

National Wastewater Sludge Management Plan Consultation 1 Report



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SUMMARY

Irish Water is preparing a long-term National Wastewater Sludge Management Plan (referred to as the NWSMP) that will outline its 25-year strategy for managing the distribution and recycling of wastewater sludge to ensure high standards nationwide.

Irish Water launched Consultation 1, a non-statutory public consultation to inform the development of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA), the environmental reports that will accompany the Draft NWSMP. Consultation 1 ran for six weeks from Tuesday 12th May to Wednesday 24th June 2015.

Section 1 of this report sets out the activities undertaken to ensure widespread awareness of Consultation 1. Section 2 of the report sets out the feedback raised by stakeholders during the consultation process.

1 PROJECT BACKGROUND

1.1 INTRODUCTION

Irish Water was incorporated in January 2014 under the Water Services (No. 2) Act of 2013. Irish Water has been established as a single utility providing water and wastewater services nationally. Irish Water now has the responsibility for the provision of water and wastewater services in Ireland from 31 local authorities. This includes the management of approximately 856 water treatment plants and approximately 1,000 wastewater treatment plants.

Irish Water is currently preparing a National Wastewater Sludge Management Plan (referred to as the NWSMP throughout this document), which will set out Irish Water's high level strategies for wastewater sludge management over a 25 year horizon. A separate report will be undertaken for sludge from water treatment plants. The NWSMP will take into account current legislation and guidance documents in relation to the treatment and utilisation of wastewater sludge in addition to potential environmental impacts and sustainability of proposals. The recommendations of the NWSMP will be used to inform future capital and operational activities in relation to sludge management.

The NWSMP will allow for the optimisation of sludge management procedures nationally to ensure efficiency and ongoing improvement, which will be to the benefit of the customer. This is in keeping with the objectives of Irish Water's *Water Services Strategic Plan (WSSP)*, which is a separate strategy document available at www.water.ie

The SEA Directive requires that certain Plans and Programmes, prepared by statutory bodies, which are likely to have a significant impact on the environment, be subject to the SEA process. Screening of the proposed NWSMP was undertaken by Irish Water in 2014 and a decision was taken to undertake SEA. A copy of the SEA Screening Statement is available on www.water.ie/wastewater-sludge-management/.

The SEA Scoping Report for the NWSMP was published on Tuesday, 12th May 2015.

The SEA Scoping Report looks to establish the range of environmental issues and level of detail of information to be included in the environmental reports. It considers Human Beings and Population, Soils, Water, Noise, Air, Odour, Climate, Transport and Energy. Irish Water will refer to the SEA and AA environmental reports when preparing the Draft NWSMP.

Consultation 1 was a non-statutory public consultation that provided all interested individuals and organisations with an opportunity to feed into the SEA Scoping Report for the NWSMP.

As part of Consultation 1, Irish Water sought feedback from the public, statutory consultees and interested bodies on the SEA Scoping Report and any additional information, not currently contained in the Scoping Report, that should be considered for the SEA, or any other comments or suggestions that should be considered.

The terms of reference for this round of consultation are shown below:

Consultation 1: Terms of Reference

- Based on the plans, policies and programmes outlined in Chapter 4 of the SEA Scoping Report, are there any other key relevant international, national or regional plans, policies or programmes that should be considered in the SEA Environmental Report?
- Are there any other significant information sources that should be considered?
- Do you agree with the list of potential significant effects that have been identified in Chapter 5 of the SEA Scoping Report? Should any be added or removed?
- Are there any other existing environmental issues which should be considered?
- Do you have any comments regarding the draft SEA Objectives outlined in Chapter 7 of the SEA Scoping Report?
- Do you have any suggestions in relation to the overall approach to alternatives?
- How would you like to be contacted as the project progresses?

Consultation 1 ran for six weeks from Tuesday, 12th May to Wednesday, 24th June 2015.

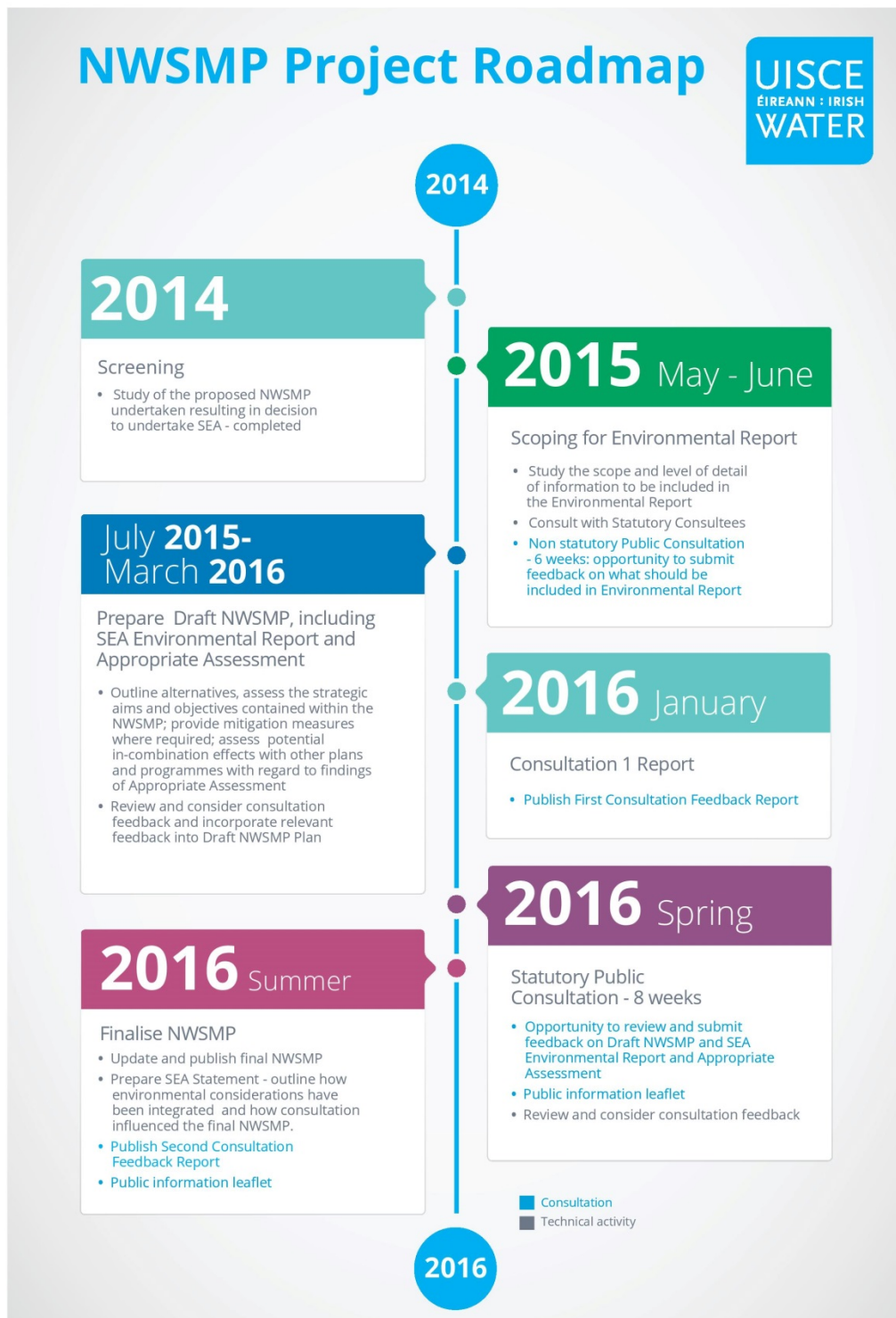
All of the communications activities undertaken as part of this first public consultation have been summarised in Section 1 of this report. The feedback provided is summarised in Section 2.

Feedback from this consultation will be reviewed and considered by the project team and relevant feedback will be incorporated by the project team into the SEA and AA environmental reports.

Irish Water will refer to the SEA and AA environmental reports when preparing the Draft NWSMP.

It is anticipated that the Draft NWSMP will be available in spring 2016, when there will be opportunity for the public and interested bodies to provide feedback on the Draft NWSMP and associated SEA and AA environmental reports as outlined in Figure 1.1 the Project Roadmap during a period of focused consultation, Consultation 2. During Consultation 2, the Draft NWSMP and its associated environmental reports (SEA and AA) will be available online here www.water.ie/wastewater-sludge-management/ and at local authority planning counters around the country.

Figure 1.1: Project Road Map



1.2 CONSULTATION PROCESS

A range of communications tools were employed for Consultation 1 in order to raise levels of awareness of the project and to facilitate participation in the consultation process.

Key components of the consultation process included:

- Advertising
- Public relations
- A dedicated project webpage hosted on the Irish Water website;
- Mailouts and briefings to:
 - National Elected Representatives;
 - Local and Regional Authorities;
 - National and Regional Media;
 - Interested Bodies.

This section of the report provides further details on each of the above consultation components.

1.2.1 Advertising and Public Relations

Awareness of the consultation was achieved through a combination of advertising and public relations.

