

## **Appendix 11**

**Discrepancy  
in the application of  
SI 476/2000 Regulations  
And  
Council Directive 96/82/EC  
on the  
Control of Major Accident Hazards  
Letter To Ms. Mary Harney TD**

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12<sup>th</sup> May 2004

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Ms. Mary Harney T.D  
Department for Enterprise Trade and Employment  
Kildare Street,  
Dublin 2.

**RE Discrepancy in the application of SI 476/2000 Regulations and Council Directive 96/82/EC on the Control of Major Accident Hazards.**

Dear Mary,

I have noted a discrepancy in the application of both SI 476/2000 Regulations and Council Directive 96/82/EC and would like you or your department to confirm to me in writing which document is ultimately effective. You implemented regulation SI 476/2000 on the 21<sup>st</sup> of December 2000.

The discrepancy is noted in SI 476/2000 regulation 4 (2) (v)  
It states that *These Regulations shall not apply to— (v) the transport of dangerous substances in pipelines and pumping stations*

Council Directive 96/82/EC (Seveso II European Directive)  
*States in Article 4 'Exclusions' that the directive shall not apply to (d) the transport of dangerous substances on pipelines, including pumping stations, **outside establishments covered by this Directive***

The statement 'outside establishments covered by this Directive' is omitted, in SI 476/2000. However, as stated in the explanatory notes at the end of SI 476/2000 the purpose of such document is to implement Council Directive 96/82/EC and therefore I conclude that it doesn't replace Council Directive 96/82/EC and that the content of Council Directive 96/82/EC is ultimately what should be referenced, used and applied.

Such an omission means, as a nation we are misinterpreting and therefore not correctly implementing Council Directive 96/82/EC. Therefore we are exposing the public and the environment to a far greater risk, than that currently recognised under the EU Directive. The transmission of dangerous substances through pipelines has a potential to produce major accidents.

The aim of the Seveso II directive (96/82/EC) is '*for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for man and the*

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- The applicant has failed to identify how they intend to adequately support the pipelines in blanket bog that can fail at two-degrees and above. An independent engineering report commissioned by Mayo County Council (local planning authority) also notes this fact.
- The proposed site for this gas terminal is one of the worst sites in North Mayo for building on, due to the depth, volume and surrounding blanket bog.
- The development of this site will involve the removal of c.450,000 cubic meters of saturated blanket bog that will contain c 405,000,000 (405 million) litres of acidic water. This peat will be taken from a site located to the North of Carrowmore Lake and deposited at a site located to the South of Carrowmore Lake. Bord Na Mona has not provided any evidence where they have removed and deposited such a large volume of peat before so close to a major water supply. The milling and harvesting of peat usually carried out by Bord Na Mona involves the removal of the top 10-15mm (c. half an inch) of dust like particles this does not compare to the proposed works.
- The applicant, HSA or Mayo County Council has not provided any evidence or planning conditions as to how the operator must/should prevent the loss of life or ground water contamination in the event of a major accident, either at the terminal or along the pipeline or how it is intended to limit the domino effect arising from a major accident.

Coupled with all of the above, the Health and Safety Authority (Ireland) has refused to examine and report on possible events that can lead to major accidents e.g. pipeline failure, slope stability failure of blanket bog that can impact the terminal and pipeline, anticipated substances that can be present in untreated gas (e.g. Hydrogen Sulphide, etc.- this substance has been found in untreated gas in the Irish Sea. A gas well blowout containing this substance affected 25sq miles in China in December 2003- the area affected was reported as a death zone following the disaster)

The Health and Safety Authority considered the term 'establishment' to be the terminal footprint (area within the security fence where hazardous substances are processed and stored). The Seveso II directive defines establishment as '*the whole area under the control of an operator where dangerous substances are present in one or more installations, including common or related infrastructures or activities.*

It is clear from this that the HSA has determined their own definition for the term 'establishment', that has limited their assessment, analysis and advice. The Health and Safety Authority has refused to examine the consequences of a pipeline or slope stability failure.

