

Historic Landfills – An Innovative ICT Solution for Efficient Environmental Regulation

*Breen Higgins, Inspector
Environmental Licensing Programme
ICT for Environmental Regulation
Workshop, NUIG, 20th & 21st June 2013.*



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Overview

- What was the challenge facing the EPA?
 - Numbers
 - Timeframes
 - Resource constraints
- Possible Solutions
- Innovations within solution
- Outcomes

Background

- The Waste Directive (75/442/EEC) required each Member State to authorise landfilling activities
- EC deemed Ireland had not done so appropriately (ECJ C-494/01)
- Ireland now required to authorise a significant additional number of landfilling activities

Background

- Section 22 register identified 285 sites for authorisation
- Road Map agreed between European Commission/DECLG/ City & County Managers Assoc.
- No additional resources for EPA
- Challenging timeframe for EPA to implement a solution
 - 3.5 months to identify, build and release in time for applications

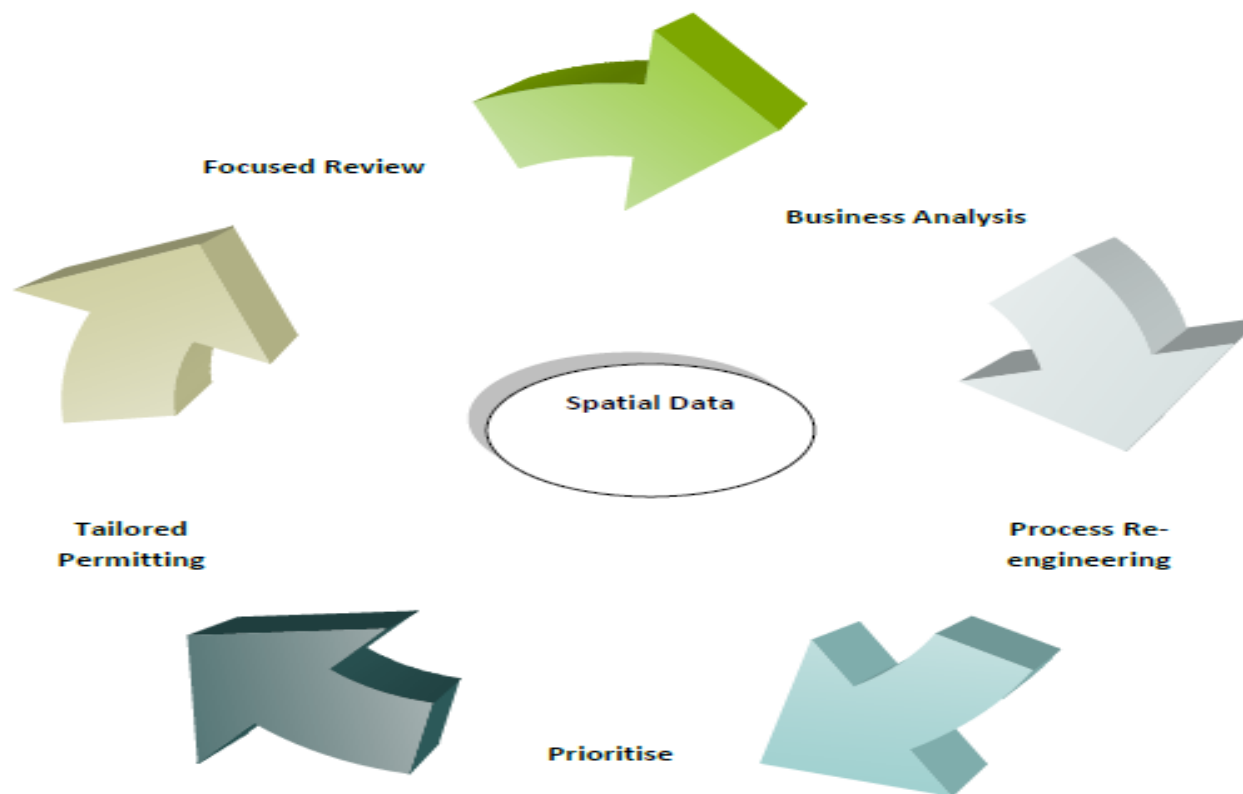
Possible Solutions – Option 1



Or.....Option 2

- Utilise our ICT experience through;
 - Analysis
 - Utilising Verified Data – identify risk
 - Identifying Priorities –
 - aim to break the Source-Pathway-Receptor (SPR) linkages

