

Unit 15  
Melbourne Business  
Park  
Model Farm Road  
Cork



T: 021 434 5366  
E: info@ocallaghanmoran.com  
www.ocallaghanmoran.com

To: Director of Services, Environment Section, Laois County Council

Date: 20/11/2015...

**Re:** Risk assessment on an historic landfill (Oughaval, Stradbally) in support of an application for a certificate of authorisation in accordance with regulation 7 of the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.

Dear Director,

As a person who is qualified, trained and experienced to the standard set out in section 2.3 of *Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites* (EPA, 2007), it is my opinion that the risk assessment carried out by O'Callaghan Moran & Associates (OCM) on the closed landfill at Oughaval, Stradbally is adequate and complete.

The risk assessment complies with all of the requirements of the *Code of Practice*. The local authority and its contractor (OCM), in carrying out the risk assessment, has followed and completed the steps set out in the *Code of Practice* and associated guidance (Matrix 1 and Matrix 2 – as published).

The following items:

- - the risk assessment,
- - the findings and conclusions of the risk assessment,
- - the remedial measures proposed
- - the monitoring proposed to be carried out to demonstrate the effectiveness of the remedial measures,

are, in my opinion, appropriate and adequate to:-

- identify the instances and risks of environmental pollution arising from the closed landfill to which this application refers,
- proportionately address any and all such instances and risks of environmental pollution,
- ensure that any future instances of environmental pollution will be detected in a timely manner.

I have advised the local authority on the following aspects of this project or have carried out or managed the following aspects of the project on behalf of the local authority

- - Tier 2 risk assessment (Yes) OCM completed the Tier 1 and Tier 2 Risk Assessments.
- - Tier 3 risk assessment was completed in 2011 and concluded that the site remains a moderate risk to groundwater
- - Remedial Measures are required comprising the following;

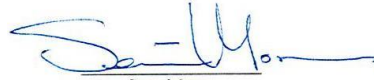
The site should be levelled, covered with a 0.5m layer of low permeability subsoil graded to a fall to encourage shedding of rainfall to a point down gradient of fill area. The subsoil should be compacted to minimise rainfall infiltration, covered with 0.1m of topsoil and seeded with grass. The use of the land following capping should be restricted to grazing of livestock.

- - Post-Remediation Monitoring Programme. -

Following completion of the remedial works, groundwater quality should be monitored quarterly in the two down hydraulic gradient wells to assess the effectiveness of the remedial measures over a 12 month period. If the water quality improves over time then the monitoring frequency can be reduced to annually after year 1. If after year 2 groundwater quality is not impacted no further monitoring is considered necessary subject to the agreement of the Agency.

Because capping has the potential to increase landfill gas migration risk laterally it is recommended that landfill gas monitoring be undertaken quarterly in conjunction with the groundwater monitoring. A spike probe survey should also be undertaken between the site and the closest dwelling (100m to the west of the site) at the time landfill gas monitoring is being undertaken in the groundwater/landfill gas wells.

Signed:



Sean Moran

Name

Sean Moran (P.Geol., Eur. Geol, MSc.)>  
O'Callaghan Moran & Associates  
Unit 15 Melbourne Business Park,  
Model Farm Road,  
Cork.

*For inspection purposes only.  
Consent of copyright owner required for any other use.*