Communicating Geoscience Some Private Sector Examples

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Mines & Quarries, Natural Gas

- Cross section of mining and quarrying developments examined; also Corrib Gas
- EIS/EIA a key step
- Not all controversial
- Wide range of issues arising; geoscientific, land-use, planning, environmental, cultural, political, economic
- Single issues can determine outcomes

Tara Mines, Navan



- Europe's largest zinc mine; 720 employees
- 5 Km long; up to 1km deep; output 2.5 Mtpa
- Discovered late 1970
- EIS 1971-2;PP Q1 1973
- Production; mid 1977
- High Court Nuisance Action 1973
- Delays related to Mining Lease terms
- Several expansions to mine and TMF (PA &IPCL)

Galmoy Mine



- Discovered 1986
- EIS, PA(2 counties),IPC
- Opposition Group
- ABP Hearing
- High Court & Mining Board challenges
- Production 1995
- Expansion PAs
- Closure 2012/3

Lisheen Mine, near Thurles



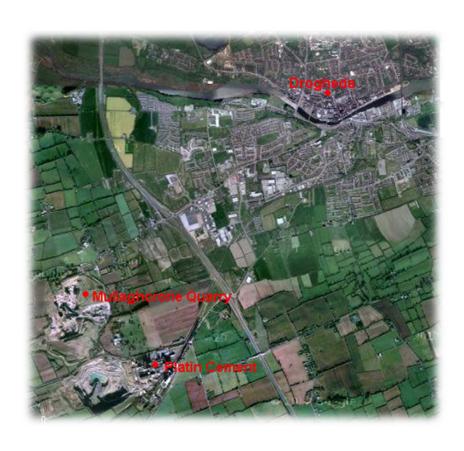
- Discovered 1990
- EIS, PA, IPCL,
- Few Objectors (c 5 no)
- Production September 1999
- C 1.2 Mtpa
- Later Wind Farm(s) nearby
- Lisheen, Galmoy & Tara Zinc
 /Lead Mines environmentally well
 mitigated and managed

Croagh Patrick & Doo Lough Gold Projects



- No PA lodged for these Projects
- 1984; Gold discovery by Tara near Croagh Patrick, important religious site
- 1987 Tara JV with Burmin Opposition Group 1988; EIS completed
- 1990 Prospecting Licence Renewal Refused on religious/cultural grounds
- 1996; Supreme Court Action Burmin v Ireland settled
- 1986; discovery by Glencar/Andaman near Doo Lough
- Mining Ban by Mayo CC 1992
- High Court Actions, Glencar v Mayo 1992 & 1998
- Supreme Court Decision 2001; Ban Overturned but no compensation
- Contrast with Northern Ireland gold projects advances(Galantas & Dalradian)

Mullaghcrone Quarry



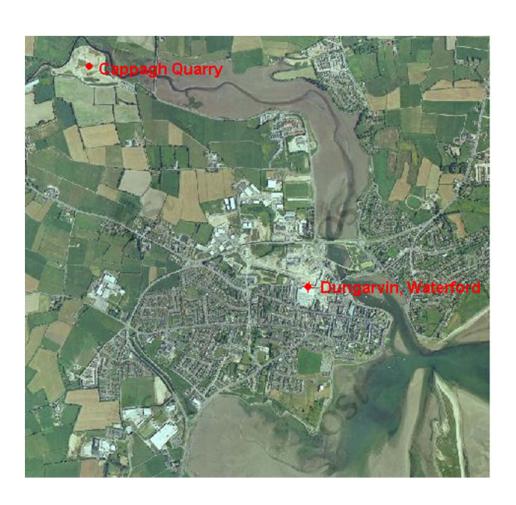
- Existing Quarry 1978
- 1980, 1982; PAs to Meath CC: one 3rd party appellant
- 1984; ABP grant
- 1989; EIS&PA for quarry extension; granted; no objections
- 2003; PA for Batching Plant; granted; no objections
- Subsequent Waste Permit
 /Licence Applications 2011-to
 date; successful