Workflow



Targeted Guidance to assist applicants

■ Key assistance provided to applicant and Qualified Person

- Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites, 2007
- Landfill Manuals; Restoration and Aftercare
- On-line tutorial for completing electronic application form

Local Authority – Licence Application Page



Licences My Notifications Manage My Users



Wexford County Council List of Licences

Welcome Breen

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[Home](#) >> All Licences

Carcur (H0002-01)



PRE APPLICATION

Ballykeerogue (H0460-01)



PRE APPLICATION

Bridgetown (D0231-01)



APPLIED

Castlebridge (D0235-01)



APPLIED

EDEN - EPA, Johnstown Castle, Co. Wexford - Phone: +353 (0)53 9160600 | edenenforcementsupport@epa.ie



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Qualified Person – Preliminary Step

Prior to proceeding with your application, please tick the box below to confirm that you have read the above information and that you certify that the information given in this application is true, accurate and complete.

☒ I Confirm

Qualified Person Details [\[?\]](#)

First Name

Breen

Relevant Professional Body

IEMA

Surname

Higgins

Professional Body Membership Number

0004441A

Email address

breenhiggins@feawe.com

Qualification

BSc, MA, P Grad

Please upload document from Professional Body confirming qualifications and experience

Upload files

File Name	Action
waiver_20130618105728.pdf	

SAVE

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Applicant Information – Pre-populated

STEP 1:
Details

STEP 2:
Site Details

STEP 3:
Risk Assessment

STEP 4:
Remediation Plan

STEP 5:
Appropriate Assessment

STEP 6:
Fees

Applicant Details

Name of Local Authority

Wexford County Council

Applicant's Interest in Site

Owner

Does site extend over more than one Local Authority jurisdiction?

☒ Yes

☐ No

Co-Applicant Details

Name of Local Authority

Wicklow County Council

Contact First Name

John

Email address of Contact

jjames@eircom.com

Contact Surname

James

Telephone Number of Contact

353 059 6211745

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Use and Re-use of Geo-data

Site Details

Address Line 1	<input type="text" value="Park"/>	Townland(s)	<input type="text" value="PARK"/>
Address Line 2	<input type="text" value="Wexford"/>	Site Code	S22-02599
Address Line 3	<input type="text"/>	Grid Reference	E/N
Address Line 4	<input type="text"/>		
Address County	<input type="text" value="Wexford"/>		

Spatial Boundary:



Identifying/Classifying Risk

Following refinement of your CSM, have you recalculated the risk classification?

☐ Yes
☒ No

Validate	SPR Input	Original Value	New Value	Rationale	
<input type="checkbox"/>	1a	5.00	10.00	Edit	Waste area < 1 ha, MSW.
<input type="checkbox"/>	1b	5.00	7.00	Edit	Waste area < 1 ha, MSW.
<input type="checkbox"/>	2a	3.00		Edit	Extreme Vulnerability
<input type="checkbox"/>	2b	1.00		Edit	Poorly Productive Bedrock Groundwater Bodies (LI, PI, Pu)
<input type="checkbox"/>	2c	0.00		Edit	No direct connection to SW.
<input type="checkbox"/>	2d	2.00		Edit	Bedrock
<input type="checkbox"/>	2e	0.00		Edit	No receptor above source, site used for agricultural grazing.
<input type="checkbox"/>	3a	3.00		Edit	Dwelling located <50m from waste body.
<input type="checkbox"/>	3b	0.00		Edit	Greater than 1km to SWDTE or GWDTE.
<input type="checkbox"/>	3c	1.00		Edit	Poor aquifers (PI, Pu)
<input type="checkbox"/>	3d	0.00		Edit	Site is located 800m uphill of boundary of Sow River catchment which is a public water supply. Nearest river abstraction point is 8km away from site. Nearest group water scheme boundary is 1.17km North.
<input type="checkbox"/>	3e	1.00		Edit	Greater than 250m but less than 1km
<input type="checkbox"/>	3f	5.00		Edit	Dwelling located <50m from site boundary.

