Questionnaire for stakeholders

to examine Member States' current legal framework and practices on by-products and end-of-waste

Your contact details	
Name / Position	Conor Walsh / Secretary
Organisation / company	Irish Waste Management Association
Contact details (mail and phone number)	cwalsh@slrconsulting.com +353 86 8337573
Role of the organisation in the specific sector	Trade Association for Waste Management Companies in Ireland (Republic of Ireland)
Waste / material streams managed by the organisation / members of the organisation	The vast bulk of waste steams generated in Ireland.

Introduction

This questionnaire forms part of data gathering within the current project "Study to assess Member States' practices on by-product and end-of waste" conducted under Framework Contract ENV.B.3/FRA/2017/0005 by DG Environment (please see supporting letter from the European Commission).

It aims at obtaining information

- to evaluate national/regional end-of-waste criteria that were established in Member States and relevant guidelines;
- to evaluate the national procedures related to taking case-by-case decisions;
- to identify best and worst practices in relation to end-of-waste and by-product regimes.

The answers to the questions will provide the basis for a long list of possible cases to be analysed in detail, as input for recommendations on the design of national legal and enforcement regimes for by-products and EoW.

- to draw conclusions on the role of identified approaches related to end-of-waste and by-product status on the markets of secondary raw materials (volumes, values and trade);
- to identify groups of Member States with similar overall approaches related to application of end-of-waste and by-product status;
- to learn from best practices in order to find the right balance between a precautionary and a liberal circular economy approach;
- to give clear recommendations on the design for future national legal end enforcement regimes related to end-of-waste and by-products.

Guidance on using the questionnaire

This questionnaire provides specific questions on following main sections:

1. Experience with legal or administrative difficulties concerning specific waste streams to reach an end-of-waste status.
2. Examples of poorly or well-organised and managed transitions of specific wastes to an end-of-waste status. Examples of good or difficult classifications of materials as by-products not entering the waste phase.
3. Drivers and barriers
4. Market situation of materials already regulated under end-of-waste or by-products
5. Expand on one waste or material stream for which you envisage optimization.

A glossary of used terminology is added in annex.

We kindly ask you to fill out the questionnaire electronically. Please use the check boxes provided under each question - which can be activated or disabled by mouse-click - and the text fields where textual input is wanted.

Please provide all documents you are referring to, if available, also in English.

If questions are unclear, please do not hesitate to contact Mr Ray Jacobsen ray.jacobsen@arcadis.com, +32 474 500 288)

Return of the completed questionnaire

Please return the completed questionnaire and any additional documents to ray.jacobsen@arcadis.com by **22nd of March 2019**.

	1. Experience with legal or administrative procedures concerning specific waste streams to reach an end-of-waste or by-product status.	
1.1	Please describe in general terms the present legal or administrative **procedures** for the classification of waste or materials which you are in touch with.as end-of-waste or by-product	**End of Waste –** There are currently no National End of Waste procedures/standards in place. Case by case end of waste has been agreed with the EPA for some materials such as waste plasterboard and waste LDPE. These only apply at specific facilities where an application was made to the EPA and was processed by the Agency. **By-Products –** Economic operators can make a statutory declaration that material is a by-product. The procedure entails submitting information to the EPA via an on-line system demonstrating that the relevant criteria are met. The EPA reviews the declarations and makes a determination in due course, but the material can be moved as a by-product as soon as the declaration is made, in advance of the EPA determination.
1.2	Please describe in general terms the administrative or legal **difficulties** you encounter upon the classification of waste or materials as end-of-waste or by-product.	**End of Waste –** Case by case End of Waste (EoW) applications / decisions are suitable for some materials, particularly niche or uncommon wastes and several of our members have engaged positively with the EPA in this regard. National or EU-wide EoW status is more suitable for some common materials that meet relevant standards. For example, we are having difficulty in establishing EoW for recycled aggregate and case by case is less attractive than national criteria for that material. We believe that larger EU Member States have more resources to establish National EoW standards, so smaller Members States are disadvantaged by the legislation in this regard. **By-Products –** The EPA does not have enough resources in this area, so By-Product declarations are not reviewed until months or years after the material has been moved as a by-product. This can lead to serious difficulties if and when the EPA decides that a by-product declaration was incorrect and effectively classifies the material as a waste and the location where the material has been placed, as an unauthorised waste disposal site. Such sites could be hit with the landfill levy at €75 per tonne, so the consequences can be very serious. The EPA initially published informal guidance on by-product declarations on their website. The Agency later published more formal guidance, introducing more restrictions on by-product declarations. That guidance was withdrawn after legal challenges. New draft guidance was issued for consultation in Q4 2018. That draft has not yet been finalised, so there is currently a lack of guidance and also any decisions or draft decisions, based on previous guidance that are now questionable since they were based on guidance that has been withdrawn after legal challenge. The current situation is therefore unclear.