The operator has been given specific control to an area of land in which the pipeline passes through and the operator also controls the flow in that pipeline. Irrespectively, the HSA will not consider the safety of the public from this pipeline. Design standards for pipelines quotes set-back distances from pipelines for the safety of the pipeline from third party activities and not for the safety of the public from that pipeline. Published documented reports of a pipeline explosion, operating at approximately one-third the pressure of this upstream pipeline, killed people that was as close as 200m from the pipeline explosion. The proposed route for the upstream pipeline for the Corrib gas field will be as close as 60m from existing dwellings.

I made an observation to Mayo County Council with regard to the stability of the pipeline in peat. Mayo County council identified this on their further information request to the applicant. The applicant has failed to provide details that will guarantee the stability and hence the safety of the pipeline in the surrounding landscape (blanket bog). The Health and Safety Authority have refused to examine the safety of the public from the pipeline.

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environment, with a view to ensure high levels of protection throughout the community in a consistent and effective manner.'

Article 8 of the EU directive 'Domino Effect' states

*Member states shall ensure that the competent authority, using the information received from the operators in compliance with article 6 and 9, identifies establishments or groups of establishments where the likelihood and the possibility or consequences of a major accident may be increased because of the location and the proximity of such establishment, and their inventories of dangerous substances'*

Article 12 of the directive 'Land-use planning' states

*'that member states shall ensure that their land-use and/or other relevant policies and the procedures for implementing those policies take account of the need, in the long term, to maintain appropriate distances between establishments covered by this directive and residential areas, areas of public use and areas of particular natural sensitivity or interest...'*

This leads me to the proposed site chosen for the Corrib Gas Terminal in North Mayo which has the potential to create a domino effect based on the site characterises and surroundings. The site chosen has not changed irrespective of the implementation of the EU directive in December 2000 and following the landslides that occurred in this area in 1983 and 2003.

- The site is surrounded in blanket bog in an area of natural ground instability. This can ultimately have an impact on the pipeline and terminal.
- The applicants design team has advised that peat slopes (blanket bog etc) can fail at angles of two-degrees and above.
- The site is surrounded with forestry and bog heather that can ignite in the expected periods of prolonged dry weather as climate changes are expected to become more severe. It is even proposed to plant more trees to minimise the visual impact of the terminal.
- The proposed site is located on the catchment area of a major drinking water supply (Carrowmore Lake) for the entire North Mayo area.
- Streams and rivers run adjacent to the site that discharge to Carrowmore Lake. If Carrowmore Lake become contaminated the impact to the public and environment will be widespread affecting communities 25-miles away from the terminal (Domino Effect).
- An existing established village is directly across the road from the proposed gas terminal development.
- The high-pressure upstream pipeline (c1500 tonnes/square meter pressure) travels approx. 8km inland through blanket bog along an established village and as close as 60m to dwellings. The Health and Safety Authority will not consider the safety of the people from this pipeline. They state its not part of their remit due to the interpretation of SI 476/2000 that implements Seveso II EU Directive. I have written to Mr. John Colreavy of the HSA and told him that I was personally prepared to commission the HSA to examine the effects and consequences of a pipeline failure. I did not receive any response or acknowledgement of my letter.

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There are other alternative sites available in this locality that do not pose such a consequential risk, and therefore in the event of an accident these sites in comparison, limit the consequence to the public and the environment, such is the aim of the Seveso II directive. These sites do not require the removal of such large quantities of peat; they are not surrounded with trees, and are outside the catchment area of a major drinking water supply.

The safety of the public and protection of a major water supply in the event of a major accident should be of utmost important to us all. It is not comforting to think that our national authority responsible for the Health and Safety of the public will not consider the consequences of pipeline failure, peat slope failure and the transportation and treatment of gas containing hydrogen sulphide as they feel its not part of their remit.

An independent safety audit of the entire proposed gas terminal development (for the Corrib gas field) surrounded with blanket bog and trees, in an area of natural ground instability and within the catchment area of the only major water supply for the entire North Mayo area should now be carried out. Usually, the safety implications of documents become more rather than less stringent as more and more events occur.

I would be grateful if you or your department would clarify the discrepancy noted in this letter and identify the correct wording/document to reference, use and apply for the control of major accidents in Ireland. The implementation of the EU Directive 96/83/EC (Seveso II), in Ireland has resulted in the misinterpretation and incorrect application of a document that is intended to prevent and limit the consequences of a major accident. SI 476/2000 forms a relaxation rather than a more stringent safety requirement for such events.

