

LEGACY LANDFILL SITES CLOSURE AND AFTERCARE	2nd February 2016
To: ENVIRONMENTAL SERVICES COMMITTEE	
For Decision	

Linkage to Council Strategy (2015-19)	
Strategic Theme	Protecting and Enhancing Our Environments and Assets
Outcome	Our natural assets will be carefully managed to generate economic and social returns without compromising their sustainability for future generations.
Lead Officer	Kieran Doherty
Cost: (If applicable)	Capital £7,051,169 Revenue £3,473,377

1.0 Background

Landfill sites have been operated by Limavady and Ballymoney Borough Councils in their respective Boroughs since the 1970's; the Limavady site at Drumaduff and the Ballymoney site at Crosstagherty. Both sites ceased accepting waste in 2003, however both sites require to be closed and suitable aftercare arrangements put in place in accordance with The Landfill Regulations (NI) 2003. The Northern Ireland Environment Agency (NIEA) being the enforcing authority in these matters issued Compliance Notices in 2013 on both Limavady and Ballymoney Councils to make the necessary arrangements to have the sites restored as required by the legislation.

1.1 Drumaduff Site – Limavady

The site at Drumaduff extends to approximately 6.7 hectares (17 acres). The lands are leased from a local landowner and while the Council has attempted over many years to purchase the lands this has proven problematic. To effect the restoration works, Council will require ownership or a long lease of at least 30 years, in order to finance and implement any eventual closure plan. The site and some adjoining lands are currently the subject of a second vesting application made by the Council in April 2013.

A site closure plan was prepared for the site in 2005 by RPS Consulting Engineers, this was superseded by a revised version in 2004, which is the current NIEA approved plan.

In summary, this plan involves the re-profiling of the existing body of waste to include additional lands outside the existing landfilled area, the installation of a synthetic liner and a one meter thick clay cap which would in turn be top soiled and sown in grass. Issues however, have arisen with

the multiple owners of the additional lands required who have refused to sell the required lands to allow the works to progress.

The requirement to submit a planning application for the extension of the site arising from the placing of municipal waste into previously unfilled land and the need to engineer this part of the site, remains to be clarified.

Landfill gas would be handled through passive ventilation shafts, no formal leachate treatment is proposed.

1.2 Crosstagherty Site - Ballymoney

The site at Crosstagherty extends to approximately 14 hectares (35 acres) which includes a leachate treatment compound and the civic amenity site and transfer station. All lands are in the ownership of Council.

A site closure plan was prepared for the entire site and submitted to NIEA in May 2015.

In summary the plan involves limited re-profiling of the existing body of waste within the existing landfilled area, the installation of a synthetic liner and a one metre thick clay cap which would be top soiled and sown in grass.

Landfill gas is to be handled through passive ventilation shafts and leachate would be treated through the existing leachate treatment works before discharge to a water course.

1.3 Costings

Cost arise in 2 respects, namely:

Capital Costs associated with the engineering and site works in re-profiling the sites, installation of landfill gas venting infrastructure, the synthetic liner, site drainage, clay overlay, top soiling and final grassing of the sites; and

Revenue Costs associated with ongoing maintenance, site supervision, leachate treatment and sampling costs.

These costs are projected for a period of 30 years which is the current timescale over which the Council is expected to actively manage the restoration of both sites.

1.4 Current Costings

	<u>Drumaduff Site</u>	<u>Crosstagherty Site</u>
Capital cost:	£4,256,669	£2,794,500
Revenue cost:	£2,567,676	£905,701

2.0 Amended Proposals

2.1 Drumaduff Site – Limavady

The original strategy outline at 1.1 above has proven to be inoperable for many reasons, particularly the difficulty in gaining the additional lands to re-profile the waste over the proposed larger site.

The current proposal is to re-profile the waste within lands largely contained within the footprint of the existing landfilled area and entirely within land owned by the one landowner.

Advantages:

- No need to vest additional lands from numerous landowners
- No need to make a planning application for an extended landfill
- Restoration of “rights of way” on a contested bog road
- Some reduction in costs due to a smaller cap and less compensation in purchasing additional lands

Disadvantages:

- More material to be moved within the curtilage of the site
- Potentially a higher on-site profile, particularly as viewed from Drumaduff Road
- Disappointed landowners

Discussions with NIEA on revisions to the previous approved closure plans in 2009 have been very positive both in terms of the level of environmental protection afforded by the revised proposals but in the increased likelihood that should vesting of existing landfilled lands continue to be necessary the mechanics of proceeding against one landowner are much more straightforward.

Discussions will be required with Council’s Planning officials when the extent of the elevations of the re-profiling are complete.

2.2 Crosstagherty Site - Ballymoney

The original strategy outlined at 1.2 above essentially proposed a full “Landfill Directive” compliant cap to the whole of the 12.5 hectare site. The legal vices for such a solution is driven by the requirements of The Landfill (Amendment) Regulations (NI) 2011 which critically amended the deadline for closed sites accepting waste from 2003 to 2001. The Crosstagherty site closed in November 2003 in order to avoid the onerous requirements of closure, capping and aftercare contained within The Landfill Regulations (NI) 2003. The amendments contained within the 2011 Regulations therefore meant that the site was subject to the higher standards of closure and aftercare.

Unlike the Drumaduff site the Crosstagherty site operated between 2001 and 2003 in a discrete part of the site and there will only be a limited need to re-profile waste over other parts of the site. This permitted discussions to take place with NIEA proposing that the site be treated as 2 separate legal entities, one part which ceased operation before 2001 and another which operated between 2001 and 2003.

These discussions have been very positive and the draft amended closure plan now relates to an area of approximately 50% of the site subject to some final trial pit results being considered. The remaining 50% of the site will require some capping and restoration works, however these can largely be undertaken in-house. Subject to NIEA approval this will be a combination of some additional cover material being applied across the relevant part of the site, land drainage works and a sow-out in grassland. It is also proposed to include a small nature reserve extending to approximately 2 hectares to be created and managed by Council's bio-diversity officer in conjunction with local primary schools.

2.3 Costings

Significant cost savings are anticipated to arise out of the proposed amendments, these will be calculated on final approval of the Closure Plan prior to placing a tender for completion of this work which is likely to be in the 2017/2018 year.

2.4 Conclusion

RPS Consultants, who are preparing the revised closure plan for submission to NIEA, will be in attendance at Committee to present the amended draft plans for both the Drumaduff and Crosstagherty Sites.

3.0 Recommendation

It is recommended that Council:

- (i) Approve the Draft Closure Plans in principle for the Drumaduff and Crosstagherty landfill sites and authorise the submission of both plans to NIEA for approval;
- (ii) Authorise the withdrawal of current vesting proceedings for lands at Drumaduff;
- (iii) Acquire the necessary interest in the lands at Drumaduff to affect the Closure Plan as approved, and
- (iv) Approve the creation of a nature reserve at Crosstagherty led by Council Bio-diversity officer.