1.3	**For which** waste streams or material streams did you already acquire an end-of-waste or by-product status? How were your experiences regarding the legal /administrative procedures?	**End of Waste –** One of our members has acquired EoW on a case by case basis for Low Density Polyethylene (LDPE) pellets for a processing plant that has yet to be developed. I understand that the process was quite efficient with a satisfactory outcome. The IWMA is currently involved in the process of applying for EoW status for recycled aggregate. The EPA has informed us that their decision on this application will not be consistent with UK National EoW standard for Recycled Aggregate, as the UK system takes no account of risk of contamination of soil and groundwater. This means that recycled aggregate in Ireland that is deemed to be EoW will have to meet a higher standard than EoW recycled aggregate in Northern Ireland, which is part of the UK. We feel that this is an anomaly and would prefer consistent standards across the EU. However, we understand that EU wide EoW decisions take a long time, so we would settle for a National EoW standard for Recycled Aggregate in the short term, recognising that it will be inconsistent with the UK for legitimate environmental reasons. **By-Products –** Some of our members have made economic declarations with regard to by-products or accepted material as non-waste in this regard. The material normally comprises uncontaminated soil and stones or other suitable engineering materials used at landfill sites. Some outcomes were satisfactory, but some are now in difficulty as the EPA has changed the rules several times and there is now uncertainty in relation to many by-product declarations. We have also observed economic declarations on materials by other parties that we believe are not suitable (demolition wastes) and may cause environmental pollution.
1.4	**Detail:** For which waste streams do you experience legal or administrative difficulties in acquiring an end-of-waste status? Please detail nature of the waste, origin, intended use, conditions.	**Recycled Aggregate**. This material was used for low grade fill purposes prior to 2008. However, since the revised Waste Framework Directive came into force, recycled aggregate must go to licensed or permitted waste facilities in Ireland, so landfill engineering is currently the main outlet for that material. The number of landfills in Ireland has reduced from 120 in c.1995 to just 4 currently.
1.5	**Detail:** For which material streams do you experience legal or administrative difficulties in acquiring a by-product status? Please detail nature of the material, origin, intended use, conditions.	**Uncontaminated soil and stone.** This is generally derived from new developments at greenfield sites and is uncontaminated. It is normally used for backfilling quarries, land improvement, landscaping or landfill engineering. There is a demand for the material as it replaces virgin materials, but it may attract a gate fee, due to supply and demand dynamics. The EPA is currently considering if a material can be a by-product if the economic operator has to pay someone to take it. We argue that

		the payment is immaterial. If a store has stock that it needs to clear to make way for new stock, it could have 2 choices: 1. discard the goods at a price by placing it in bins/skips. 2. Choose to not discard it, but to pass it to a third party to sell it. The clearance and transport of the goods may incur a monetary cost, but it may cost less than the discard option described above. In this scenario, the goods are a financial burden but never become a waste. We therefore believe that material is not necessarily a waste just because it is a financial burden to the holder.

	2. Examples of poorly or well-organised and managed transitions of specific wastes to an end-of-waste status.	
	2a) Open question on well-organised systems	
2.1	Please state for **which wastes**, according to your appreciation and experience, the legal transition towards **end-of-waste** is well organised. Please explain why. What aspects brought the success, if applicable highlighted for different waste / material streams	• **Iron, steel and aluminium scrap** • **Glass Cullet** • **Compost & digestate**
2.2	Please indicate how this is realised. Please also give information on aspects that can be highlighted:	☒ An EU end-of-waste Regulation ☐ A national/regional provision in the legislation ☐ A national/regional administrative procedure for single case decisions ☐ A self assessment by industry or the waste treatment chain followed by inspection ☐ Other, please explain: What aspects brought the success, if applicable highlighted for different waste / material streams: As the first two of these EoW were determined at EU level, there is consistency across the industry in Ireland and the EU, so no competitive advantages or disadvantages. There are also clear and consistent rules for all involved in handling these materials. There are consistent standards for compost and digestate across Ireland and this has facilitated the use of these materials as products in a satisfactory way.
2.3	Please state for **which material streams**, according to your appreciation and experience, the legal identification as **by-product** is well organised. Please explain why. What aspects brought the success, if applicable highlighted for different waste / material streams	We are not aware of any well organised identification of by-products, but there may be some that are outside the experience of our members. The inconsistency in EPA guidance over the last 5 years has not facilitated 'well organised' by-product identification for our members.