Interpretations and applications of published documents responsible for the prevention and limitation of major accidents should be on the side of caution rather than relaxation. Government policy to develop and extract our natural resources can still be achieved in an environment that will limit the consequence and domino effect of a major accident.

Yours Sincerely



Brian Coyle BE, CEng, MIEI, MStructE  
Chartered Engineer

cc Ms. Siobhan Duffy- European Commission Representation in Ireland

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## Appendix 12

### Larger Scale Pictures Used in the Report

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Picture of Landslide of Dooncarton Hill, Co. Mayo

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Pictures of North Face of Dooncarton Hill Landslide, Co. Mayo Directly above the High pressure landfall for Corrib Gas Field

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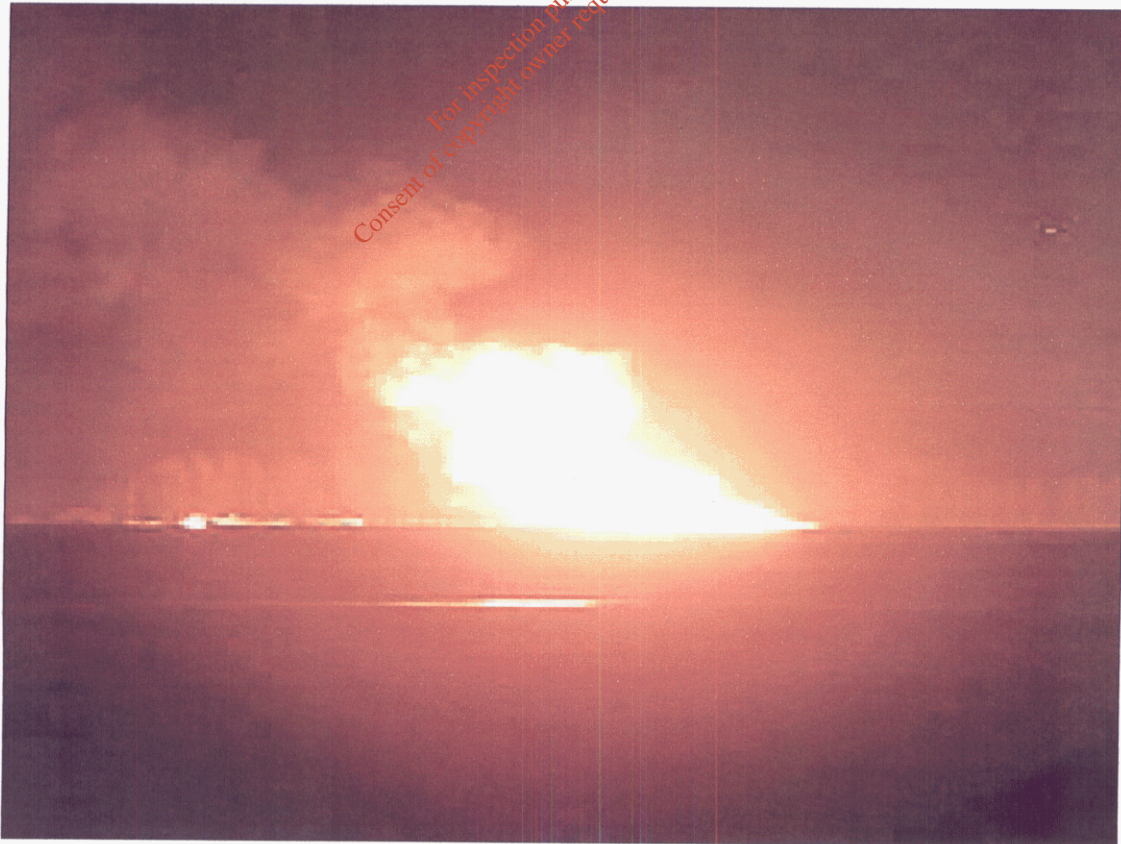
Note access road blocked in the event of a landslide.



Pictures of Dooncarton Hill Landslide

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### Recent Events of Pipeline Explosions

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**Pictures from the Gas Pipeline Explosion in New Mexico. Note the size of the People Standing around the Crater**

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