1.2.1.1 Advertising

An advert was placed in the national newspaper the Irish Independent on 12th May 2015. A copy of this advert is included in Appendix A.

1.2.1.2 Public Relations

Public relations activities included issuing news releases to national and local media organisations and posting them online on the Irish Water website.

Copies of the national and local news coverage along with a list of media outlets that were issued press releases are contained in Appendix B. The press release issued to media is contained in Appendix D.

1.2.2 Project Webpage

All relevant project information, including an electronic version of the SEA Scoping Report is available online.

A dedicated page for the NWSMP was established on the Irish Water website and information on the project was made live on the website at the consultation launch on Tuesday 12th May 2015.

The URL for the project website is www.water.ie/wastewater-sludge-management.

In addition to the project website, members of the public were invited to submit feedback and queries to the project team:

By Email: nwsmp@water.ie

Or by Post: National Wastewater Sludge Management Plan, Irish Water,
P.O. Box 860, South City Delivery Office, Cork

1.2.3 National Elected Representatives

In recognition of the mandate given to national elected representatives and the critical role they play in representing the public and the public interest, Ministers, Senators, TDs and MEPs were identified as priority stakeholders.

Letters and emails were issued by Irish Water to all Ministers, TDs, Senators, MEPs, and Councillors.

All City and County Councils in the study area were contacted and informed of the commencement of Consultation 1.

1.2.4 Statutory Bodies

Statutory consultation on the NWSMP commenced on the 12th May 2015 when a Scoping Report and letter were sent to the five statutory consultees for SEA in Ireland, namely:

- Environmental Protection Agency (EPA);
- Department of Arts, Heritage and the Gaeltacht (DAHG);
- Department of Communications, Energy and Natural Resources (DCENR);
- Department of the Environment, Community and Local Government; and
- Department of Agriculture, Food and the Marine.

In addition, statutory consultation was also undertaken with the NIEA (Northern Ireland Environment Agency) in the context of transboundary impacts.

A workshop was held on July 7th 2015 to discuss the NWSMP and the scope and level of detail of the environmental assessment of the plan. Representatives from the EPA and DCENR (represented by Inland Fisheries Ireland) attended the meeting with apologies from NIEA, DAHG, DAFM and DECLG. The workshop included a presentation on the purpose and outline content of the NWSMP and a further presentation on the SEA and AA, including identification of key issues.

Feedback from the statutory bodies has been included in Section 2.

1.2.5 Interested Bodies

Stakeholder groups and community leaders from the following sectors were identified:

- Agriculture;
- Environment;
- Elected Representatives;
- Community Organisations;
- Business Organisations;
- Statutory/Strategic Stakeholders.

Contact information for these groups was obtained from publicly available sources including websites and telephone directories. A briefing note on the consultation on the SEA for the NWSMP, including the terms of reference of the consultation and a link to the SEA Scoping Report was issued digitally to the groups identified. The information sent is included in Appendix C.

2 FEEDBACK FROM CONSULTATION 1

There were 40 responses to Consultation 1. The following section is a compilation of the issues raised under the relevant question asked in the Consultation 1 terms of reference. Everything included in the section below is taken directly from stakeholder feedback. Many submissions reiterated similar themes; therefore some of the issues raised are quoted directly from submissions, while others are a summary of issues raised by a number of submissions.

2.1 TERMS OF REFERENCE – QUESTION 1

Based on the plans, policies and programmes outlined in Chapter 4 of the SEA Scoping Report, are there any other key relevant international, national or regional plans, policies or programmes that should be considered in the SEA Environmental Report?

Stakeholders and interested bodies noted that quality assurance schemes and the consequences that arise from the schemes for restricted use of sludge in agriculture should be included. These schemes include but are not limited to:

- Bord Bia Origin Green Initiative;
- Sustainable Dairy Assurance Scheme (SDAS)
- Beef & Lamb Quality Assurance Scheme
- Irish Grain Assurance Scheme

Stakeholders noted that the lists of plans, policies & programmes as listed in Section 4.2 of the SEA Scoping Report - Interaction With Other Plans and Programmes - do not appear to include any documents on alternative energy or climate change, which would be relevant to consideration of energy generation from digestion of sludge.

A submission on behalf of the Connacht-Ulster, Eastern Midlands and Southern Waste Regions proposed that the following policies, plans and programmes should be included in the SEA Environmental Report:

- The regional waste management plans;
- River Basin Management Plans;
- Water Services Investment Programme;
- Water Framework Monitoring Programmes;
- A Blueprint to Safeguard Europe's Water Resources/*COM/2012/0673 final;
- The EU Flood Action Programme: Flood risk management – Flood prevention, protection and mitigation/*COM/2004/0472/final; and
- Strive Report; STRIVE 123 – Management Options for the collection, treatment and disposal of Sludge derived from Domestic Wastewater Treatment Systems.

The submission also noted that additional information should be included in the Environmental Report to highlight how the NWSMP measures align with Water Framework Directive (WFD) requirements as well as documenting the reasons for where any environmental criteria are

proposed to be scoped out. The submission further pointed out that consideration should be given to the problems identified in previous sludge management plans for generating alternatives.

The EPA noted that it would be useful to categorise the various plans and programmes, legislation according to environmental aspect / topic i.e. water, waste, biodiversity etc. and that it would be also useful to consider including references to other key relevant plans, programmes & legislation including:

- International Conventions e.g. OSPAR (Convention for the Protection of the Marine Environment of the North-East Atlantic), RAMSAR (Convention on Wetlands).
- EU Directives/Regulations e.g. Waste Framework (2008/98/EC), Environmental Liabilities, Shellfish Water, Freshwater Fish Bathing Water, Drinking Water, Integrated Pollution Prevention and Control (IPPC), etc.
- National Legislation/ Policy / Guidance e.g. the relevant aspects of the Environmental Protection Agency Act 1992 as amended, Water Services Act, SEA Regulations, EIA Regulations, etc.
- In the regional context, the Draft NWSMP should also include a reference and consider the relevant aspects from: Regional Waste Management Plans, relevant Shellfish Waters - Pollution Reduction Programmes and associated Characterisation Report, relevant River Basin Management Plans, relevant CFRAMS (Catchment Flood Risk Assessment and Management).

The EPA further noted that the biennial reporting requirements of the Waste Statistics Regulation S.I. No. 2150 of 2002 on sludge (and other wastes) generated and treated by wastewater treatment activities should be reflected in the Draft NWSMP.

In relation to Section 4.3 - SEA Guidance, the EPA provided a reference to the SEA related guidance and information available on the Agency's website in addition to recent guidance on the Developing and Assessing of Alternatives.

The EPA noted that with reference to Table 6-1-Baseline data sources, (page 19/20), an EPA database (municipal solid waste) is referenced as a potential data source, however the Agency does not maintain a municipal solid waste database and that wastewater treatment sludge is not classed, by the EPA, as municipal waste. It was suggested that this should be reflected in Table 6.1 and any associated text.

The EPA stated that SEA Regulations were signed into Irish law on 3rd May 2011, amending the original SEA Regulations, and should be referenced and integrated into the Draft NWSMP and SEA process as appropriate:

- European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011, (S.I. No. 200 of 2011), amending the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004)
- The DoEHLG Circular (PSSP 6/2011) 'Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)' which should also be referred to and integrated into the Draft NWSMP.
- The DoEHLG Circular (Circular PL 9 of 2013) 'Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA) as amended' should be taken into account during the preparation of the Draft NWSMP and in undertaking the SEA process.

The Department of Arts, Heritage and the Gaeltacht (DAHG) advised that the screening for Appropriate Assessment, and Appropriate Assessment as may be required, are to be undertaken pursuant to SI 477 of 2011, European Communities (Birds and Natural Habitats Regulations), 2011 and that the statements and conclusions in relation to Appropriate Assessment screening be clarified, in line with the relevant legislative requirements.

Cré noted that the Danish policy for the management of domestic wastewater sludge should be reviewed in the Draft NWSMP.

The Irish Business and Employers Confederation (IBEC) stated that the SEA Scoping Report should consider the requirement for industry standards governing the production, treatment and recovery of sludge, bio-solids and other substances, akin to the Industry standards recently implemented by the compost and anaerobic digestion industries in collaboration with the NSAI (National Standards Authority of Ireland).

In IBEC's submission they stated that the Scoping Report does not go far enough in setting out how the Draft NWSMP will address inconsistencies and other issues with the existing rules (e.g. legislation, guidance, and codes-of practice) on sludge. IBEC suggested that Irish Water properly legally analyse these instruments on foot of policy formulation such that they may be amended, consolidated, revise or replaced as necessary to the provision of better rules for sludge management and that this legal analysis should address how the applicable instruments regulate the auditing, control and traceability of sludge throughout the production, treatment and recovery chain, and the elimination of conflicts of application or interpretation between the various instruments as well as between the instruments and relevant case-law, particularly with respect to end-of waste criteria.

2.2 TERMS OF REFERENCE – QUESTION 2

Are there any other significant information sources that should be considered?

