

Personal contact details and Professional summary	
Name	Mr. Chris Cronin: Chartered Engineer, Chartered Environmentalist, Chartered Waste Manager.
Address	Fehily Timoney and Co, Core House, Pouladuff Road, Cork.
Contact details	Landline telephone: +353 21 4964133 Mobile phone: +353 86 3803216 Email: chris.cronin@ftco.ie Website: www.fehilytimoney.ie
Qualifications	<i>B.Sc. (Hons.), M.Sc..</i>
Career history	1979 Research Engineer winged bean trials, Thailand. 1979 to 80 Topographic and Soils Surveyor, Libya. 1981 to 82 Research Engineer reclamation of saline alkaline soils, Egypt. 1982 to 84 Irrigation and Drainage Design Engineer and construction supervision, UK and Nigeria. 1985 to 86 Civil Engineer/Agent, groundwork contracts, UK. 1986 to 89 Irrigation and Drainage Design Engineer and construction supervision, Swaziland. 1990 Irrigation Design Engineer, Oman. 1992 to 97 Irrigation and Drainage Design Engineer, Pakistan. 1997 to 99 Technical Director NomixChipman (research and contract management), UK. 1999 Chief Engineer, Derbendikhan Dam radial gate replacement, Iraq. 2000 to 2002 Resident Engineer, Kinsale Road Landfill, Cork. 2003 to present Principal Design Engineer, FehilyTimoney and Company. (Ireland, Scotland, England, UAE. KSA, Malta, Jordan.)
Relevant project experience	Chris has acted as Project Manager for a number of landfill cell, capping, operations on behalf of local authority and private clients in Ireland and overseas. Responsibilities have included project management, detailed design, preparation of contract documents, procurement, value engineering, risk assessments, construction supervision and operations management. Landfill Project Experience: <i>Capping:</i> Kinsale Road, Arthurstown, Silliot Hill, Marlinstown, Ballydonagh, Rossmore, Killurin, (Ireland); Sajja (UAE), Al Asla (KSA), Gozo (Malta), Knowes Farm, (Scotland) <i>Cell:</i> Arthurstown, Holmstown, Bottlehill, Knockharley, Donohill, Banemore. <i>Leachate treatment:</i> Kinsale Road, Arthurstown, <i>Facility operations:</i> Sajja (UAE) and Al Asla (KSA). <i>Landfill gas specialist inputs:</i> (software, migration): Arthurstown, Marlinstown, Ballydonagh, Silliot Hill, Donohill, Kinsale Road. <i>Utilisation projects:</i> Midland region 3 no. landfill sites, Arthurstown, Kinsale Road.

Research: Zero Waste Scotland low calorific landfill gas trials, Scotland.

Facility Development: Bottlehill, Arthurstown, Holmetown, Sajja plus numerous design build operate tender submissions in Ireland and overseas.

Environmental: (risk assessments, audits, leachate and gas migration studies): Marlinstown, Silliot Hill, Kinsale Road, Arthurstown, Rossmore, Ballydonagh, Donohill, Al Asla (KAS), Sajja (UAE).

Hazardous: Sajja (UAE).

Peer reviewed landfill related publications.

Landfill Technical Information Resource , (internal training document for EPA not published), co-author

Estimate of Methane Recovery in Landfill Gas Flaring and Utilisation in Ireland for EPA, co-author.

EPA AG7 Guidance Note on Landfill Gas and Engine management and Monitoring, co author.

A Management and Auditing Model for Balancing Landfill Gas Extraction.
C. J. Cronin, et al, Proceedings Waste 2008.

A Spreadsheet Tool to Calibrate LANDGEM Gas Prediction Software for Specific MSW Facilities Using Data from Gas Extraction Audits. C. J. Cronin et al Proceedings, Sardinia, 2011.

A Spreadsheet Tool to Calculate Landfill Gas Flow Across a Range Of Control Valves or to Select Appropriate Valves Based on Design Flows, C. J. Cronin et. al. ISWA World Conference 2013, Vienna.

Specific areas of expertise

Chris has an extensive background in landfill engineering encompassing the following disciplines:

- Soils - classification and soil mechanics.
- Hydrology and hydrogeology.
- Landfill engineering:
 - Cell and capping design.
 - Leachate management, treatment and migration.
 - Anaerobic bioreactors.
 - Landfill gas management including migration.
- Wetland design.
- Environmental risk assessments.
- Project management.

Declaration: *I accept responsibility for the accuracy of the particulars contained in this form including my qualifications and I agree that, when submitted, its contents will be made available on the Engineers Ireland website www.engineersireland.ie*

I agree to the declaration above