax: 023-34449
Email: office@clonakilty.teagasc.ie

15 August 2008

Re: Mr. James Stafford,
Roches Point
Whitegate,
Co. Cork

To whom it may concern:

As Teagasc Horticultural advisor to James Stafford Roches Point Whitegate, I would like to make the following points:

James grows intensive mixed field vegetables and potatoes at his farm in Roches Point.

His soils are light, free draining mineral loam in nature, which are ideally suited to early and late season production for which he had become specialist in over a long number of years.

During the late spring, summer and more recently even in autumn, the particular soil type is subject to drying out. This risk is increased due to his land aspect, elevation and exposure from the sea. Given his range of crops and particular cropping practice and the desired quality requirement by his customers, his irrigation system is absolutely essential to the functioning and ultimate profitability of his business. James has invested heavily in all aspects of his horticultural business over the years including in particular sophisticated high tech equipment for irrigation. The availability of a local source of water has allowed him to continue and specialise in production and he has been using the water from the Glenagow stream since the early 1990s. Without the latter he could not continue in vegetable and potato production.

The implications of climate change to farming practice are well documented and with drier seasons particularly spring and summer predicted the use of irrigation will become even more critical to specialist production such as in James's case.

James Stafford is a highly respected and reputable producer and grows to the Bord Bia Quality Assurance standards which sets a requirement for high standard quality produce with water as one of the key quality production factors.

I think that it is critically important to local areas and communities that people such as James Stafford and his family are able to continue farming & growing profitably in the future.

Should you wish to discuss any of the above in greater detail, feel free to contact me at anytime.

With kind regards,

Your sincerely,

Andy Whelton
Horticultural Adviser

NDP
NATIONAL DEVELOPMENT PLAN

Comhshaol, Oidreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government

Ireland in a Warmer World

Scientific Predictions of the Irish Climate in the Twenty-First Century

Editors: Ray McGrath, Met Éireann and Peter Lynch, UCD

Authors: Susan Dunne, Jenny Hanafin, Peter Lynch, Ray McGrath, Elisa Nishimura, Paul Nolan, J. Venkata Ratnam, Tido Semmler, Conor Sweeney, Saji Varghese and Shiyu Wang

June 2008

Community Climate Change Consortium for Ireland (C4I)

MET éireann

UCD DUBLIN

Precipitation (Figures 4 and 5)

Autumn and winter are becoming wetter: 5-10% increase in mid century, increasing 15-25% towards the end of the century. Summers are drier: 5-10% decrease for 2021-2060; 10-18% decrease towards the end of the century. While Figures 4 and 5 show regional detail the spread in the ensemble of simulations is large, implying that the accuracy of the detail is questionable. For example, early simulations suggested the largest winter increases would occur in the NW; later simulations showed a bias in favour of the E/SE. Only the general assessment is robust.

Figure 4

Seasonal changes in precipitation: mean of 8 ensemble simulations showing the percentage change between periods 2021-2060 and 1961-2000 for winter, spring, summer and autumn (from left to right). Autumn and winter are wetter (5-10%); summer drier (5-10%); spring is also slightly drier (2-5%). Unlike the temperature signal there is no clear regional trend; the spread in the ensembles (not shown) is also large.