2.4	Please indicate how this is realised Please also give information on aspects that can be highlighted:	☐	A national/regional provision in the legislation
		☐	A national/regional administrative procedure for single case decisions
		☐	A self assessment by industry or the waste treatment chain followed by inspection
		☐	Other, please explain:
		What aspects brought the success, if applicable highlighted for different waste / material streams: No success to report.	
	2b) For following wastes or materials, how do you evaluate the procedures or the lack of procedures: *(please only consider those wastes or materials of importance to you, and indicate 'no answer' for the others)*		
2.5	Granulates, construction and demolition wastes. These materials are frequently used after demolition as building materials or foundations in the same or other wharfs or in road construction.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	No end-of-waste solution necessary for this stream
		☐	No answer, no experience with this stream
2.6	Ashes and slags, especially metal bearing slags. They are used as construction material but may be confronted with content of hazardous materials.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste / by-product solution necessary for this stream
		☐	No answer, no experience with this stream
2.7	Compost and digestate as end-of-waste usable as soil improver or organic fertilizer. They are sometimes looked upon as by-products from energy production (anaerobic digestion) or as outcome of aerobic waste treatment/ recycling operations.	☒	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste / by-product solution necessary for this stream
		☐	No answer, no experience with this stream

2.8	Chemical waste, balancing on the interface between chemical products and waste legislation.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste /by-product solution necessary for this stream
		☒	No answer, no experience with this stream
2.9	Wood, especially non-treated wood in natural form or as wood chips/wood chip mulch, from green and park maintenance that might be considered as a by-product.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste / by-product solution necessary for this stream
		☐	No answer, no experience with this stream
2.10	Different kinds of scrap and metal bearing wastes not yet covered by of not complying with the European Regulations. They are often valuable raw materials fit for urban mining. E.g. lead waste or other metals apart from iron, steel, aluminium or copper. E.g. metal salts and oxides. E.g. metals as dust or in dispersible forms…	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste /by-product solution necessary for this stream
		☒	No answer, no experience with this stream
2.11	RDF refuse-derived fuel, at the edge between waste incineration (waste-to-energy) and end-of-waste fuel. Issuing the question material versus energy recovery.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	No end-of-waste solution necessary for this stream
		☐	No answer, no experience with this stream

2.12	Wastes and sludges from the food production industries. Often used as animal feedstock, human consumption, as fertilizer and for other purposes, often in a disperse way (free use not limited to specifically permitted plants).	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste /by-product solution necessary for this stream
		☒	No answer, no experience with this stream
2.13	Plastic waste after a sorting process or the first steps in the recycling chain, either single stream or mixed. The principles of the Mayer Parry case (see glossary) and similar jurisprudence is often debated regarding the flip-over point when sorted out plastics become a raw material and leave the waste phase.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	No end-of-waste solution necessary for this stream
		☐	No answer, no experience with this stream
2.14	Waste paper and cardboard after a sorting process.	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☒	Not organised, no end-of-waste solution available, although it is needed
		☐	No end-of-waste solution necessary for this stream
		☐	No answer, no experience with this stream
2.15	Waste tyres unfit for their original use but applied in diverse dispersed applications such as coverage of feedstock silos in the agriculture exploitation or as rubber in arenas for horseback riding or sport fields in combination with artificial grass.	☐	Well organised, transparent and smooth procedure
		☒	Poorly organised, complicated administration
		☐	Poorly organised, inconsistent or non transparent administration
		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	No end-of-waste solution necessary for this stream
		☐	No answer, no experience with this stream
2.16	Other: please note down: Excavated Uncontaminated soil and stone	☐	Well organised, transparent and smooth procedure
		☐	Poorly organised, complicated administration
		☒	Poorly organised, inconsistent or non transparent administration