Duleek Quarry



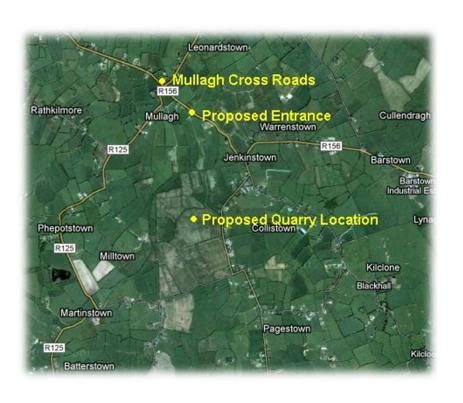
- Existing Limestone Quarry since mid 1970's
- EIS & PA for Extension 2001
- PP granted 2002
- No objections

Cappagh Quarry, Waterford



- Existing Quarry
- PA for extension; local objections
- 2007; Partial consent by Waterford CC; extraction above water table
- 2008; ABP upheld WCC conditions citing groundwater issues
- Subsequent legal letter to ABP re errors of fact in ABP's Inspector's Report
- Extraction below water table permitted elsewhere

Mulhussey Proposed Quarry



- PA & EIS
- Initial Application April 2004
- Over 300 local objections, some professionally represented
- PP granted Meath CC
- ABP refusal 3 reasons
- New Application 2007
- Granted PP by Meath CC
- ABP Refusal 2009 ;1 reason-road alignment at specific location

Carrowkeeny Proposed Quarry



- Greenfield site
- PA & EIS
- Dec 2004; Initial Application
- Local objections
- 2006; Roscommon CC refusal of PP due to impact on surrounding dwellings, traffic related issues and water supply issues
- 2008; ABP Refusal
- Not all Greenfield Sites Fail!

Corrib Gas Project

JV Shell, Statoil & Vermilion









- Offshore Gas Field Discovered 1996 by Enterprise Energy
- 3 main elements; 350m
 Subsea connection to gasfield+83km Offshore
 Pipeline; 9km Onshore
 Pipeline; Gas Terminal
- Issues; Geotech ,Water, Hydrogeology, Pipeline Safety; Community & Resource Equity
- Crucial for national energy security & long term development of Ireland's Offshore

Corrib Gas-Terminal





- 2001 PA to MCC for Terminal
- 2002; ABP Oral Hearings(2 no);
 2003; ABP Refusal- Peat Stability
- 2003; New PA to MCC; public consultation by SEPIL and Bord na Mona in relation to Peat removal & storage in cut-away bog
- 2004; ABP Oral Hearing, Permission Granted; c 0.5 M cu meters of peat removed 10kms by Roadbridge Ltd and stored in BnM cut-away
- 2007; IPCL for Terminal
- 2009; Terminal completed, connected to National Gas Grid (c 150 km pipeline-no objections)

Corrib Gas- Onshore Pipeline





- 2005; High Court Injunction;
 Rossport Five; Gov Safety Review,
 Tech. Advisory Group & Mediator
- 2008; PA under Strategic Infrastructure Development (SID)
- 2009; PA resubmitted; Oral Hearing;
- 2009; Landfall for 83Km Offshore Pipeline
- 2010; Modified Route (incl Tunnel) for Onshore Pipeline; Oral Hearing
- 2011; ABP Permission
- 2013; 5km Tunnel Commenced
- First Gas 2015

Corrib Collateral; Barrets Quarry, Bangor Erris



- Pre 1963 Quarry
- PA & EIS 2007
- No local objectors; An Taisce objection-Corrib related
- PP grant by Mayo CC
- ABP grant 2010
- Readymix Plant PA 2011
- PP grant by Mayo CC 2012
- An Taisce objection;
- 2013; ABP Permission Granted

Corrib Collateral; Lennon's Quarry, Glencastle



- Existing Quarry
- EIS & PA 2003
- No local objections; Taisce role
- PP granted by Mayo CC
- 2003 ABP partial grant; Peat issue
- 2005; High Court Action(Corrib related)
- 2005; ABP final grant
- 2010; EIS & PA for quarry extension no objections;
- 2012; PP granted Mayo CC

Some Lessons Learned

- Early and consistent community involvement key
- Long term operations provide information, clarification & long term jobs and will greatly reduce objections IF track record is good
- Long term exploration presence provides information, clarification, some jobs but will not ensure no objections
- National issues may overshadow local attitudes
- EIS without community /stakeholder engagement is futile
- Single point contact for media; how to get balance?
- Planning process generally thorough & effective, 'tho often ponderous
- Scientists and Engineers need training in public consultation
- Geo-Tourism and Heritage projects well received- e.g. Burren & Copper Coast -need more of these!