

I object to Planning Application SP10/0947 on the following grounds:

The Environmental Statement some 355 pages long has great detail on the following:

- Traffic and Transportation
- Landscape and Visual
- Ecology and Nature Conservation
- Soils and Geology and Ground Water
- Surface Water and Flood Risk
- Noise and Vibration
- Air Quality
- Human Health
- Archaeology and Cultural Heritage
- Cumulative Effects

It however omits the paramount study and report as to whether the proposal is **SAFE**.

I assume that this oversight is either because of compliance with a standard Application format or ignorance of the potential dangers, which the proposal will generate.

The proposal has at its core a gasification plant which will generate a gas combination known as syngas or producer gas. This is a mixture of Hydrogen and Carbon Monoxide, two of the most highly flammable and explosive gases known to man, with auto combustion temperatures as low as 500 deg centigrade and explosive range from 4 to 75%. Further Carbon Monoxide is a highly toxic gas.

In designing a process handling such extremely hazardous substances it is mandatory that a preliminary hazard analysis be completed before any planning application is forwarded, as a negative result will completely negate all other studies.

A hazard analysis will quantify the probability of a hazardous event and determine the impact and consequences of the identified event.

While the analysis is made to minimise the consequence of an event on the capital assets of the plant and minimise risk to the plant operational staff, the situation in the case of the proposed installation is exacerbated by the introduction of the general public into the adjacent Community Recycling Centre (CRC), who will not have the emergency training that operational staff will have received.

From information drawn from the application documents it is evident that the designers have given scant attention to safety issues, and your attention is drawn to “Guideline for Safe and Eco-friendly Biomass Gasification”, Intelligent Energy (Europe) Nov 2009, funded by the EU, which can be found on <http://www.gasification-guide.eu>.

The Gasification Plant currently proposed in the Application is at variance with the Guideline principally:

- **The feed stock must be separated from the gasification building.** (The proposal houses the feedstock and gasification plant in the same building).
- **For safety reasons the control and staff rooms must be separated from the remainder of the plant due to fire, explosion and toxic gas release hazard.** (The proposal houses the control room, administration offices and educational centre in the same building.)
- **The control room should have positive pressure ventilation, with air drawn from a safe location. Note it is normal petro and chemical plant practice to ensure that the control rooms are blast resistant.** (It would appear that the proposal does not satisfy either of these requirements).
- **The gasification building must be well ventilated and the flows monitored or verified across critical operational areas.** (This is not possible with the proposal as the building is kept under negative pressure to reduce the escape of odorous air into the atmosphere).
- **There should be two escape routes from each point within the gasifier building to the outside.** (From documents provided it is not possible to ascertain if this is complied with).
- **All hazardous areas shall be clearly identified and clear signs erected at points of entry into potentially explosive atmospheres.** (The proposal has not identified any hazardous areas).
- **Further the proposal has not utilised the available site to provide maximum distance between the Gasifiers and the CRC.**

It should be noted that both the Institution of Mechanical Engineers and the Institution of Chemical Engineers, while champion energy from waste, have serious reservation on gasification, mainly due to enormous operational problems where they have been tried out, mainly in other countries.

It is recommended that all approving authorities of this application seek legal advice as to their liability should they approve the application and a potential hazardous event take place.

In summation from a safety aspect the site is too small for the proposed installation and the combination of Gasifiers, Anaerobic Digester and adjacent Community Recycling Centre **should not under any circumstances be considered.**

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