		☐	Not organised, no end-of-waste solution available, although it is needed
		☐	Not organised, no by-product solution available, although it is needed
		☐	No end-of-waste/by-product solution necessary for this stream
		☐	No answer, no experience with this stream
2.17	Please explain or add comments, if possible related to specific materials Indicate why you consider some procedures as 'well' or 'poorly' organised.	Compost and digestate **EoW** is well organised in Ireland as the material is produced at specific facilities that are subject to permits or licences and those authorisations require the compost or digestate to meet certain standards (environmental, health, disease control and soil improvement) before it can be spread on land as a non-waste. There are consistent standards and control of the flow of such material through these authorisations, so it works very well. The **by-product** procedures in Ireland are poorly organised. The EPA has been inconsistent with the rules and has gone beyond the four requirements listed in Article 5 of the EU Waste Framework Directive. This has resulted in decisions by the courts that have led to revisions of the EPA guidance and should result in changes to EPA decisions. This has created a trap for some economic operators that have made declarations in good faith, based on the requirements of Article 5 and been over-ruled later by the EPA using guidance that goes beyond the requirements of Article 5. The EPA has not put enough resources into by-product decisions with the result that decisions are made years after the economic declarations have been made and decisions that should be over-turned since guidance was withdrawn are not being over-turned. The lack of EPA resources in this area is likely to lead to very many unresolved cases or cases that are resolved by the court system, using more resources than would be required if a well-organised system was put in place. The lack of EPA resources and consistency has also allowed some economic operators to take advantage of a short term blind spot to make inappropriate economic declarations that are not consistent with Article 5 of the Waste Framework Directive. By the time the EPA catches up with those declarations it is often too late to remove the material as it may be at the bottom of a major development (e.g. a new major road), where it may cause contamination.	

	3. Drivers and barriers		
	What are the main drivers/barriers identified?		
		Barriers in managing material streams under end-of-waste and by-products?	Drivers in managing material streams under end-of-waste and by-products?
3.1	Aspects related to appropriate institutional set-up to enable the establishment of rules for end-of-waste and by-products. Please specify, if possible by examples related to specific materials.	The lack of EPA resources in these areas is a major barrier. Also, inconsistency in EPA rules in relation to these areas has caused major issues. For example, the EPA stated that it would not set national EoW criteria for materials as that would require consultation with all the other EU member states and the EPA stated that it does not have the available resources for such procedures. Lack of EPA resources has also been a major barrier to a well-organized system of by-product declarations. In fact, the EPA guidance documents appear to set restrictions that go beyond Article 5 of the WFD as the EPA is not able to cope with the amount of declarations that have been made to date.	
3.2	Aspects related to existing strategies on resources, product policies and chemical legislations. Please specify, if possible by examples related to specific materials.	There is no strategy in Ireland for management of materials as EoW or as by-products. Everything is decided 'case by case' with no overarching view or strategy. We would welcome a strategy that identifies how Ireland could use Article 5 and Article 6 to greater effect in terms of waste prevention and recycling. However, in the meantime we need 'case by case' decisions to progress through the existing	

	3. Drivers and barriers		
	What are the main drivers/barriers identified?		
		Barriers in managing material streams under end-of-waste and by-products?	Drivers in managing material streams under end-of-waste and by-products?
		system without undue delay, so we recognize and support the EPA best efforts in this regard.	
3.3	Aspects related to the economic feasibility to handle material streams under end-of-waste or by-products and on the presence or absence of specific markets for it. Please specify, if possible by referring also to examples on industrial symbiosis/clusters.		This is a major driver for EoW. The certainty that comes with national and international EoW standards can open markets for materials such as recycled aggregate. This system has been successful for compost and digestate in Ireland and a solid market exists. There is no market for recycled aggregates other than landfill engineering and this is a major problem in our view. Agreed national or EU EoW standards for this material would immediately open a market and allow higher level management of this material in line with the waste hierarchy.
3.4	Aspects related to providing and distribution of knowledge and innovation including exchange between administrative authority level and industrial sectors. Please specify, if possible by examples related to specific materials.	Whilst we recognize and support the need for 'case by case' decisions, the predominance of the 'case by case' system for EoW and by-products in Ireland is a potential barrier to the distribution of knowledge and innovation. Companies are incentivised to work against each other to achieve EoW or by-products for their material to give them a competitive advantage. However, in our experience there is a willingness for companies to work together to achieve national or	