Cré proposed that measures which provide the best food safety should be a key factor for all considerations in developing the Draft NWSMP and suggested the following reports as sources of other information:

- Food Safety Implications of Land-spreading Agricultural, Municipal and Industrial Organic Materials on Agricultural Land used for Food Production in Ireland (Food Safety Authority of Ireland, 2008);
- Cré (2013) The Management of Sewage Sludge in Ireland.

The EPA and DCENR noted that there are significant gaps in information on sludge disposal.

The DAHG suggested that the following data and information sources should be considered:

- The NPWS website for sources of data, information and publications, including GIS datasets;
- Site-specific conservation objectives, and associated backing documents and GIS datasets in the case of some European sites;

- Due regard to developments in the interpretation and application directives and legislation arising from jurisprudence of the Court of Justice of the European Union, and of the Irish Courts, particularly in regard to Article 6 of the Habitats Directive.

There was feedback that the following information should have been included in the Scoping Document:

- Tonnage, source and the chemical composition including heavy metals, that are present in wastewater sludge;
- Endocrine Disrupting Chemicals (EDCs), Emerging Contaminants (ECs); and Prions should also have been considered.

Feedback in this regard included that there is documentation that the maximum concentration of heavy metals in soils exceeded the maximum permitted values on land in agricultural use where wastewater sludge was spread and referenced the EPA Bi annual 'Waste Water Reviews' 2000 –2001 and 2002-2003. The EPA Urban Waste Water Discharges Report 2002- 2003, was also referenced stating that the EPA reports show that the maximum-recorded levels of heavy metals on agricultural land where wastewater sludge was spread of being up to 12 times the maximum level of heavy metal recorded in the wastewater sludge in 2003. Feedback included a view that the Scoping Report should state the proposed mitigating measures for the lands where the maximum concentration of heavy metals in soils exceeds the permitted levels, where Ringsend sludge was reused in agriculture.

It was requested that the following Base Line Information be included in the Environmental reports:

Information on the amount of wastewater sludge produced in the country:

Table 2.1 Quantity of Wastewater Sludge Produced 2012

Regional Waste Authority	Figures for year	Quantity of Wastewater Sludge Produced
Eastern and Midland Region	2012	227,998 tons
Southern Region	2012	144,525 tons
Connacht Ulster Region	2012	99,794 tons
National Total	2012	472,317 tons

Information on the amount of Landfill Leachate received by wastewater treatment plants in 2012:

Table 2.2 Quantity of Landfill Leachate received in wastewater treatment plants 2012

Regional Waste Authority	Figures for year	Quantity of Landfill Leachate Received*
Eastern and Midland Region Waste Authority	2012	236,396 tons
Southern Region	2012	154,409 tons
Connacht Ulster Region	2012	177,824 tons
National Total	2012	472,317 tons

*These figures do not include Landfill Leachate discharged to sewers either with or without authorisation. All three Regional Waste Authorities indicated that all Landfill Leachate is sent to wastewater treatment plants controlled by Irish Water and outlined the need for detailed chemical analysis of the landfill leachate being received by the wastewater treatment plants.

2.3 TERMS OF REFERENCE – QUESTION 3

Do you agree with the list of potential significant effects that have been identified in Chapter 5 of the SEA Scoping Report? Should any be added or removed?

The Confederation of Waste-to-Energy Plants (CEWEP) Ireland suggested that reference to the effect on food quality is considered as a parameter within the SEA issues of Human Health and Soil and Land Use in Table 5-1 and that a more extensive list of potential soil (and hence food supply chain) contaminants as a result of landspreading be included in this table, including but not limited to: heavy metals, Persistent Organic Pollutants (POPs), Environmental Persistent Pharmaceutical Pollutants (EPPP) and personal care products (e.g. antibiotics, endocrine disrupting hormones). It was also noted that the impact on fertiliser use - if landspreading of wastewater sludge was limited or discontinued - should be considered under Material Assets.

Other stakeholders also proposed that the effects of human health (pathogens, heavy metals etc. resulting from landspreading of sludge should be included in Table 5-1, noting that this could be via food crops or directly from contact with sludge.

The EPA noted that water related aspects and implications of the NWSMP need to be further considered, in the context of determining potential for conflict with the achievement of the Water Framework Directive (WFD) objectives. The Draft NWSMP should identify and select appropriate mitigation measures where required and should be designed to ensure compliance with the WFD. The Draft NWSMP should also include suitably scaled maps identifying the relevant WFD related Protected Areas and should consider the potential effects on Groundwater Source Protection Areas.

The EPA further noted that the Draft NWSMP should take into account the relevant aspects of the recently published Significant Water Management Issues in Ireland (SWMI) Report (DECLG, 2015 and the Water Quality in Ireland 2010-2012 Report (EPA, 2015), as appropriate in undertaking the SEA.

With respect to Flood Risk, the EPA recommended that a section and relevant maps be included that describes the potential risk of flooding to existing infrastructure, noting that the ongoing and future development/operation/upgrade of supporting wastewater treatment infrastructure should be consistent with the Flood Risk Management Guidelines (DEHLG, 2009) and take into account the relevant aspects of the various national CFRAMS programme in order to ensure that existing and future wastewater treatment plant (WWTP) related infrastructure is protected from the risk of flooding, which is particularly relevant in the context of potential impacts on population/ human health/water quality and biodiversity (including fisheries).

Stakeholder feedback noted that Chapter 5 should make reference to the fertiliser and soil organic matter benefits from the use of biosolids as a fertiliser and soil improver; Ireland currently imports our fertiliser from unsustainable sources, so locally produced and sustainable fertilisers should be viewed positively. There was reference to the quality of Ireland's WWTP sludge and a suggestion that it should be compared against some areas of mainland Europe.

The ICMSA stated that they believe that the special and unique environmental issues in relation to food production should be dealt with separately in Table 5.1.

The Department of Arts, Heritage and the Gaeltacht (DAHG) recommended that the Environmental Report in the SEA should include an Archaeological Impact Assessment of the potential impact that works carried out under the NWSMP may have on known or potential archaeological sites including the underwater cultural heritage.

The DAHG suggested that the following environmental effects should be considered and that a review of peer-reviewed literature should be undertaken to gain a fuller understanding of how these impacts may affect species and habitats, *e.g.* on vegetation and structure and functioning of ecosystems and through the trophic levels. An example includes “*Nitrogen deposition and Natura 2000: Science and Practice in Determining Environmental Impacts*” by Hicks et al 2011:

- The implications of acidification and deposition for nature conservation.
- The potential for habitat loss (from new sludge infrastructure).
- Habitat deterioration from spreading and subsequent changes to chemical composition (phosphate, copper) of surface run-off and environmental receptors, etc.
- Disturbance to Annexed species (including birds).

The DAHG also proposed that the scope of the SEA for Biodiversity, Flora and Fauna should include:

- All nature conservation sites, including European sites, sites protected under national legislation, National Parks and Nature Reserves etc.;
- Species of wild flora and fauna, including rare and protected species and their habitats; Annex IV (Habitats Directive) species of flora and fauna, and their key habitats (i.e. breeding sites and resting places), which are strictly protected wherever they occur, whether inside or outside sites, (including data on rare and protected species from NPWS, the National Biodiversity Data Centre, BirdWatch Ireland, etc.);
- Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur;
- ‘Protected species and natural habitats’ as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including:
 - Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).
 - Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur).
- Stepping stones and ecological corridors including nature conservation sites (other than European sites), habitat areas and species’ locations covered by the wider obligations of the Habitats Directive.
- All watercourses, surface water bodies and associated wetlands, including floodplains and flood risk areas.

The DAHG noted that while it is inferred that species protected under European and national legislation are included within “flora and fauna” that this would benefit from elaboration.

The DAHG stated that if disposal of sludge at sea, or incineration is being considered that this will expand the potential implications for nature conservation that will need to be considered and assessed in both the SEA and NIS (Natura Impact Statement) (*e.g.* potential implications of heavy metal loading from incineration on fauna).

Inland Fisheries Ireland (IFI) as part of DCENR suggested that, in determining the likely significant effects of the NWSMP, some key issues from a fisheries perspective for consideration in the SEA should include:

- Water quality;
- Fish spawning and nursery areas;
- Ecosystem structure and functioning;
- Sport and commercial fishing and angling;
- Amenity and recreational areas.

The IFI further suggested that consideration should be given to watercourses outside formal European designation which may hold species that are designated under the European Habitats Directive i.e. salmon and lamprey (sea, river and brook), which are listed as Annex II Species.

The Geological Survey of Ireland (GSI) as part of DCENR recommended that geology is included together with Soils under the heading Soil & Geology, that the Soils & Geology section of the SEA should provide information about the description of the bedrock and lithologies (types of strata), quaternary geology, landslide hazard and geological heritage should be included and potential impacts recognised and that the use of maps is recommended where appropriate. The GSI provided links to their online resources with relevant datasets that should be considered in the Baseline Data Sources and Extent of Assessment.

The Northern Ireland Environment Agency (NIEA) noted that to ensure that there are no adverse environmental impacts on Northern Ireland, that adequate mitigation and monitoring measures are highlighted in the Environmental Report and built into the NWSMP. They further suggested the inclusion of a clear statement in the SEA Environmental Report indicating whether or not the implementation of the NWSMP, in combination with any identified measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment, is likely to have a significant effect on Northern Ireland. The NIEA also provided links to their information sources that should highlight the current state of the environment in Northern Ireland at a regional level for inclusion in the baseline assessment.

Cré suggested that the Draft NWSMP and associated environmental reports should acknowledge the potential environmental impact of sludge from plants of a population equivalent of less than 5,000.

2.4 TERMS OF REFERENCE – QUESTION 4

Are there any other existing environmental issues which should be considered?

The ICMSA stated that the SEA should specifically address in detail the issue of the use of sludge on farms and the environmental impact of same as well as the impact of the general management of sludge on the food sector in Ireland and measures to prevent or mitigate any perceived risks.

Stakeholder feedback proposed that there should be a quantitative assessment of the environmental impact of the options. It was suggested that consideration should be given to using a waste management lifecycle assessment tool such as the Danish Easewaste or the UK Wrate tool;

such tools measure the impact with regard to greenhouse gas emissions, impact on soil, impact on air and water

Carlow County Council noted that in their experience of the supervision of Nutrient Management Plans and landspreading that there have been no environmental incidents in disposing of the treated sludge.

Clare County Council noted that issues to be considered with respect to Sludge outlets should include:

- Size of land banks required;
- Buffer zones;
- Neighbouring land uses;
- Vulnerability of groundwater and surface water.

2.5 TERMS OF REFERENCE – QUESTION 5

Do you have any Comments regarding the draft SEA objectives outlined in Chapter 7 of the SEA SCOPING REPORT?

The DAHG stated that the Environmental Report is required to contain environmental protection objectives. The environmental protection objectives for Biodiversity, Flora & Fauna should integrate with the objectives and obligations of other directives such as the Habitats Directive, the Birds Directive, the Water Framework Directive and the Floods Directive, the Wildlife Acts 1976-2000 and the National Biodiversity Plan. They further noted that under the Biodiversity, Flora & Fauna SEA Indicators, it is unclear what kind of “margaritifera plans” are being referred to. Under the Soil SEA Indicators, clarification on what is meant by “management” of peatlands is required.

The Geological Survey of Ireland (GSI) as part of DCENR recommended that the Environmental Component – Soil & Geology of the SEA Objective is modified to “Avoid conflicts with, and contribute toward, where possible, the appropriate management of soils and geology”.

The Northern Ireland Environment Agency (NIEA) recommended that Air & Climatic Factors should include a strategic environmental objective target to ‘Minimise emissions to air from sewage sludge treatment / spreading’, and ‘Minimise effects on sensitive habitats from contact/deposition of air pollutants (specifically ammonia) from sewage sludge treatment/spreading activities.’

The EPA noted that the Draft NWSMP should incorporate an additional objective to establish a register of Urban WWTPs, and an associated national reporting system for recording information on the generation and treatment of wastewater sludge (and other waste arising from the activity). These objectives and associated data are relevant for national waste reporting purposes.

2.6 TERMS OF REFERENCE – QUESTION 6

Do you have any suggestions to the overall approach to alternatives?

Stakeholders stated that consideration of alternatives should go beyond the confines of Table 7.1, to look at any emerging new technologies and innovative ways of treating and/or disposing of sludge.

Stakeholder said incineration should be given greater consideration as an alternative as the vast majority of the Irish food processing industry is now or is expected to be committed to the various quality assurance schemes, placing pressure on the available land bank.

CEWEP Ireland supports the proposed alternatives to landspreading including incineration with energy recovery, but would rule out incineration without energy recovery as this is seen to be an unsustainable approach which does not adhere to best available techniques. They noted that mono-incineration with phosphorous recovery from the ash should also be considered in the context of the phosphorous material cycle and that additional alternatives, including but not limited to; anaerobic digestion and composting could also be considered. They further noted that the different capabilities of each alternative should be recognised in terms of treating or removing contaminants from the nutrient cycle.

Bord na Móna (BNM) proposed that the final NWSMP should highlight the potential advantages / disadvantages of each treatment option, e.g. land-filling, composting, incineration, pyrolysis, gasification and anaerobic digestion. BNM noted that while it is understood that Ireland as a nation is fully compliant with EU sludge policy, it is nevertheless felt that we should support further deployment treatment options such as anaerobic digestion, pyrolysis or gasification as a sludge management and renewable energy solutions. This ethos is in line with Article 14 of the Urban Waste Water Treatment Directive (UWWTD) which states that "Sludge arising from waste water treatment shall be re-used whenever appropriate. Disposal routes shall minimise the adverse effects on the environment." BNM also noted that of the 3 treatment options (pyrolysis/gasification/anaerobic digestion) highlighted above it is anaerobic digestion which has the potential for maximum energy recovery.

Cré suggested considering the Danish model of composting of sludge produced by an on-site mobile desludging of septic tanks, which could be done by the private sector and be very cost effective. No extra infrastructure would be needed at wastewater treatment plants to handle this material.

One stakeholder noted that they have been supplying a broad bacteria consortium with very good results in sludge yield reduction and queried whether this alternative was being considered in the Draft NWSMP.

Another stakeholder proposed the use of modified slatted units as a start point for the launching of anaerobic digestion in Ireland.

There was a proposal from a stakeholder that rather than incinerating that dried sludge cakes be used as land-build/land fill for low lying fields subject to waterway flooding.

2.7 IMPACT OF SLUDGE SPREADING IN RELATION TO FOOD PRODUCTION

A stakeholder concern raised was that the impact on food producing lands by sludge spreading had not been considered, given the importance of the agri-food sector nationally. Stakeholders noted that sludge spreading on agricultural crops is forbidden under Irish quality assurance schemes, with

some noting that the application of municipal sludge to any agricultural land is forbidden under law in a number of European countries.

Bord Bia and the Department of Agriculture both highlighted a critical criterion set out in Bord Bia's quality assurance standards that the use of raw or treated sewage/wastewater sludges are prohibited from being used on Bord Bia certified farms. It was noted that while the merit the use of wastewater treated sludge as a fertiliser was understood, that the sentiment among the processors and their customers in relation to the use of municipal sludge on agricultural land is strongly negative, particularly given the positioning of the Irish food sector at the high quality end of the market. The Irish Dairy Industries Association (IDIA) stated that Irish dairy processors will simply not accept products manufactured with milk from lands on which municipal sludge has been spread. The IDIA stated that the only effective manner to prevent serious reputational and commercial damage to the Irish agri-food industry is a complete ban on the spreading of municipal sludge on the Irish farm land.

Stakeholder feedback was provided noting that there is considerable concern from farmers, processors and exporters of Irish Food Products that Quality Assurance guidelines are not being adhered to in the production of food products for sale both at home and abroad and that this could have a negative impact on trust in the source of the food production if breaches were to be identified. It was noted that other countries are not clear what Ireland's position is with respect to allowing food production on land that has been used for wastewater sludge spreading.

Particular reference was made in the submission by the Department of Agriculture, Food and Marine (DAFM) to the current legislation and guidance document in relation to the treatment and utilisation of wastewater sludge, in addition to food safety concerns as highlighted in 'The Food Safety Authority (FSAI) Scientific Committee report (2008), as well as environmental impacts and sustainability issues. The DAFM noted its support for recommendations in the FSAI report and also noted the 11 recommendations in the FSAI report which relate to the minimum safe standards required when land-spreading organic agricultural and municipal and industrial materials on agricultural land for food production.

The DAFM also noted the sewage sludge is considered a fertiliser under the definitions of the Nitrates Regulations and as such must be taken into account when considering the maximum amounts of available nitrogen and phosphorus that may be applied to meet the requirements to promote crop growth and that the total nitrogen and total phosphorus content per ton shall be declared by the supplier in accordance with the Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 to 2001 and any subsequent amendments thereto.

Both the EPA and DCENR noted the limitations on outlets for landspreading including cadmium and nickel levels, groundwater vulnerability and water quality impacts.

BNM stated that considering the potential adverse health effects arising from applying untreated sewage sludge to land, all sewage sludge should be applied using appropriate application technologies (trailing shoe/direct injection) and in accordance with Nutrient Management Planning (NMP).

It was noted in stakeholder feedback that there is no Environmental Report on the issue of Heavy Metals on Agricultural Soils, nor is there any reference to the lack of compliance of any local, national and international environmental laws, acts, regulations, licences etc. It was also stated that

there is no legislation covering the use of wastewater sludge on agricultural land in Ireland, only a code of conduct. This compares to the Netherlands where the use of wastewater sludge on agricultural land is banned by legislation. The Dutch chemical analysis and control of wastewater sludge is sufficiently detailed to allow them to identify the source of wastewater sludge from the legal and illegal chemical composition of the sewage sludge. All wastewater sludge in the Netherlands is dried and incinerated. This policy is to protect the quality and reputation of Dutch agricultural produce. When it comes to food safety, perceptions matter more than facts. The current standards in Ireland address neither. The stakeholder asked if Irish Water will research, collect, correlate and publish up to date international findings on the risks associated with wastewater sludge spreading.

The EPA noted the Draft NWSMP should include a commitment that sludge is only applied to agricultural land where it is both environmentally and agronomically safe and appropriate to do so. It should also be ensured that it is applied at levels which ensure that the nutrients can be effectively used for plant growth or assimilated into the soil.

While agriculture may be considered the main outlet for sludge, the EPA noted that the national landbank available to recover the sludge will be under significant pressure in the future for many reasons, including:

- Food Harvest 2020 (and Agri-Food 2025), that will increase the dairy herd and reduce the tillage area which is the most suitable crop type for this material;
- Consumer sentiment, where some food producers are discouraging the use of wastewater sludge on agricultural land due to the negative perceptions of spreading wastewater sludge.

The EPA suggested that the Draft NWSMP should consider including a commitment to establish a system for improved tracking of sludge spreading, in order to minimise the risk of overspreading and increasing the risk of runoff and leaching suggesting consideration of a central GIS based landspreading database to ensure that the available lands are not overspread.

The EPA further suggested that the Draft NWSMP should include a commitment to ensure that sludge applied to agricultural lands complies with the Sewage Sludge in Agriculture Regulations (S.I. No. 267 of 2001) and that an appropriate regime is put in place for the testing of sludge and landbanks to demonstrate compliance. They proposed that a commitment should also be included to undertake risk assessments for any significant industrial effluent/pharmaceutical effluent discharging to a municipal wastewater treatment plant, to assess its potential impact on the sludge and on its proposed disposal/recovery options.

One stakeholder noted that the majority of imported grain to feed our national herd (livestock such as cattle, sheep or pigs) in Ireland comes from countries where landspreading of biosolids is common practice and is now business as usual and that the scientific and real tangible sustainability benefits of utilising this national resource (i.e. 300,000 tons sludge cake equivalent) as a fertiliser and soil improver does not get the recognition it deserve. This stakeholder cautioned that policy should be based on scientific and not emotive arguments.

Cré recommended the 'Code of Good Practice for the Use of Biosolids in Agriculture' should be made into legislation and that a number of exemptions and provisions in the current Regulations should be removed as they conflict with the Code of Good Practice and give rise to food safety concerns. Cré recommended the following legislative changes:

- The Code of Good Practice states that untreated wastewater sludge should not be landspread or injected into soil. Regulations that allow this practice should be changed to prevent untreated sludge being landspread or injected into the soil.
- The Regulations that allow for the use of residual sludge from septic tanks on grassland and the use of untreated sludge (worked/injected into ground) in agriculture should be changed to prevent residual sludge from septic tanks being landspread untreated as this is a matter of concern as it may introduce pathogens into the food chain.
- The Regulations should be changed to remove the exemption that the sludge register does not have to contain details of sludge from plants of less than 5,000 p.e. (population equivalent) as this represents a breakdown in the traceability and monitoring necessary for the safe use of sludge in agriculture and is a matter of concern.

2.8 PUBLIC CONSULTATION AND PUBLIC PARTICIPATION

Feedback noted that to comply with the Aarhus Convention and the Public Participation Directive 2003/35/EC, there is a requirement to have meaningful public consultation through the holding of public meetings, workshops and discussions to comply with the SEA directive, in other words the SEA process must be adhered to in both the spirit and the letter of the Directive. It was felt that the published SEA Scoping Report does not make provision for public participation at the earliest stage as there has not been an opportunity to have meaningful consultation and discussions at the earliest possible stage, and it was felt that stakeholders were left with the much-reduced opportunity of outlining concerns in writing.

There was also stakeholder feedback stating that there is a lack of consultation on specific plans for Sludge Storage/Treatment Facilities.

The EPA recommended that consultation with the National Waste Collection Permit Office (NWCPO) be carried out as they would be able to advise on aspects such as the operators authorised to collect wastewater sludge and they also gather annual return information from collectors on the collections and transfers of wastewater sludge. The EPA further recommended consultation with the lead authorities for the three waste management plan regions.

The EPA also advised that under the SEA Regulations (S.I. No. 435 of 2004), as amended by S.I. No. 200 of 2011, notice should also be given to the following:

- The Minister for the Environment, Community & Local Government;
- Minister for Agriculture, Marine and Food, and the Minister for Communications Energy and Natural Resources, where it appears to the planning authority that the plan or programme, or modification of the plan or programme, might have significant effects on fisheries or the marine environment;
- Where it appears to the competent authority that the plan or programme, or amendment to a plan or programme, might have significant effects in relation to the architectural heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs.

2.9 SPECIFIC TREATMENT FACILITIES

Stakeholders asked that all aspects of specific existing or proposed treatment facilities be examined including:

- Thornhill Sewage Sludge Storage facility.
- The Proposed Sludge Storage/Treatment facility located in Corclough East, Belmullet, Co. Mayo.

Stakeholders had the following specific questions on the development of facilities:

- Will an EIS be done for each project?
- How will Irish Water control contamination to wildlife from discharge from Proposed Sludge Storage/Treatment facilities?
- How does Irish Water propose to protect safe uncontaminated shellfish for human consumption from discharge from Proposed Sludge Storage/Treatment facilities?
- How does Irish Water propose to control water quality affected from discharge from Proposed Sludge Storage/Treatment facilities?
- How will Irish Water control the noise level during construction and operation phases on Waste Storage/Treatment Plants?
- How will Irish Water deal with the issue of visual Impact of these plants both from a landscape perspective and intrusion with respect to being lit up at night for security purposes?
- How will Irish Water deal with the issue of odour and air quality from these plants?
- How will Irish Water deal with the issue that these plants would attract rodents and pests?

2.10 DOMESTIC WASTEWATER TREATMENT SYSTEM SLUDGE

The EPA expressed concern about the current status of inadequate infrastructure and capacity for onward disposal of sludge from Domestic Wastewater Treatment Systems (DWWTS). The EPA sees the management of sludge arising from DWWTS as being a national priority that should be reflected in the Draft NWSMP. The EPA further noted the findings of their report that there is a volume deficit for receipt of 50% of evacuated DWWTS sludge generated annually and that there is a lack of sludge screening facilities at WWTPs resulting in discharge from sludge tankers to the inlet of the process, resulting in the shock loading of the WWTPs, disruption of the biological process, higher energy costs and a reduction in the quality of the final effluent discharged to receiving waters.

2.11 TRANSPORT COSTS

BNM suggested that the finalised NWSMP should give careful consideration to the location of future agglomerations or centralisation of WWTPs bearing in mind the transportation distances which would be considered by potential investors to the anaerobic digestion marketplace.

Feedback was received regarding transport costs being a significant factor in sludge treatment and disposal and while regional hubs might have a number of advantages due to the scale of operations the transport costs may negate these.

2.12 NATIONAL WASTEWATER MANAGEMENT PLAN AND OTHER PLANS

While the Department of Arts, Heritage and the Gaeltacht (DAHG) acknowledged that the relevant recommendations arising from the SEA and AA of the Water Services Strategic Plan will be reviewed and incorporated into the SEA and AA of the Draft NWSMP, they further suggested that such recommendations may need to be incorporated into the Draft NWSMP itself (and other Tier 2 Implementation Plans), particularly if it is mitigation on which the higher-level plan relies for any conclusion that it will not adversely affect the integrity of European sites.

The EPA noted that there would be merit in clarifying the extent to which the focus of the Draft NWSMP and the associated SEA will include relevant aspects of alternative management options considered for all forms of non-hazardous sludge currently arising and predicted to arise over the lifetime of the plan.

The EPA suggested that the Draft NWSMP should clarify which population figures will be taken into account in estimating future sludge generation quantities. They further suggested that the Draft NWSMP and the SEA should consider the location and capacity aspects of the necessary sludge management infrastructure and that the capacity to treat domestic wastewater sludge should also be factored into predicted sludge volumes and be linked to predicted population growth as described in the Regional Planning Guidelines and relevant Core Strategies. The Regional Spatial & Economic Strategies (likely to be prepared in the lifetime of the NWSMP), should also be taken into account, as appropriate, upon their adoption.

The EPA suggested that the Draft NWSMP should consider the systems, processes, monitoring and records required to ensure that the volumes of sludge to be removed from wastewater treatment plants (for offsite disposal, reuse or recovery) are accurately recorded and reported on. These should be clearly described in the Draft NWSMP. They proposed that a commitment should also be included in the Draft NWSMP to ensure the appropriate annual wastewater return information is provided to the EPA in a timely manner.

The EPA noted that the Draft NWSMP should take into account that the current sludge volumes removed from wastewater treatment plants may not accurately reflect the potential/ predicted volumes that should be removed, as some plants do not de-sludge at the required frequency.