Recalculate Inputs

Remediation Plan

Remediation Plan

Risk Classification

C (Low Risk)

Action	SPR	Risk Score	Remedial Options	Date for Completion	Monitoring Options	Description
+	SPR01	7.50				
+			Decommission domestic <input type="button" value="v"/>	28/06/2013		
					Leachate levels at source <input type="button" value="v"/>	Remove receptor to eliminate
+	SPR02	0.00				
+			None required (No / Low <input type="button" value="v"/>	30/06/2013		
					None required (No / Low <input type="button" value="v"/>	None required
+	SPR03	3.75				
+			Active landfill gas ventin <input type="button" value="v"/>	31/08/2013		
					Gas monitoring in building <input type="button" value="v"/>	Remediate gas migration
+	SPR04	0.00				
+			None required (No / Low <input type="button" value="v"/>	30/06/2013		
					None required (No / Low <input type="button" value="v"/>	None
+	SPR05	3.38				
+			None required (No / Low <input type="button" value="v"/>	26/06/2013		
					None required (No / Low <input type="button" value="v"/>	None

Submit Application

Confirmation from Qualified Person

Please upload a letter from your Qualified Person confirming WORDS FROM BREEN TBC

Upload files

Submit Application

Prior to submitting your application, please tick the box below to confirm the following:

I certify that the information given in this application is true, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and via the EPA's website. This consent relates to this application itself and to any further information or submission whether provided by me as Applicant or any person acting on the Applicant's behalf.

I recognise that the EPA will issue a Certificate of Authorisation under regulation 7(6) of the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations, 2008, based on the information provided in this application form. I accept that any Certificate of Authorisation found to have been issued on the basis of untrue, inaccurate or incomplete information provided in this application form may be reviewed at the EPA's discretion and a new application made under regulation 7 of the Regulations at the local authority's expense.

I accept that the local authority must make all reasonable efforts to comply with any Certificate of Authorisation so issued and that failure to do so is an offence under regulation 8(2) of the Regulations.

☐ I Confirm

Submit


PREV

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Data written back to LEMA


Landfill Application
HLF-00000443

Landfill Applications ▼ ↑ ↓

Site  **Carcur**

Principal Waste Type **C & D**

Overall Risk Classification **Lowest Risk (Class C)**

<input type="checkbox"/>	SPR Linkage	Calculation	Score	Normalised Score	Section 22 Nor...	GQRA Exceede...	
<input type="checkbox"/>	SPR-1	1.50 x (2.00 + 1....	7.50	7.50	10.50	No	
<input type="checkbox"/>	SPR-10	1.00 x 1.00 x 1.00	0.67	0.67	0.00	No	
<input type="checkbox"/>	SPR-11	1.00 x 1.00 x 1.00	0.40	0.40	0.00	No	
<input type="checkbox"/>	SPR-2	1.50 x (2.00 + 1....	0.00	0.00	10.50	No	
<input type="checkbox"/>	SPR-3	1.50 x (2.00 + 1....	3.75	3.75	8.75	No	
<input type="checkbox"/>	SPR-4	1.50 x (2.00 + 1....	0.00	0.00	13.13	No	
<input type="checkbox"/>	SPR-5	1.50 x (2.00 + 1....	3.38	3.38	2.63	No	
<input type="checkbox"/>	SPR-6	1.50 x (2.00 + 1....	0.00	0.00	0.00	No	
<input type="checkbox"/>	SPR-7	1.50 x (2.00 + 1....	5.63	5.63	13.13	No	
<input type="checkbox"/>	SPR-8	1.50 x 2.00 x 3.00	15.00	15.00	0.00	No	
<input type="checkbox"/>	SPR-9	1.50 x 2.00 x 0.00	0.00	0.00	0.00	No	

1 - 11 of 11 (0 selected)

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Attributes

Groundwater Flow Regime (Horizontal Pathway)

Poorly Productive Bedrock Groundwater Bodies (LI, PI, Pu) ▼

Human Presence (Well)

Greater than 50m but less than 250m ▼

Soil Permerability

All Namurian or Irish Sea Tillis (low permeability) ▼

Human Presence (Gas)

Greater than 150m but less than 250m ▼

Public Water Supplies

Greater than 1km (no karst aquifer) ▼

Surface Water Drainage (surface water pathway)

Direct Connection ▼

Certificate of Authorisation

- Generated using information submitted in application form
- Contains Conditions relating to;
 - Scope of the authorisation
 - Notifications relating to the authorisation
 - Management of the Site
- And a Schedule detailing Remediation Measures
 - Linked to risks identified for the site
 - Appropriate time frame and monitoring

Outcomes

■ Customer Service Delivery

- receipt of applications in line with timeframe agreed with the EC,

■ Enhanced Customer Service

- re-use of geo-spatial data through the on-line form,

■ Working in new ways

- reduced administrative and inspectorate burden

■ Reducing costs to drive better value for money

- significant savings on human resource input

Final Thoughts

- Loyal to the core principles of *better regulation* (Hampton)
- A template for future developments.
- Effective and efficient use of contemporary ICT in the field of environmental regulation.
- Provides a platform that allows the EPA to take on new regimes in an extremely efficient manner.

Thank you for your attention