	3. Drivers and barriers		
	What are the main drivers/barriers identified?		
		Barriers in managing material streams under end-of-waste and by-products?	Drivers in managing material streams under end-of-waste and by-products?
		international EoW standards that are consistent for everyone and recognized by consumers. Our members are generally willing to share knowledge in this context.	
3.5	Aspects related to the public perception and consumer acceptance of material streams managed under end-of-waste and by-products. Please specify, if possible by examples related to specific materials.		This is a driver for EoW compost and digestate. Material must reach a high standard in a controlled environment and this give confidence to the consumer that it is a good product.
3.6	Aspects related to transfrontier shipment of end-of-waste or by-product between Member States and to third countries. Please specify, if possible by examples related to specific materials.	The EoW status for recycled aggregate in the UK, means that this material can cross the border from Northern Ireland (NI) and be used as non-waste in the Republic of Ireland (RoI). Equivalent material produced in RoI cannot be used as non-waste, so it costs more to manage. This introduces unfair competition as C&D waste can be managed at lower cost in NI and can attract waste from RoI.	

	4. Market situation of materials already regulated under end-of-waste or by-products	
4.1	Is information on the market situation for end-of-waste materials or by-products available, specifically on market prices for secondary materials and primary materials, competitiveness issues, cross-border movements? Please specify, if possible by examples related to specific materials.	Bulk loads of compost and/or digestate are traded on a case by case basis, so there is no public information on this subject that we are aware of. Bagged compost and digestate is sold openly on the market, but we have not seen analysis of the difference between the price of secondary and primary materials. The UK market prices for EoW glass cullet and EoW metals are publicly available and the market is international.
4.2	If possible, please share information on costs for - monitoring, sampling and analysing to achieve obligations defined in relevant end-of-waste or by-product provisions - treatment to achieve end-of-waste or by-product status (eg exemplified by specific waste / material streams in EUR per ton) - administrative costs for certification procedures or other relevant related organisational needs Please specify, if possible by examples related to specific materials.	
4.3	Are issues related to secondary raw materials driven by eco-innovation or research initiatives in your country? Please specify, if possible by examples related to specific materials.	Not as far as we are aware.

	5. Expand on one waste or material stream for which optimisation should be sought:	
5.1	For which waste or material stream do you think optimisation should be sought? Please specify waste/material stream and if applicable relevant processes.	**Recycled Aggregate** for the following reasons: i. There are large volumes of this material being generated. ii. It can only be used as landfill engineering or deposited in inert landfills. iii. Landfills are becoming close to obsolete for MSW, so the need for future landfill engineering materials is reducing. iv. We have obligations to recover 70% of C&D wastes under the WFD, so the establishment of alternative uses for recycled aggregate is very important. v. There is inconsistency between Ireland and our nearest neighbour, the UK, on this issue. vi. This material was used as low grade fill prior to 2008, when the WFD introduced rules for EoW. vii. As far as we are aware, there are no significant contamination issues associated with the historical use of this material as low grade fill.
5.2	Are the wastes/materials treated in a disperse way in the market (e.g. manure, construction material) or in specific dedicated installations by processes fulfilling specific conditions? What kind of function do they take up once the by-product or end-of-waste status is achieved, types of application? Reuse[1], use as a secondary raw material for which processes, use for other purposes?	C&D materials are generated in a disperse way, but are managed at facilities that are regulated by permits or licences, so recycled aggregate is produced at regulated installations by processes that are designed to separate aggregate from other C&D materials. We would like to see the recycled aggregate used as a 'non-waste' low grade fill in construction projects and in exempted developments, such as farmyards or farm tracks, but this is currently not allowed as EoW status has not been obtained in Ireland for this material.
5.3	Are the wastes/materials likely subjected to trans-frontier shipment? Does the classification as by-product/end-of-waste call up additional/less administrative requirements in terms of trans-frontier shipment?	Transfrontier shipment of recycled aggregate is possible but not likely to be widespread. We are seeking consistency between Ireland and the UK on EoW for recycled aggregate, which there currently is not.

[1] When an activity 'preparing for reuse', level 2 in the waste treatment hierarchy, is completed a material may achieve the end-of-waste status and be reused.