The EPA suggested that current sludge management practices operating at WWTPs should be described in the Draft NWSMP, highlighting any additional measures/processes required to ensure compliance with the Urban Waste Water Treatment Directive and EPA Waste Water Discharge (Authorisation) Regulations. They proposed that the Draft NWSMP and associated SEA should take into account the potential increase in wastewater sludge production likely from ongoing and planned sludge handling improvements at several WWTPs. They suggested that a commitment to review/assess the current status of sludge handling facilities at WWTPs should also be included in the Draft NWSMP as appropriate sludge handling facilities are required at WWTPs to ensure performance of these plants is not adversely affected. The Agency noted that in particular there is a deficit of appropriate sludge handling facilities/ infrastructure in the west of Ireland and that this needs to be addressed in the Draft NWSMP.

3 NEXT STAGES OF PROJECT DEVELOPMENT

3.1 WHAT HAPPENS NEXT

The feedback received from Consultation 1 will be reviewed by the project team, and issues raised will inform the development of the scope and detail of the SEA Environmental Report and Draft NWSMP, with relevant feedback being incorporated into the Strategic Environmental Assessment and Appropriate Assessment.

Statutory Consultation on the Draft NWSMP and associated Environmental Reports will be carried out in spring 2016. This will represent a further opportunity for the public and interested stakeholders to have their say.

APPENDIX A

ADVERTISING OF NWSMP CONSULTATION 1

The MSC Splendida towers over the Poolbeg chimneys as it enters Dublin Port. Below: Crew members Jovana Dabic, Tijana Stepanovic, Darko Penovski and Ivana Peresic from Serbia get ready for shore leave. Bottom: Performer Paddy Long Legs greets tourist Alexandra Sytnytska from Ukraine on the quayside. Photos: Damien Eagers/Conor McCabe



towers over city skyline

biggest ever vessel carrying 3,200 passengers



"I have studied in Germany but I wish I came to Dublin to study because Trinity College is amazing," said Ms Peter.

She has had some experience on-board this particular cruise ship - so, unlike some guests, she never got lost on the massive vessel.

However, the on-board fun was not limited exclusively to passengers, with cabin crew members Bogdan Lada and Sviatoslav Vistrov, insisting that they get some downtime from looking after the guests.

"The ship has everything. We have a lot of musicians on-board that perform a lot of different kinds of music," said Bogdan.

"We get a few hours every day to visit places like Dublin, and we also have staff parties and discos."

The Splendida left for Cork last night but another ship is already taking its place. Dun Laoghaire's port will host the marginally smaller Royal Princess cruise ship, which was due to dock at 6am today and will stay until 6pm.



Floating fun house has swimming pools, a squash court and an F1 simulator

THE MSC Splendida is 333 metres in length, 67 metres high and weighs 137,936 tonnes.

So it's hardly surprising that the 3,247 passengers and 1,370 crew members are rarely stuck for entertainment. There are 1,637 rooms, including 71 suites in the VIP area and guests can avail of a 24-hour butler service.

The ship was built in 2009 and facilities include four swimming pools, a squash court and a Formula One simulator all on board.

It docks in Cork today and then Southampton in England.

Magic for retailers as Disney liner to sail into city with 2,700 on board

Sam Griffin

DUBLIN is in line for a major tourism windfall after the city was added as a stopping-off destination for a massive transatlantic cruise liner operated by a Walt Disney company subsidiary.

Mickey Mouse and a host of other characters will descend on the capital on May 26 next year when the 'Disney Magic' liner, part of the Disney Cruise Line fleet of luxury ships, makes port here.

Dublin Port has also been added to a second Disney travel package which will see the 'Magic' liner stop in June 2016.

The ship can accommodate 2,700 passengers

and 950 staff and performers, who will be here for around 12 hours.

Disney Cruise Line recommends a number of potential attractions for passengers to visit, including the Guinness Storehouse, Trinity College and the Book of Kells, and Christ Church, Dublin Town, the



business representative body, said passengers on such cruise ships typically spend on average more than €100 per person during stop-overs.

"It's very welcome that Dublin has been added as a destination. We do see a big boost when such cruise ships

stop here. Shops will also often hire additional staff so there are huge spin-off benefits as well," CEO Richard Guiney said.

The 'Magic' liner is 984ft (300m) long with 11 decks, and boasts numerous swimming pools, bars, restaurants and clubs. The May stopover is part of the 14-night Eastbound Transatlantic Cruise, which starts in Port Canaveral in Florida and ends in Dover in England.

A stay in a standard inside stateroom for two adults and two children is available from €5,498.42 and includes dining, entertainment and character experience.

The June visit is part of a 12-night Disney Magic Cruise around Ireland and Britain.

Dublin Port is planning a major redevelopment of the Alexandra Basin in the north port area.



Public consultation on the Strategic Environmental Assessment (SEA) Scoping Report for the Draft National Wastewater Sludge Management Plan

This starts today Tuesday 12th May for a period of six weeks, until Wednesday 24th June 2015.

Irish Water is preparing a long-term National Wastewater Sludge Management Plan (NWSMP) that will outline its 25 year strategy for managing the distribution and recycling of wastewater sludge to ensure high standards nationwide.

Public consultation, to inform the development of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA), the environmental reports that will accompany the Draft NWSMP, is now underway.

Irish Water is seeking feedback on the contents of the SEA Scoping Report; any additional information that should be considered for the SEA and any other comments or suggestions that should be considered from the public and interested bodies with respect to the development of the SEA.

Public consultation will be undertaken for six weeks from Tuesday 12th May to Wednesday 24th June 2015 during which time the SEA Scoping Report can be viewed at www.water.ie/wastewater-sludge-management

Further details on the scope of this consultation are included in the SEA Scoping Report which can be viewed at www.water.ie/wastewater-sludge-management

Comments and feedback should be sent to Irish Water by 5pm on Wednesday 24th June 2015:

By Email: nwsmp@water.ie

Or by Post: National Wastewater Sludge Management Plan, Irish Water, P.O. Box 860, South City Delivery Office, Cork

Submissions will be reviewed and relevant feedback incorporated into the environmental reports. Irish Water will refer to the environmental reports when preparing the Draft National Wastewater Sludge Management Plan. There will be a further consultation opportunity at this stage.

APPENDIX B
MEDIA COVERAGE AND MEDIA LIST

MEDIA COVERAGE:

1. Irish Independent – 13.05.2015
2. Irish Independent – 13.05.2015
3. Waterford Today – 13.05.2015
4. Irish Farmers Journal – 25.04.2015
5. Irish Farmers Journal – 15.07.2015

Publication: Irish Independent
Date: Wednesday, May 13, 2015
Page: 11
Extract: 1 of 1
Circulation: 112.502
Author: Paul Melia
Headline: Irish Water may use sludge to power incinerators



Irish Water may use sludge to power incinerators

Paul Melia

IRISH Water could use sludge produced by wastewater treatment plants as fuel to power incinerators and produce electricity.

The company said one potential source of disposal was transforming it into 'cakes' and using it as so-called 'refuse derived fuel'.

But Head of Asset Management Jerry Grant said the most effective method of disposal was to spread it on land as fertiliser.

Irish Water operates 1,000 wastewater treatment plants, and produces 220,000 tonnes of sludge a year, of which 25,000 tonnes is dried into cakes.

Most of the remaining 195,000 tonnes is spread on land as a fertiliser after being treated to remove dangerous pathogens, or biological agents which can cause illness.

The sludge is also tested for metals and other toxins, and the land where it is to be spread is also assessed.

"The best way to disposing of sludge is as a fertiliser in soil," said Mr Grant, but added: "It's important for us to have other options as well."

"This is the first time we would have produced a national plan and in doing that, in consulting on it, it will open up to sensitivities around using

sludge for food production.

"We are conscious that certain aspects of sensitivity around use in dairy or beef production. Bord Bia don't want to see it used on production of milk. The food sector is taking a view on this, and we're very conscious we have to have sustainable options."

The company is producing a National Wastewater Sludge Management Plan for the next 25 years which is currently out for public consultation.

Submissions on the plan can be made at nwsmp@water.ie by June 24 next.

Irish Water may use sludge to power incinerators



[Paul Melia Twitter](#)

[Email](#)

Published 13/05/2015 | 02:30



Open Gallery 1

Irish Water could use sludge produced by wastewater treatment plants as fuel to power incinerators and produce electricity

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"We are conscious that certain aspects of sensitivity around use in dairy or beef production. Bord Bia don't want to see it used on production of milk. The food sector is taking a view on this, and we're very conscious we have to have sustainable options."

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Irish Water prepares National Wastewater Sludge Management Plan (NWSMP)

Irish Water is preparing a long-term National Wastewater Sludge Management Plan (NWSMP) that will outline its 25-year strategy for managing the distribution and recycling of wastewater sludge to ensure high standards nationwide. Public consultation, to inform the development of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA), the environmental reports that will accompany the NWSMP, is now underway.

Public Consultation

Public consultation will be undertaken for six weeks from Tuesday 12th May to Wednesday 24th June 2015 during which time the SEA Scoping Report can be viewed at <http://www.water.ie/wastewater-sludge-management> and comments and feedback sent to Irish Water by 5pm on Wednesday 24th June 2015, as follows:-

Email: nwsmp@water.ie

Post: National Wastewater Sludge Management Plan, Irish Water, P.O. Box 860, South City Delivery Office, Cork.

Irish Water is seeking any additional information, not currently contained in the Scoping Report, that should be considered for the SEA, and any other comments or suggestions that should be considered from the public and interested bodies. Further details on the scope of this consultation are included in the SEA Scoping Report which can be viewed at <http://www.water.ie/wastewater-sludge-management>.

Commenting on the NWSMP, Mr. Jerry Grant, Head of Asset Management with Irish Water said, "We are currently working on this draft strategy with a view to publishing a full 25 year strategy by autumn 2015. The plan will take into account current legislation and best practice in relation to the treatment and utilisation of wastewater sludge, leading to efficiencies in the process, which will be to the benefit of our customers."

Traditionally, the majority of Ireland's wastewater sludge is re-used as a fertiliser and soil conditioner, and also used to generate renewable energy. A very small percentage of Ireland's sludge currently goes to landfill. Irish Water aims to retain and develop these traditional outlets with full regard for food safety and the environment, through quality management and communication at all stages of the process.

Up to recently, it was the responsibility of local authorities to deal with wastewater sludge management. This is the first time that wastewater sludge will be dealt with at national level and Irish Water is seeking feedback from statutory bodies and the public on shaping the future of wastewater sludge management.

The NWSMP will assess the following issues in relation to sludge management:

- o Current and predicted future sludge quantities;
- o Statutory requirements and best practice for the utilisation of sludge;
- o Potential for sludge reduction and increased energy recovery;
- o Options and alternatives for sludge management;
- o Availability of sludge outlets and risks to current outlets.

All submissions made on the SEA Scoping Report will be reviewed and relevant feedback incorporated into the environmental reports. Irish Water will refer to the environmental reports when preparing the Draft National Wastewater Sludge Management Plan. Submissions from individuals will be reported anonymously; feedback from organisations will be attributed to them and stakeholders will be advised of this in correspondence inviting them to participate in the consultations.

Later this year, when the Draft NWSMP is prepared it will go on display for a 6-week statutory public consultation, before being reviewed and finalised in the winter.

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Letters to the Editor

Weekly Poll

Our View

Lies, damned lies & statisticsIt is

A Hollandaise of Fish

Steaks with Soy and Garlic Sauce

perhaps an indication that a general election is in the offing when even though it is the summer and the Dail is in recess much of the media and the Irish political class is still behaving as if the Dail is still up and running and working as if it's business as usual. It is unusual, to say the least, that there have already been a large number of polls questioning the Irish public over what their forthcoming polling preferences will be if a general election is to be c ...

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American Strawberry Shortcake
Summer Pudding
Moroccan Barbecued Beef
Southern Fried Chicken with Garlic ...
Hazelnut Cake
- 280g (10oz.) Hazelnuts
method
Roast Loin of Lamb with Orange and ...
- 110g. Redcurrant Jelly
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Dempsey at large

Cheap fertilizer - does municipal sludge count?

There are few subjects that grab mine and other farmers' attention as quickly as fertilizer prices. Prices have stayed up despite the halving of energy prices and the fall in general commodity prices. I look forward to the forthcoming IFA conference on the subject.

Of the fertilizers, organic manure has huge attractions from a land structure and fertility point of view, but one of the most difficult debates is around the use of the sludge from municipal sewage works. The Irish position is quite clear - that its use is

forbidden under the various quality assurance schemes. So for cattle farmers producing beef and participating in the Bord Bia quality assurance scheme, as practically every beef producer is, its use is forbidden.

Likewise, all the milk purchasers as far as I know have an absolute ban on their suppliers using sewage sludge on their farms. The same

“Animal manure should go to where it is absolutely safe and of real value

applies to those producing malting barley for dominant Diageo supplier Boortmalt. Even in my own farming case, where I am growing gluten-free oats for Glanbia's US customers, I am forbidden to use it.

Recently, on a trip to Brussels for the Forum for the Future of Agriculture Conference, I was talking to a Dutch agricultural scientist. He assured me that in the Netherlands there was a legislative ban on using sewage sludge on land used for agricultural production.

To be honest, I did not fully believe him and checked with

the Dutch government and got a comprehensive written reply confirming that my informant was correct. Sewage sludge cannot be used on land in The Netherlands - end of story. The reasoning is straightforward. While heavy metals and other contaminants can be extracted by plants such as willows, there are potential features to sewage sludge that make it unsuitable for use on land producing food. The Dutch insist on sewage sludge being dried and incinerated.

We have not been as stringent as that here but given the similarities in the range of export markets we cater for, I wonder if we should not stand back and reassess.

I was glad to see Moy Park, the amazingly successful Northern Ireland poultry producer, making the manure from its contract growers available on a wider basis than up to now.

The presence of a legal botulism vaccine in the North makes some resolution of this area necessary but the principle is clear - animal manure should go to where it is absolutely safe and of real value.

The Dutch legislation and our quality assurance schemes do not seem to see sewage sludge in the same light.

THE HOME FARM

Is everything ever fully under control in farming?

With the dry weather, we are now totally up to date in spraying the winter barley and oilseed rape as well as everything having had its first, or in some cases its second, application of nitrogen. I still find growth a bit below par, due I presume to the cold nights, but nevertheless recovery from the first grazing is steady. A good indication of the temperature is how long the daffodils stay in bloom and this year they have lasted longer than normal.

Earlier this week, we got the maize sown, under plastic as usual. After a difficult few weeks, conditions were ideal and while it may have been desirable to have got it in a week or 10 days ago, I would rather have a good seedbed and good sowing conditions.

This year most of the inputs for maize are down in price, but the banning of Atrazine a few years ago really complicated the weed control programme with a need for a pre-emerge at sowing under plastic and then a band spraying between the rows before the plants broke

through the plastic. This year we are trying a new herbicide at sowing that is meant to do everything, so we will see how it goes.

Farming where I do, outside the direct Dublin metropolitan area but close enough to be affected by infrastructural developments servicing the capital, I again have a public body carrying out work.

Last year, it was the County Council putting in a new water main.

This year, we have the ESB on site. I have two lines of pylons going across the place and there always seems to be something needed. This time it's a major line that needs strengthening, with some pylons actually needing replacing.

I am always conscious of the enormous legal powers the ESB has, so it's a question of hammering out a modus vivendi that makes life tolerable for everybody.

I am glad to see that the company has invested in metal trackways, similar to the ones used at the Ploughing, so the vehicles are kept to these as they cross the fields. But inevitably there is some damage to crops and land.



Available with Sulphur & Potassium added

CHEAPER per unit of Nitrogen than CAN



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- Saves on transport and spreading time

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Dempsey at large

Sewage sludge needs clarity

There has been a continuing ambivalence about the use of sewage sludge as a fertiliser in Irish agriculture. It is forbidden under all the quality assurance schemes, including the Bord Bia scheme and the grain quality assurance scheme. In some schemes, you must give a written guarantee that sludge has not been used on your farm within the last five years. But there is a view that the oversight of how sludge is used is less than complete.

Responsibility for this whole area now rests with Irish Water and, while the organisation has come in for substantial criticism in the way it was set up, there is no doubt that a competent na-

tional water and waste body is badly needed.

Last week I went through Irish Water's thoughts on the treatment of sewage sludge with them.

As we mentioned before, the Netherlands bans the use of sewage sludge in agriculture completely, as does Switzerland. Other countries such as Germany, Belgium and Austria have regional bans, while a ban on its use on grassland is widespread. But Denmark, the UK and France use it routinely as a fertiliser on crops.

If it is to be used on land, the ideal is that it is as a fertiliser on energy crops. In other words, it is removed from the food chain.

In Ireland, Irish Water's policy is to maintain land

spreading as an option but obviously to have a quality assured pathogen-free product with strict monitoring and reporting mechanisms in a unified national online reporting system (which is being developed).

As in most areas of life, there are pros and cons on both sides of the argument.

Irish Water points out that only about 15,000 hectares (45,000 acres) are needed to be available for land spreading – less than one-quarter of 1% of the 4.5m hectares (11m

☞ If it is to be used on land, the ideal is that it is as a fertiliser on energy crops

acres) of agricultural land in the country. Irish Water has detailed soil and parent material maps of the country which pinpoint the southeast as being most suitable for sludge spreading on land.

One of its clear policies on cost and fertiliser recovery grounds is to maintain the land spreading outlet and it is in discussions with Bord Bia on whether an absolute ban on quality assured farms is justified.

Irish Water points out that Ireland imports 70% of its feed grain and there are no controls in place as to whether this grain is produced with the aid of sludge or not.

Ultimately, it is a choice for Government. The Environmental Protection Agency and Food Safety Authority have broadly kept out of the discussions, at least publicly. But what do farmers want? There is no doubt there is a capacity to influence legislation towards the Dutch and Swiss models of a total ban, or to have a strict monitoring and quality control policy, as in France and Britain.

What has not been decided is where the clear national interest lies instead of just muddling through. At least Irish Water has laid out its objectives and policies. We are due the same clarity from other stakeholders.

THE HOME FARM

Cold May hits the honey hives

We were all set to go with the Roundup to desiccate the oilseed rape when we got heavy rain. The modern product is rain-fast after just a few hours. I remember when it first came out it needed 24 hours' continuous dry weather but technology moves on and so does the year. Presumably we will get a chance over the next few days. Desiccating the oilseed rape means we are really entering the harvest season.

I reckon the winter barley will be ready in about 10 days, though it's difficult to judge. Normally with the winter barley, the straw is a valuable byproduct but straw prices really seem to be under pressure. The national acreage of winter barley is well up and everywhere I go I see large stacks of wheaten straw not yet collected by the mushroom composters.

I am in the same position with a large, unopened pile of big straw bales. If push comes to shove, I will keep the barley straw for feeding and shred the wheaten straw as we harvest it. My contractor has a good shredder on the back of his combine so I will keep that option open.

The beans now have devel-

oping pods working their way up the stem and the wheat is just beginning to turn but I think the leaves are hanging on to their green colour longer than usual – it could be a late wheat harvest.

Meanwhile, Gianbia has really developed its texting with regular updates on what it is willing to pay for grain. It has seesawed over the last few weeks but I have also received reminders on how weed-free my gluten-free oats are expected to be.

One interesting aside: a few weeks ago, I mentioned how my regular bee man had put in about 16 hives around the place. He tells me that the hives on a northward-facing ditch exposed to the continuous cold winds during May have produced practically nothing, while those facing south with protection against the north have produced fully up to normal. I know it was the coldest May in 20 years but I didn't expect immediate evidence.

Meanwhile, we continue to move beef cattle as soon as they are fit. They say every year in the cattle trade is different. Never was this truer than the comparison between this year and last.

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APPENDIX C
BRIEFING NOTE TO INTERESTED BODIES



12 May 2015

Non-statutory public consultation on strategic environmental assessment (SEA) Scoping for the National Wastewater Sludge Management Plan (NWSMP) from 12 May to 24 June 2015

Dear ,

Irish Water, as the competent authority for the management of sludge from wastewater treatment plants under its remit, is undertaking Environmental Assessment (EA) scoping of the National Wastewater Sludge Management Plan (referred to as the NWSMP) and invites you to participate in non-statutory consultation now underway.

The NWSMP will set out Irish Water's high level strategies for wastewater sludge management over a 25 year period. A separate plan will be developed for sludge from water treatment plants.

In accordance with the European Communities Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, as incorporated into Irish law through S.I. No. 435/2004 and 436/2004 (as amended), consideration has been given to potential environmental effects associated with implementation of the plan. Irish Water has undertaken screening for SEA and concluded that the SEA process would provide an appropriate mechanism to ensure environmental considerations are incorporated into the plan. RPS has been appointed by Irish Water to carry out the SEA and also an Appropriate Assessment (AA) on the NWSMP.

In accordance with Article 11 of S.I. No. 435, the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and 2011:

1. RPS on behalf of the competent authority (in this case Irish Water) will prepare an Environmental Report on the likely significant environmental effects of implementing the NWSMP; and
2. The Environmental Report will include information that may reasonably be required, taking into account:
 - Current knowledge and methods of assessment;
 - The contents and level of detail in the NWSMP;
 - The stage of the NWSMP in the decision making process; and

- The extent to which certain matters are more appropriately assessed at different levels in the decision making process in order to avoid duplication of environmental assessment.

We are seeking to establish the range of environmental issues and the level of detail to be included in the Environmental Report. You can view the SEA Scoping Report at www.water.ie/wastewater-sludge-management and we have included the Terms of Reference as detailed below to guide you in making any submission.

Submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report may be made on or before **5pm on Wednesday 24 June 2015** as follows:-

Email: nwsmp@water.ie

Post to: **National Wastewater Sludge Management Plan,**

**Irish Water,
P.O. Box 860,
South City Delivery Office,
Cork**

Submissions will be reviewed and relevant feedback incorporated into the environmental reports. Irish Water will refer to the environmental reports when preparing the Draft NWSMP.

Consultation Reports will be prepared on the feedback received as part of each of the focused consultation periods and will be published on the website at www.water.ie/wastewater-sludge-management. Submissions from individuals will be reported anonymously, while feedback from organisations will be attributed to them.

Yours sincerely,



Fiona Lane

Wastewater and Sludge Strategy Specialist

TERMS OF REFERENCE FOR NON-STATUTORY CONSULTATION ON SEA SCOPING REPORT

Irish Water is undertaking a Strategic Environmental Assessment (SEA) to inform the development of a National Wastewater Sludge Management Plan.

The purpose is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process.

An SEA Scoping Report has been prepared and is available at www.water.ie/wastewater-sludge-management. The SEA Scoping Report looks to establish the range of issues and level of detail of information to be included in the SEA and considers the following:-

- o Human beings and population
- o Soils
- o Water
- o Noise
- o Air
- o Odour
- o Climate
- o Transport
- o Energy.

- Based on the plans, policies and programmes outlined Chapter 4 of the SEA Scoping Report, are there any other key relevant international, national or regional plans, policies or programmes that should be considered in the SEA Environmental Report?
- Are there any other significant information sources that should be considered?
- Do you agree with the list of potential significant effects that have been identified in Chapter 5 of the SEA Scoping Report? Should any be added or removed?
- Are there any other existing environmental issues which should be considered?
- Do you have any comments regarding the draft SEA Objectives outlined in Chapter 7 of the SEA Scoping Report?
- Do you have any suggestions in relation to the overall approach to alternatives?
- How would you like to be contacted as the project progresses?

Submissions will not be individually responded to, but will feed into the Consultation Reports, which will be published on the Irish Water website.

Submissions will be reviewed and relevant feedback incorporated into the environmental reports. Irish Water will refer to the environmental reports when preparing the Draft National Wastewater Sludge Management Plan.

Submissions from individuals will be reported anonymously, while feedback from organisations will be attributed to them.

 FORWARD

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APPENDIX D
PRESS RELEASE

Irish Water prepares National Wastewater Sludge Management Plan (NWSMP)

Tuesday May 12th, 2015 - Irish Water is preparing a long-term National Wastewater Sludge Management Plan (NWSMP) that will outline its 25-year strategy for managing the distribution and recycling of wastewater sludge to ensure high standards nationwide. Public consultation, to inform the development of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA), the environmental reports that will accompany the NWSMP, is now underway

Public Consultation

Public consultation will be undertaken for six weeks from Tuesday 12th May to Wednesday 24th June 2015 during which time the SEA Scoping Report can be viewed at <https://www.water.ie/projects-plans/wastewater-sludge-management/>

and comments and feedback sent to Irish Water by 5pm on Wednesday 24th June 2015, as follows:-

Email: nwsmp@water.ie

Post: National Wastewater Sludge Management Plan, Irish Water,
P.O. Box 860, South City Delivery Office, Cork.

Irish Water is seeking any additional information, not currently contained in the Scoping Report, that should be considered for the SEA, and any other comments or suggestions that should be considered from the public and interested bodies. Further details on the scope of this consultation are included in the SEA Scoping Report which can be viewed at

<https://www.water.ie/projects-plans/wastewater-sludge-management/>.

Commenting on the NWSMP, Mr. Jerry Grant, Head of Asset Management with Irish Water said, "We are currently working on this draft strategy with a view to publishing a full 25 year strategy by autumn 2015. The plan will take into account current legislation and best practice in relation to the treatment and utilisation of wastewater sludge, leading to efficiencies in the process, which will be to the benefit of our customers."

Traditionally, the majority of Ireland's wastewater sludge is re-used as a fertiliser and soil conditioner, and also used to generate renewable energy. A very small percentage of Ireland's sludge currently goes to landfill. Irish Water aims to retain and develop these traditional outlets with full regard for food safety and the environment, through quality management and communication at all stages of the process.

Up to recently, it was the responsibility of local authorities to deal with wastewater sludge management. This is the first time that wastewater sludge will be dealt with at national level and Irish Water is seeking feedback from statutory bodies and the public on shaping the future of wastewater sludge management.

The NWSMP will assess the following issues in relation to sludge management:

- Current and predicted future sludge quantities;
- Statutory requirements and best practice for the utilisation of sludge;
- Potential for sludge reduction and increased energy recovery;
- Options and alternatives for sludge management;
- Availability of sludge outlets and risks to current outlets.

All submissions made on the SEA Scoping Report will be reviewed and relevant feedback incorporated into the environmental reports. Irish Water will refer to the environmental reports when preparing the Draft National Wastewater Sludge Management Plan. Submissions from individuals will be reported anonymously; feedback from organisations will be attributed to them and stakeholders will be advised of this in correspondence inviting them to participate in the consultations.

Later this year, when the Draft NWSMP is prepared it will go on display for a 6-week statutory public consultation, before being reviewed and finalised in the winter.

ENDS