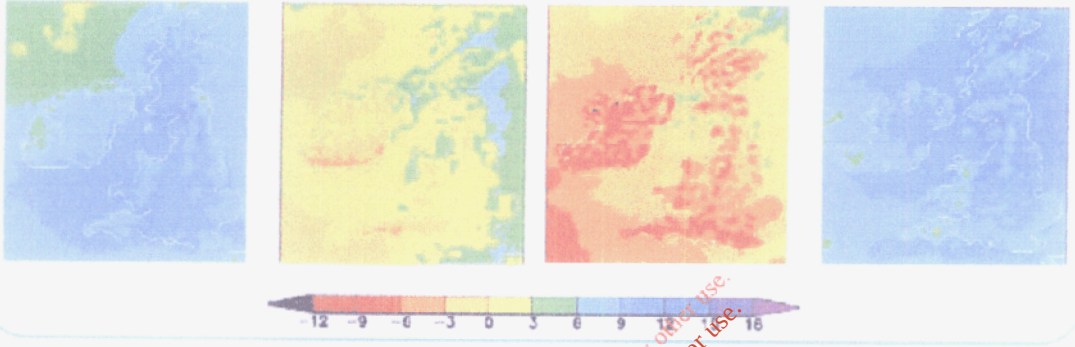
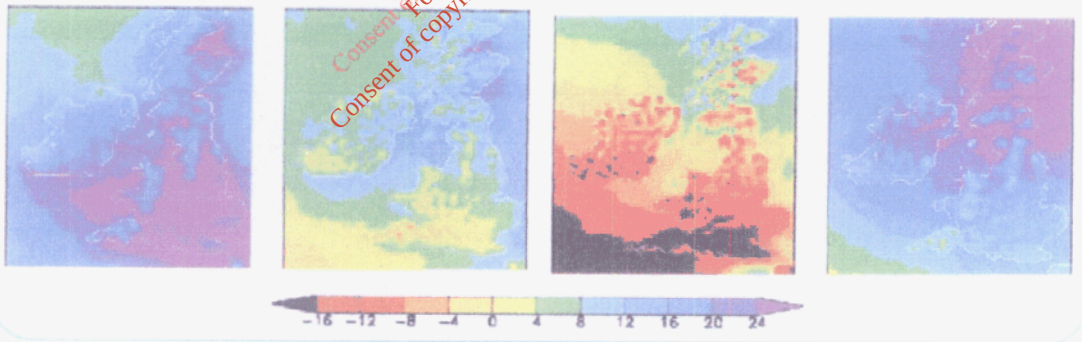


Figure 5

Percentage change in precipitation between the periods 2070-2099 and 1961-2000 for winter, spring, summer and autumn (from left to right). Autumn and winter increases of 15-20% generally but 20-25% in the northern half of the country in autumn. Summer decrease (10-18%). Spring is least affected. There is no clear regional trend.



Wind speeds (Figures 6 and 7)

The ensemble set shows slight increases in winter wind speeds (1-2%) and decreases in summer (2-3%) for 2021-2060. However, towards the end of the century there is an overall decline in speeds, particularly in summer (4-5%). The latter is consistent with the predicted movement of storm tracks towards polar areas (IPCC, 2007); fewer storms may affect Ireland, although the influence of rising sea surface temperatures is likely to lead to more extreme storms. It should be noted that the Irish observational records indicate that average annual wind speeds decreased in the 1990s, with this trend continuing in the early years of the 21st century.

Bord Bia

Water Analysis Requirements Guide Notes

Background

The use of water is essential in the horticultural industry. It is required for crop irrigation, application of chemicals and for post harvest rinsing/washing, cooling and transport. It is also required on production sites for canteen and hand washing facilitates. Sources of water include county council supply, bore hole, deep well, ponds, rivers, dykes, lakes etc.

The quality of water may affect the safety of produce for human consumption. Produce can become contaminated by using a source of water which is contaminated. Water can directly contaminate produce and/or enable contamination to spread in the field, production unit or factory. Water contamination can be caused by microbial and/or chemical factors.

Why test water?

The purpose in having a representative aseptic sample of water tested is to establish its chemical and microbiological status. The result of the test will show if the water supply is suitable for its intended use.

Water quality is an issue of critical concern to fresh produce retailers and consumers alike. This is the reason why water analysis has become a requirement for participants in the Bord Bia Quality Programme. The following key areas are addressed in this document :

- Water quality requirements in the fresh produce sector ;
- Water sampling frequency ;
- Sampling procedure ;
- Microbiological and relevant chemical test requirements on water ;
- List of test laboratories.

Water Quality Requirements in the Fresh Produce Sector

1. All participants in the Bord Bia Quality Programme must have an annual analysis of their water source(s) and have a copy of the analysis available as a record for the auditor. The analysis must be carried out within the auditing time and documented results must be available before final audit. Where more than one water source is used an analysis of each source will be required.

2. In general field grown crops will undergo certain processes post harvesting (e.g. washing and cooking etc.). In the cases of field grown crops which are being irrigated from rivers, open waterways etc and which are deemed as low risk crops (eg potatoes/root crops/crops in a non ready to eat form in the field) a water analysis of these sources will not be required. Where field grown crops are ready to eat and near harvest (eg soft fruit/iceberg lettuce) and if irrigated, then a water

analysis of these water sources will be required. In relation to these crops when a test has been carried out on the water supply and the results received, a risk assessment must be carried out on the water quality, source and purpose of use to identify if the quality of the water poses a risk to the safety of the product. On completion of the risk assessment a decision can be taken as to what if any corrective action in relation to the water supply is required. In relation to the process of carrying out of a risk assessment please refer to the Bord Bia Guideline Document No 2 on this matter.