5.4	Should the evaluation on end-of-waste or by-product be covered by national or regional legislation? Do national or regional technical criteria / guidance exist to evaluate the case and what is the legal status of these criteria? Please elaborate.	National or international. Regional would skew the market and introduce competitive advantages and disadvantages. Ireland is a small country. There is national criteria established by the National Roads Authority for use of recycled aggregate in road projects. However, the aggregate must be EoW before it can be used in those projects and we currently have no EoW criteria, so it is not used in that way.
5.6	What kind of a decision is made on end-of waste or by-product status?	☐ A single case decision on one specific batch from a specific generator to a specific use ☐ A decision on multiple batches from the same generator to the same use? ☐ A decision applicable on similar batches from comparable generators ☒ More general or other? Please elaborate : None currently for recycled aggregate, but some 'case by case' applications are under consideration or in a process of negotiation with the EPA.
5.7	Which enforcement strategies are applied or applicable on these kinds of cases? Are they riskbased?	EPA enforcement is risk-based, but the EPA does not have jurisdiction to enforce unauthorised activities. The Agency is limited to enforcing licensed activities. The local authorities are tasked with enforcement of permitted sites and unauthorised waste activities. Local authority enforcement is inconsistent with EPA enforcement and is often inconsistent from one county to another. National strategies for enforcement are agreed between the EPA and local authorities on an annual basis, as far as we are aware.
5.8	Are applied enforcement strategies and sanctions proportionate?	Enforcement sanctions are inconsistent as we have a two-tier enforcement system. The EPA enforcement is often disproportionately severe and the local authority enforcement is inconsistent. Some local authorities are severe and some are extremely light touch. We see a lack of enforcement of criminal gangs illegally burning and burying waste, whilst our members are often sanctioned for very minor issues. For these reasons, we are very dissatisfied with the enforcement strategy/regime in Ireland.
5.9	What kind of sanctions or fines are applicable and are they applied in reality?	The legislation dictates that illegal dumping of wastes should attract a criminal prosecution, clean-up costs and the imposition of the landfill levy (€75 per tonne). However, many local authorities do not engage in such enforcement as they are not adequately resourced to tackle criminal gangs. The IWMA has called for the establishment of an environmental crime unit in Ireland that is resourced and trained to deal with such criminal gangs.

5.10	How do competent authorities on waste/environment and on products/chemicals collaborate on the administrative procedure?	We are not aware of any such collaboration.
5.11	How do competent authorities on waste/environment and on products/chemicals collaborate on enforcement activities applied on the case?	We are not aware of any such collaboration.
5.12	How is information of the case been made publicly available, if at all? Is this information easy to consult by stakeholders, operators, foreign competent authorities and the general public?	We are not aware of any such information.
5.13	Does the disclosure of case decisions include sufficient motivation of the policy decisions?	We are unaware of any case decisions on EoW for recycled aggregate in Ireland.
5.14	If no national or regional technical criteria for end-of-waste or by-product status exist, what are the reasons for not establishing such criteria: no interest/request by industry? Application of the precautionary principle has led to the conclusion that the waste/material shall remain in the waste regime?	The EPA application of the Precautionary Principle is the main stumbling block. There are ongoing talks between industry and the EPA for several years on the subject of recycled aggregate and some applications have been made but not yet determined.
5.15	If recognizing end-of-waste or by-product status has been refused in single case decisions, what were the reasons and justifications supporting such a negative decision by a competent authority?	No refusals yet on EoW for recycled aggregate. There have been refusals by the EPA in relation to by-product declarations for uncontaminated soil and stone originating at greenfield site excavations and used for land improvement or for backfilling quarries. The refusals have generally been based on EPA guidance that has now been withdrawn. Some refusals relate to the EPA interpretation on the validity of

		planning decisions, which we consider to be ultra vires and the EPA has now stated that it will refrain from reviewing planning decisions going forward. The Agency has now recognised that it has no role in planning decisions.
5.16	How is the application of the precautionary principle and the support to circular economy taken up by the approaches analysed in the specific case?	The EPA has taken the view that the run-off from recycled aggregate is likely to exceed the inert waste WAC and has the potential to cause environmental pollution. Whilst we respect that opinion and do not challenge it, there is an inconsistency between Ireland and the UK on this matter and that has the potential to create unfair competition between our members in the Republic of Ireland and competitors in Northern Ireland.
5.17	Which activities at national and European level have been taken by the industry up to now, to achieve end-of-waste / by-product status for the described case? Please specify.	The IWMA has engaged an expert to prepare an application to the EPA on EoW for recycled aggregate. However, the application has not yet been submitted as discussions with the EPA and the testing of leachates are ongoing.
5.18	Other remarks?	None

