



SLUDGE MANAGEMENT PLANS

Strategy for Handling, Treating and Re-using Non-hazardous Sludges

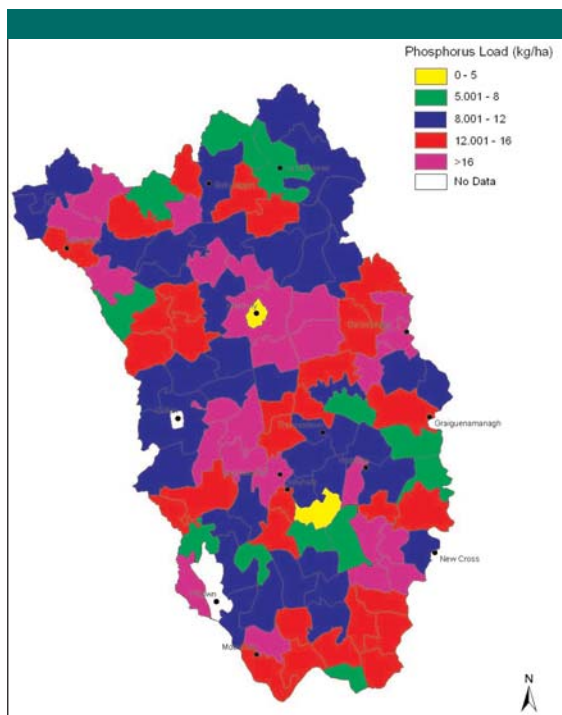
Client: Various Local Authorities

SUMMARY:

Services Provided:

- Inventory of Sludges
- Nutrient Balance Analysis
- Treatment Option Analysis
- Transportation Strategy
- Financial Analysis

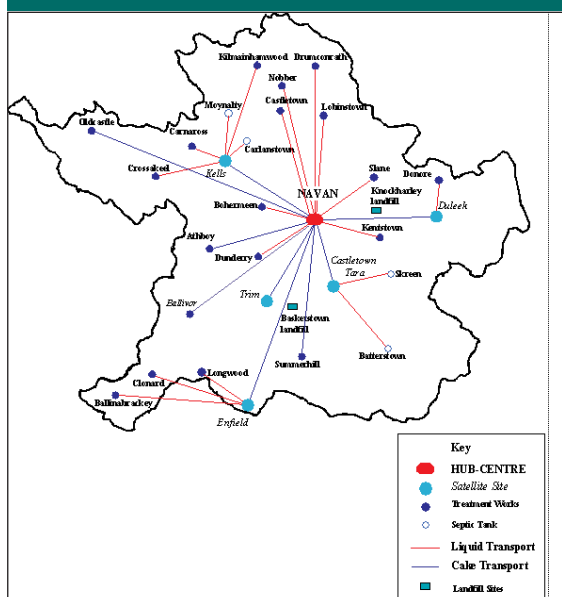
Status: Complete



Nicholas O'Dwyer Ltd have produced Sludge Management Plans for 10 Local Authorities, in partnership with Entec. The plans were developed for the following councils; Carlow, Cavan, Fingal, Kildare, Kilkenny, Leitrim, Longford, Meath, Waterford and Waterford City.

The plans analysed the existing sludge quantities produced in the counties and projected these forward for 20 years. Based on these quantities and logistics a Hub, Satellite and Transportation Plan was derived to ensure a cost-effective transportation model was proposed.

A sludge treatment and beneficial re-use analysis was also carried out. Treatment options investigated included alkaline stabilisation, composting, digestion, microwave and thermal drying. The European Union recognises that the re-use of treated sludge (biosolid), in agriculture, is the best Practicable Environmental Option due to the nutrient content of the biosolid. Therefore, a nutrient balance and metals content analysis was carried out for each Local Authority to examine the potential for spreading biosolids on agricultural lands in the county. In some counties there was potential to reduce the dependency on fertiliser use by using biosolids. However, it was noted that metal concentrations, intensive farming practices and water table / sub-surface conditions prohibited the practice in others. The treatment and re-use options proposed all comply with the Code of Good Practice for the use of Biosolids in Agriculture and Statutory Instruments 148 of 1998 and 267 of 2001.



The final step in the development of the plan was to cost the suitable treatment options so that a preliminary budget range could be derived. As the plans are strategic a range of possible solutions are identified thus promoting flexibility in the potential contracts that could be let to implement the plan.

All Sludge Management Plans are now complete and have been adopted by their respective councils as a subset of their Waste Management Plans.