3. Protected crops are generally likely to be consumed without cooking or processing. This sector can be divided into two categories: (a) Where water is applied directly onto the crop (e.g. mushrooms, lettuce, tomato, celery, cucumber, strawberries etc.) the water used in the production of these crops must be of drinking quality. (b) Where water is applied indirectly to the crop such as through a drip irrigation system (e.g tomatoes, cucumbers, strawberries etc.) a risk assessment must be carried out on the water supply as described in point 2 above.

4. Water of drinking quality is required for all washing/processing water. It is essential that water fit for human consumption is used for the final rinse stage of any post-harvest handling process.

It is important that good agricultural practice is maintained at all times to maximise the quality of the water in the horticultural enterprise and to ensure its suitability for the crop being grown and other associated processes.

Water Sampling and Analysis

The Bord Bia Quality Programme requires that a minimum of one water analysis (for each separate water source used) is available for the current year. A copy of the analysis should be available where possible on the first audit. This allows time if required for corrective action to be taken if the analysis indicates that the quality of the water supply is not suitable for its intended use, and for a re test to be carried out. A copy of this analysis can then be available for inspection on the last audit. If a copy of the analysis is not available on the day of the inspection then it can be forwarded at a later date to the quality programme inspection body ie. the National Standards Authority of Ireland (NSAI). Ideally testing should be carried out at least twice a year in different climatic conditions to get a more accurate picture of the quality of the water supply.

The Bord Bia Quality Programme Specification outlines the microbiological and relevant chemical analysis (see below) to be carried out. A list of selected laboratories that carry out water testing is included at the end of this explanatory note. However the water sample can be tested at any water testing laboratory. Details of the relevant microbiological and chemical tests to be carried out on the water supply are also outlined.

Microbiological /Chemical Tests and Results Required on Water fit for Human Consumption (Drinking Water)

These specifications for water testing are set down in The European Communities (Quality of Water Intended for Human Consumption) Regulations, 1978; Statutory Instrument Acts 81 of 1988.
Water testing for microbiological and chemical analysis is carried out to a standard Codex procedure for the following:

Microbiological standard analysis required by Bord Bia :

Test For	Specifications/Results Required For Drinking Water
Total Coliforms	0 per 100 ml. of sample
Faecal Coliforms	0 per 100 ml. of sample
Total Bacteria Count @37°C	20 per 1 ml. of sample
Total Bacteria Count @22°C	100 per 1 ml of sample

Chemical standard analysis required by Bord Bia :

Test For		Specifications/ Results for Drinking Water Maximum Admissible Concentrations
pH		6.0-9.0
Nitrates	NO_3 mg/l	50 (11.30mg/l as N)
Nitrites	NO_2 mg/l	0.1 (0.03mg/l as N)
Ammonia	NH_4 mg/l	0.3 (0.23 mg/l as N)

In a particular cropping situation where a water analysis and risk assessment is carried out on the water source and it is shown that water of drinking quality is not necessarily required for that particular use, then the results of the analysis do not have to be within the specifications as listed above (except for Faecal Coliforms). However the aim should always be to use the best quality water where possible and to achieve results as near to these specifications as possible. It should also be remembered where staff are drinking water on the production site that it must be from a source that has water fit for human consumption.

Please note that producers who add fertiliser to water for the liquid feeding of plants (e.g. in the production of certain crops under glass) will need to have their water analysed for additional relevant chemical elements critical to the growth of plants to ensure that the correct and appropriate levels of feed are being supplied to the plants. Producers should consult with their technical advisor on this matter. In these cases where producers have already carried out a detailed chemical analysis of their water supply for production purposes and it includes the chemical elements listed above this will satisfy this part of the water testing requirement for the Quality Programme this year. Where this is the case, only the outstanding microbiological analysis needs to be carried out.

Where test results are identified as being outside the specifications for a specific use the water should be re-sampled and re-tested to eliminate any doubt in relation to the

GLANAGOW WATERCOURSE EX BORD GAIS (WIPP) SOUTH DIRECTION

GLANAGOW WATERCOURSE EX BORD GAIS (WIPP) NORTH DIRECTION

VIEW OF WHITEBAY BEACH FROM MY HOME

ONE OF MY DAMS FACING SOUTH

FORESHORE LOOKING SOUTH OF WHITEBAY BEACH

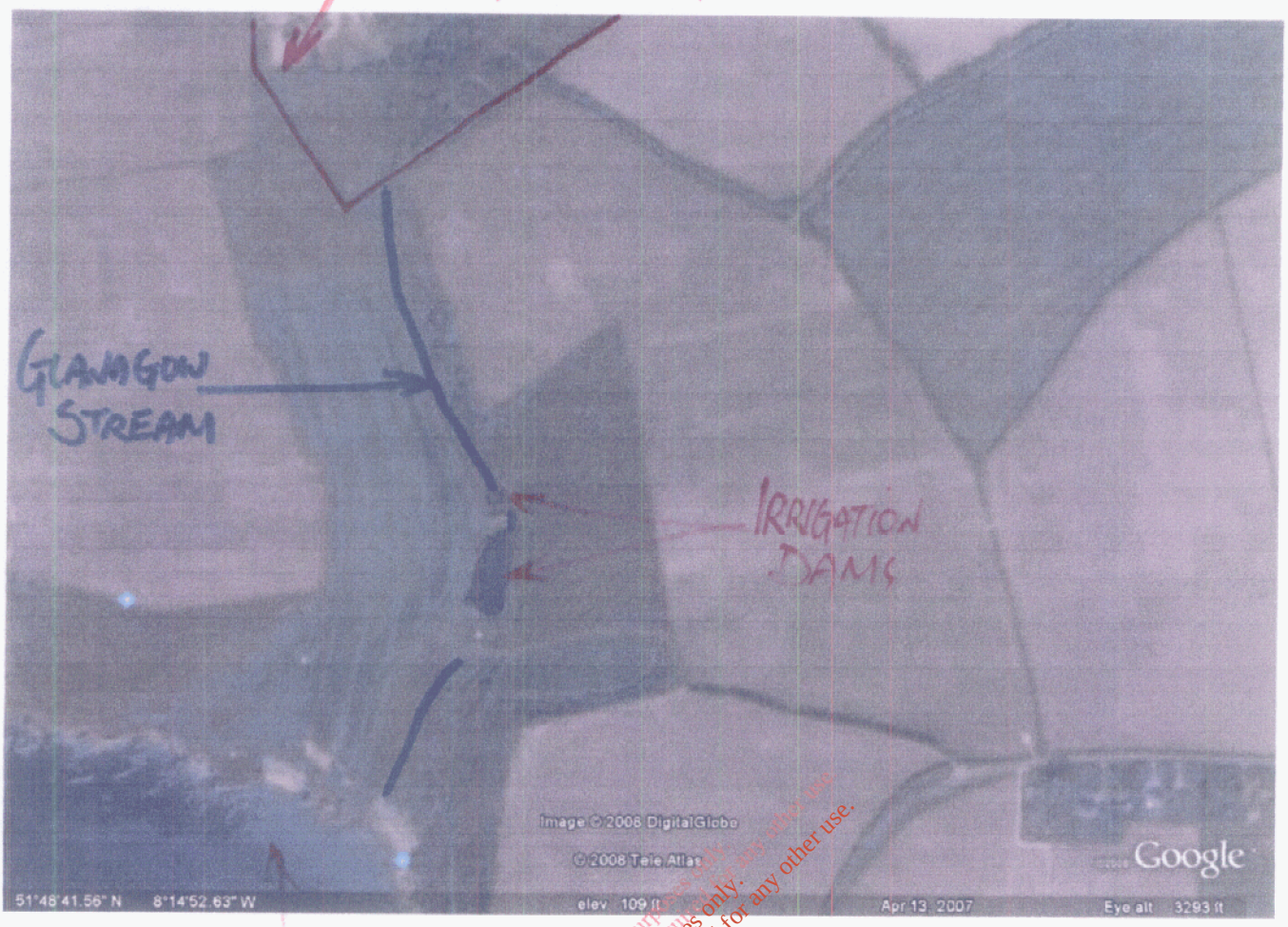
GLANAGOW STREAM FANS OVER WHITEBAY BEACH

WHITEBAY BEACH

WHITEBAY BEACH

PHOTO'S SHOWING SOILED WATER AFTER ENTERING WHITEBAY EX. GLANAGOW WATERCOURSE WHEN MURPHYS CROSSED GLANAGOW WATER-COURSE WHILE LAYING A UNGROUND MAIN GAS LINE TO BORD GAIS (WIPP) SITE

BORD GAIS EIREANN SITE



WHITEBAY BATHING BEACH