Annex

Glossary of used terminology:

By-product: A substance or object resulting from a production process the primary aim of which is not the production of that substance or object, which is not to be considered a waste according to appropriate measures taken by the Member States, if meeting the following conditions[2]:

(a) further use of the substance or object is certain;
(b) the substance or object can be used directly without any further processing other than normal industrial practice;
(c) the substance or object is produced as an integral part of a production process; and
(d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

Circular economy: An emerging economic model that covers both techniques and business models to keep materials and resources as long as possible, and ideally, forever in a closed cycle of extended use, reuse and recycling. Critical components of the circular economy are industrial symbiosis, share economy, 'product as a service', a close relation between producer and consumer, proximity economics, reuse and recycling, urban mining, detoxification of material cycles and sustainable consumption and production. Opposite to the circular economy are programmed obsolescence, downcycling, legacy substances or loss of added value[3].

Eco-innovation: Reducing our environmental impact and making better use of resources, by developing products, techniques, services and processes that reduce CO_2 emissions, use resources efficiently, promote recycling and so on.[4]

End-of-waste: waste which has undergone a recycling or other recovery operation and is considered, according to appropriate measures taken by the Member States, to have ceased to be waste, complying with the following conditions[5]:

(a) the substance or object is to be used for specific purposes;
(b) a market or demand exists for such a substance or object;
(c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and
(d) the use of the substance or object will not lead to overall adverse environmental or human health impacts.

Liberal circular economy approach: This aims to increase the circular economy by enhancing the uptake of wastes, by-products or end-of-wastes into new use cycles by maximally removing market distortions hindering this uptake.[6]

[2] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives
[3] ARCADIS definition. There is no definition included in EU legal or policy documents
[4] http://ec.europa.eu/environment/eco-innovation/discover/programme/index_en.htm
[5] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives
[6] ARCADIS definition

Mayer Parry case: Case C-444/00. The dispute between Mayer Parry and the Environment Agency concerned the scope of the definition of "waste" in the Waste Management Regulations 1994 (EEC Waste Framework Directive (Directive 75/442 of 15th July 1975)). The Court analysed the statutory regime, European regulations as well as European court decisions related to the term "waste". It concluded that one form of "recovery operation" in the meaning of the relevant European Directive was "recycling or reclamation of metals and metal compounds". Accordingly, so long as the materials continued to be subject to any process falling within that description they remained waste for the purpose of the definition. All operations of Mayer Parry (from sorting to fragmentizing) are recovery operations within the meaning of the Directive. Once the material was restored to a form which was suitable for sale as raw material to steelworks or other manufacturers, the task of recovery was complete, and the material ceased to be waste.

Relevance for plastic waste: the final application of recycled plastic waste determines whether treated plastics remain waste or cease to be waste and become a product or a raw material. The number of intermediary processing steps needed, like sorting, washing, scrapping, grinding, always change the form of the material which however remains waste even if sold to third parties for further processing. The output of an intermediary process can always be suitable for sale and serve as input for other manufacturers, without the material losing its waste status. Hence, the context specificity of the recycling process will be the determining factor to decide when the task of recycling is complete and the material can be considered end of waste.

Precautionary principle: Used by policy makers to justify discretionary decisions in situations where there is the possibility of harm from making a certain decision (e.g. taking a particular course of action) when extensive scientific knowledge on the matter is lacking. The principle implies that there is a social responsibility to protect the public from exposure to harm, when scientific investigation has found a plausible risk. To be applied where preliminary-objective-scientific-evaluation indicates that there are reasonable grounds for concern that potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection.[7]

Reuse: any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.[8]

Secondary raw material: a waste or non waste used as a raw material in production processes which is generated through recycling or processing of wastes.

Urban mining: using the build up environment and the urban processes as a mine for rare or valuable material resources through extended and specialized recycling activities.

[7] https://en.wikipedia.org/wiki/Precautionary_principle and Communication from the Commission on the precautionary principle Brussels, 2.2.2000 COM(2000) 1 final

[8] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives