**Inspector’s Report – Recommended National By-Product Criteria.**

<table>
<thead>
<tr>
<th>To:</th>
<th>Board</th>
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<tbody>
<tr>
<td>From:</td>
<td>Caroline Murphy and Róisín Griffin, Inspectors.</td>
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<tr>
<td>Approved for the Board By:</td>
<td>Warren Phelan, Programme Manager</td>
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<tr>
<td>CC:</td>
<td>Caitríona Collins, Senior Inspector</td>
</tr>
<tr>
<td>Date:</td>
<td>25th April 2023</td>
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<tr>
<td>File Reference:</td>
<td>BP-N001/2023</td>
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RE: Recommended National By-Product Criteria establishing detailed criteria on the application of the conditions of Regulation 27(1)(a)-(d) when making the decision that site-won asphalt can be regarded as a by-product under Regulation 27 of the European Union (Waste Directive) Regulations 2011-2020.

Supporting Documents:
- Recommended National By-Product Criteria establishing detailed criteria on the application of the conditions of Regulation 27(1)(a)-(d) when making the decision that site-won asphalt can be regarded as a by-product under Regulation 27 (hereafter referred to as the “National criteria” or “criteria”);
- 6 No. submissions on the draft National criteria.

**Executive Summary:**

National criteria are being recommended as an alternative mechanism, to the case-by-case by-product notification system, for stakeholders to attain by-product status for site-won asphalt in a more efficient manner.

The National criteria provide a mechanism via which site-won asphalt by-product from a pavement (road) development can be dispatched by a producer and/or a haulier to a Reclaimed Asphalt Pavement (RAP) plant for acceptance as feed stock to provide for their production of an intermediate product, reclaimed asphalt, and for that intermediate product to be used in the production of final products ready for the market, as bituminous mixtures.

This report provides an overview of:
- the content of the National Criteria document (Section 4);
- a description of the by-product material, the processes involved, the role of the producer, the role of the end user, registration requirements, quality control measures, compliance, and legislative controls inclusive of offences (Section 5);
- the submissions received from our stakeholders and how they were addressed (Section 6); and
- a description of how the requirements of Regulation 27 have been satisfied (Section 7).

**KEY ISSUES:**

1. The use of the term *road planings* (milled material) limited the amount of material that could avail of the criteria:
   - The criteria no longer uses the term ‘road planings’ and alternatively uses the term ‘site-won asphalt’, which is used by industry and more representative of current practice. The term ‘site-won asphalt’ provides for milled road planings and asphalt in slab form, to be considered as by-product.

2. The meaning of the term *RAP plant* (i) excluded mobile RAP plants being piloted by the local authority to produce bituminous mixtures that meet Irish standards for direct supply to road projects, and (ii) was unclear in whether satellite storage of feedstocks was provided for within its meaning:
   - The criteria’s interpretation of the term ‘RAP plant’ now provides for mobile RAP plant producing bituminous mixtures which meet Irish standards and satellite storage of site-won asphalt where those storage locations are associated with a RAP plant and come under the control of a RAP plant’s accredited Management System.

3. The draft criteria providing for bituminous mixtures being made to Irish standards (I.S. EN 13108-31), when originally it was set out that products would only be made to harmonised standards.
   - The National Standards Authority confirmed the Irish standard I.S. EN 13108-31:2019 is the adopted Irish version of the European document EN 13108-31:2019 which was published on 14th October 2019. This Irish Standard is for use in Ireland.
   - The criteria provide for the use of by-product in the production of bituminous mixtures which meet Irish Standard I.S. EN 13108-31. The criteria have been future proofed with built in controls for products made to Irish standards which reflect the controls for products made to harmonised standards e.g. the requirement for a RAP plant producing bituminous mixtures to Irish Standard I.S. EN 13108-31 to have been issued with a certificate under a Production Certification Scheme by a notified body. This scheme will need to be set up by a notified body to facilitate industry’s needs.

4. The criteria do not provide for end uses other than use at a RAP plant.
   - The criteria only provide for the certain and lawful use of the by-product as a feedstock for a RAP plant in the production of bituminous mixtures which meet the required product standard. This end use reflects one of the highest volume end use types notified by our stakeholders and this has informed the scope of the National criteria.

5. The criteria did not adequately reflect producer requirements in accordance with the REACH Regulations.
   - The Health and Safety Authority assisted the Agency in the addition of a requirement in the Statement of Conformity which provides the producer with the opportunity to confirm compliance with the REACH Regulations.

The overall recommendation of this Report is for the Board to approve the Recommended National By-Product Criteria.

**Decision:**
The Board is asked to **APPROVE** the Recommended National By-Product Criteria established in accordance with Regulation 27(7) of the European Union (Waste Directive) Regulations 2011 – 2020, for site-won asphalt by-product.
1. BACKGROUND

The notification of road planings as a by-product of road development has increased over the years and currently road planings is one of the top two materials being notified to the Agency\(^1\).

To-date case-by-case notifications, which fit the description of the source to use pathway in this report, have been successfully determined as by-product. These successful determinations have informed the recommended National By-Product Criteria proposed in this report.

Notifications to-date have been made on a case-by-case basis; whereas, this report proposes the application of National criteria rather than the submission of case-by-case notifications to the Agency.

The application of National criteria will provide a known set of requirements inclusive of quality criteria for the by-product material and service our stakeholders increasing demand for an efficient system. The ability of our stakeholders to meet the National criteria would remove the need for them to submit case-by-case notifications to the Agency and to await the Agency’s determination on these notifications. This change will ultimately decrease the number of notifications received into the Agency’s case-by-case by-product notification system. Importantly, it will also bring certainty to our stakeholders, in support of the circular economy.

2. INTRODUCTION


Regulation 27(7) states that "Where criteria have not been set at Union level, the Agency may establish detailed criteria on the application of the conditions laid down in paragraph 1 to specific substances or objects. The Agency shall notify the Commission of those detailed criteria in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council where so required by that Directive."

To-date case-by-case by-product notifications have been submitted for road planings\(^2\) by-product material; however, this report widens the scope to site-won asphalt\(^3\), described further in Section 3 below.

With regard to the scope of Regulation 27(7) set out above:

- Criteria for site-won asphalt have not been set at Union level,
- This Inspector’s Report seeks to establish detailed recommended National By-Product Criteria on the application of the conditions of Regulation 27(1) of the Regulations, and

\(^1\) The other material is soil and stone sourced from greenfield sites.

\(^2\) Road planings are planings milled from the surface of a road using a milling machine e.g. a cold milling machine.

\(^3\) Section 2 National criteria: 'site-won asphalt' is the material to be recycled, in the form of milled asphalt road layers or as slabs ripped up from asphalt pavements. This material can also be referred to in the industry as RAP material. Note: 'asphalt' is the homogeneous mixture typically of coarse and fine aggregates, filler aggregate and bituminous binder which is used in the construction of a pavement.
These criteria will be applied to **site-won asphalt**, the by-product of **pavement development**, intended for use in **Reclaimed Asphalt Pavement (RAP) plants** in the production of **reclaimed asphalt** and subsequently bituminous mixtures.

This report seeks approval from the Board on the **National criteria** established in accordance with Regulation 27(7) of the European Union (Waste Directive) Regulations 2011 – 2020, for site-won asphalt.

### 3. IMPORTANT NOTES ON THE SCOPE OF THIS REPORT

These criteria are aimed to facilitate the needs of a **specific group** of notifiers that are **currently using** the Agency’s case-by-case by-product notification system to notify road planings as a by-product for use in **RAP plants**. ‘RAP plants’ are **also referred to** as ‘end users’ throughout this report.

This type of notified material, production process and end use have been selected for National criteria. They form one of the **top two most frequently received notification types** in the Agency’s **case-by-case** notification system and have been **successful** in achieving by-product determinations.

These National criteria are **not proposed** to cover **all end use scenarios** for road planings generated from a pavement development e.g. a road development. These National criteria **only address** the end use being a RAP plant as **there is evidence** in the current by-product notification system that this is one of the highest-ranking end uses for road planings currently **notified** to the Agency.

By-product road planings, notified to the Agency using the case-by-case notification system, are **already in use** at RAP plants. The establishment of National criteria just **changes the mechanism** by which the road planings attain by-product status i.e. using the National criteria rather than the case-by-case notification system.

Through site visits, industry engagements and a review of consultation responses the Agency recognises that the by-product material notified for use at RAP plants is currently received in milled and slab form. The term ‘site-won asphalt’ better reflects the description of this material as the term ‘road planings’ does not provide for material that is not in milled form.

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4 Section 2 National criteria: ‘pavement’ is a structure, composed of one or more courses, to assist the passage of traffic over terrain e.g. a road.

5 Section 2 National criteria: ‘Reclaimed Asphalt Pavement (RAP) plant’ also referred to as an enabled RAP plant/RAP enabled plant, is a plant where site-won asphalt can be processed into the intermediary material reclaimed asphalt and where this reclaimed asphalt is in turn used to produce bituminous mixtures. This document will refer to Reclaimed Asphalt Pavement Plant as RAP plant.

This description includes: (i) cold, warm and/or hot mix asphalt plants, (ii) mobile or stationary RAP plants, (iii) RAP plants which produce bituminous mixtures in accordance with the harmonised and/or Irish Standard series I.S. EN 13108, and (iv) Any site-won asphalt storage carried on in satellite by-product storage locations connected or associated with a RAP plant and come under the control of the RAP plant’s accredited Management System.

6 Section 2 National criteria: *reclaimed asphalt* (RA) is the processed site-won asphalt, suitable and ready to be used as constituent material for bituminous mixtures, after being tested, assessed and classified according to: - Irish Standard I.S. EN 13108-Part 8 Reclaimed Asphalt when being used as a feedstock for bituminous mixtures required to meet a harmonised standard, or - The relevant requirements of Irish Standard I.S. EN 13108-Part 8 when being used as a feedstock for bituminous mixtures required to meet an Irish Standard e.g. Section 4.4 Reclaimed Asphalt of I.S. EN 13108-31, and - any tighter customer requirements.

7 Section 2 National criteria: ‘bituminous mixtures’ are products produced by a RAP plant which have used reclaimed asphalt as a constituent of those products and where the bituminous mixtures produced meet the requirements of the relevant part of the I.S. EN 13108 series of standards for bituminous mixtures.

Note: the relevant standard can be either a harmonised standard and/or an Irish standard that has not been harmonised.
i.e. slabs. The Agency has therefore widened the scope of these criteria from road planings to site-won asphalt which provides for pavement material in milled and slab form to be accepted by a RAP plant as a by-product.

Table 1 below gives an overview of the scope of the National criteria.

**Table 1: Scope of the National Criteria.**

<table>
<thead>
<tr>
<th>Production process</th>
<th>Notified By-Product Material</th>
<th>End Use of the by-product</th>
<th>Intermediate product created at the RAP plant using by-product</th>
<th>Final product output from the RAP plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement development</td>
<td>Site-won asphalt by-product.</td>
<td>Reclaimed Asphalt Pavement (RAP) plant.</td>
<td>Reclaimed Asphalt, that meets the required standard(^8).</td>
<td>Bituminous mixtures, that meet the required standard.</td>
</tr>
</tbody>
</table>

Table 1 indicates that *site-won asphalt* by-product will be generated from a *pavement development* and then supplied to a *RAP plant* for their use in the production of *reclaimed asphalt* (intermediate product) which will subsequently be used to manufacture various *bituminous mixtures* as the RAP plants product(s) for use or placement on the market (final products).

The intermediate and final products are manufactured at the RAP plant in accordance with Irish Standards (I.S.) that have been adopted from European Standards (EN). Some of these adopted standards have been harmonised and this is discussed further in Section 5.3.

Table 2 below provides a description of each Irish/harmonised Standard and its applicability to (i) the final product, (ii) the intermediate product or the (iii) the control of the manufacturing process.

**Table 2: A description of the standards referenced in this report.**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Final Product Standards</strong></td>
<td></td>
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</tr>
<tr>
<td>13108-01</td>
<td>Part 1: Asphalt Concrete</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-02</td>
<td>Part 2: Asphalt Concrete for Very Thin Layers (BBTM).</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-03</td>
<td>Part 3: Soft Asphalt.</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-04</td>
<td>Part 4: Hot Rolled Asphalt.</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-05</td>
<td>Part 5: Stone Mastic Asphalt.</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-06</td>
<td>Part 6: Mastic Asphalt.</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-07</td>
<td>Part 7: Porous Asphalt.</td>
<td>Harmonised standard</td>
</tr>
<tr>
<td>13108-31</td>
<td>Part 31: Asphalt Concrete with Bituminous Emulsion.</td>
<td>Irish Standard  (^{Note 1})</td>
</tr>
</tbody>
</table>

\(^8\) Reclaimed asphalt that meets the requirements of the Irish I.S. EN 13108 Part 08 Reclaimed Asphalt is used to make bituminous mixtures that meet the requirements of the *harmonised* standards, I.S. EN 13108 *Parts 1-7*.

Alternatively, Bituminous mixtures made in accordance with *Irish Standard* I.S. EN 13108 Part 31 requires "*The properties of reclaimed asphalt declared in accordance with EN 13108-08 shall conform to requirements that may be selected appropriate to the intended use ... When defined in documents relating to the application of the product, the amount of reclaimed asphalt, the mix group and/or the courses from which the reclaimed asphalt has been or will be derived shall be declared in the Product Type Assessment report*".
Note 1: Irish Standard which has been adopted from a European Standard.

It should be noted that the type of material previously determined by the Agency to be a by-product was road planings which was generated from a pavement development and used at a RAP plant in the production of:

- reclaimed asphalt in accordance with I.S. EN 13108-8; and
- subsequently bituminous mixtures in accordance with I.S. EN 13108 Parts 1-7 only.

The above processes are associated with warm/hot mix processing (processing using various ranges of temperature >100°C) and the final products were made in accordance with the harmonised standards in Table 2 above. Because these products were made using harmonised standards this triggered the requirement for these RAP plants to attain Certification of Factory Production Control and Product Certification by notified bodies in accordance with the Construction Product Regulations. This provided the Agency with the required controls to demonstrate that the requirements of Regulation 27(1)(d) were satisfied.

An additional final product type has been added to the list of products that can be manufactured using these National criteria, namely asphalt concrete with bituminous emulsion in accordance with I.S. EN 13108-31. This product type is associated with cold mix processing (processing without the need for high temperatures) and is made in accordance with an Irish Standard which has been adopted from a European Standard. This standard is not harmonised and certification in accordance with the Construction Product Regulations is not required.

Discussions with the local authority regarding the trials they have been working on highlighted the need for the local authority to be able to utilise the site-won asphalt, being yielded as a by-product from pavement developments, in mobile RAP plants which utilise cold mix processing to produce final products in accordance with I.S. EN 13108-31. To align with the certification requirements for products manufactured to a harmonised standard, the National criteria require this product made to an Irish Standard, to be made at a RAP plant which has achieved Product Certification by a notified body as part of a Product Certification Scheme (Reference Section 5.3).

Flowcharts showing an overview of the processes undertaken to develop the National criteria are set out in Appendix 1, Figures 1 and 2.

4. **Overview of the National By-Product Criteria**

An overview of the National criteria document attached to this report is described in Table 3.

*Table 3: Overview of the National Criteria No. BP-N001/2023.*

<table>
<thead>
<tr>
<th>Recommended National By-Product Criteria BP-N001/2023</th>
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<tbody>
<tr>
<td><strong>Section 1 – Subject Matter</strong></td>
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</table>
Recommended National By-Product Criteria BP-N001/2023

This section provides a description of the subject matter of the detailed criteria relating to site-won asphalt from a pavement development destined for use as a raw material in a RAP plant.

**Section 2 – Definitions**

This section lists definitions to describe key terms used in the National criteria document.

**Section 3 – Criteria for site-won asphalt by-product.**

- This section lists the required criteria that needs to be fulfilled in order to regard site-won asphalt as a by-product and not a waste.
- This section makes a cross-reference to Annex I which sets out the detailed criteria applicable to each stage in the process and the person with responsibility for each criterion.

**Section 4 – End User’s Declaration**

This section describes:
- The requirements that relate to the use of an End User’s Declaration.
- This section makes a cross-reference to Annex II which sets out the End User’s Declaration form.

**Section 5 – Statement of Conformity**

This section describes:
- The requirements that relate to the use of a Statement of Conformity.
- This section makes a cross-reference to Annex III which sets out the Statement of Conformity form.

**Section 6 – Management System**

This section describes the management systems that are required to be established and maintained by the producer at the production process/pavement development and by the end user at the end use/ RAP plant.

Note: Section 6 of the criteria requires the end user’s management system to be certified *only* i.e. the producer’s management system is *not required* to be certified.

**Section 7 – Registration**

This section describes the requirement for *the producer* of site-won asphalt to register on the Agency’s public register, or as otherwise prescribed by the Agency, *prior to dispatch* of any by-product from the production process. Registration will record various details inclusive of the quantity of by-product site-won asphalt produced. This will enable the collection of data which will support the National circular economy and material statistics reporting in relation to by-products.

**Section 8 - Compliance**

This section describes how the producer, holder or end user shall comply with any request made by a competent authority and/or authorised person in relation to the provision of evidence of compliance with these criteria or any requirements associated with these criteria e.g. product, or health and safety requirements. This section confirms the supply of false or misleading information is an offence.

**Section 9 – Entry into effect**
### Recommended National By-Product Criteria BP-N001/2023

This section states that the National criteria shall be available for use immediately following publication on the Agency’s website.

### Annex I – Criteria for the site-won asphalt by-product.

This Annex describes the detailed criteria and associated self-monitoring requirements that apply to each stage of the process.

### Annex II – End User’s Declaration

- This Annex provides an End User’s Declaration form which the *end user* must complete and sign in order to approve a producer as an approved supplier of site-won asphalt by-product to their RAP plant.
- A copy of this End User’s Declaration will be provided by the end user to the producer. The producer will in turn attach a copy of this declaration to their Statement of Conformity. A *copy* of the original signed Statement will be transmitted with every consignment of by-product dispatched from the production process/pavement development to the end use/RAP plant as evidence that the producer is an approved supplier.

### Annex III – Statement of Conformity

- This Annex provides a Statement of Conformity form which the *producer* of the by-product must complete and sign for by-product material generated from a production process.
- A copy of this Statement of Conformity will be transmitted with every consignment of by-product dispatched from the pavement development to the RAP plant as evidence that the by-product material meets the requirements of the National criteria.

### Annex IV – Non-Conformance Report (NCR)

- This Annex provides a Non-Conformance Report form which a producer, end user or regulatory/competent body can complete when material is noted to not conform with the requirements of the National criteria.

A detailed description of each component of the National criteria is set out in Section 5 of this report.

### 5. By-Product Material and Process Overview

Within the scope of these National criteria the *production process* that generates the by-product is pavement improvement works. The *primary product* of these improvement works is the production of an improved pavement. The *production residue* that will be examined against these National criteria is site-won asphalt. These National criteria prevent site-won asphalt generated from a pavement development from becoming a waste if they can meet these National criteria and be regarded as a *by-product*.

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9 A document can be transmitted in hard copy or electronic form.
10 Section 2 of the National criteria: ‘production process’ means a process which deliberately produces one or more primary products e.g. a road maintenance process which produces an upgraded/maintained road.
11 Section 2 of the National criteria: ‘production residue’ means a material that is not deliberately produced in a production process but may or may not be a waste e.g. site-won asphalt generated from road upgrading/maintenance process.
12 Section 2 of the National criteria: ‘by-product’ means a production residue that fulfils the conditions of Regulation 27(1)(a) to (d) of the European Union (Waste Directive) Regulations 2011-2020.
The production process is initiated at a pavement development by the producer who proposes to generate an estimated quantity of site-won asphalt by-product from the development.

5.1 The role of the producer at the production process.

The producer’s management system:

Prior to the producer’s analysis of whether the pavement development can yield suitable by-product material they first must satisfy the requirements of Section 6 Management System of the National criteria. Section 6 provides the baseline management system requirements for the producer to have in place at the pavement development. These baseline requirements assist in ensuring the consistent production of a by-product material that meets the end user’s requirements.

The Management System requirements include:

- The producer shall establish, maintain, and implement a management system suitable to demonstrate compliance with the criteria referred to in Section 3 of the National criteria.
- The management system shall include a set of documented procedures concerning each of the following aspects:
  1. Assessment of the production process for by-product potential.
  2. Approved supplier status and the End User’s Declaration.
  3. Non-Conformance Reports.
  4. Monitoring the quality of site-won asphalt.
  5. Completion and sign-off of the Statement of Conformity.
  6. Record maintenance.
  7. By-Product traceability of consignments dispatched to the end user.
  8. Review and improvement of the management system.
  9. Training of staff and qualified staff.
  10. Registration requirements.

Once the producer’s management system has satisfied the requirements of Section 6 of the criteria the producer will then be in a position to use the National criteria.

Section 6 requires that “The end user shall ensure the approved supplier of by-product implements a management system which complies with the requirements of this Section.” The end user will assess the producer’s management system prior to approving the producer as an approved supplier of by-product material to their RAP plant (this is discussed in greater detail in Section 5.2 below).

The producer’s role in accordance with the National criteria:

The next step for the producer is to determine if the pavement development can yield site-won asphalt material that meets the required by-product criteria.

The National Criteria lists the required criteria that the producer must adhere to and Parts 1 – 3 of Annex I sets out detailed requirements under the following headings:

- Part 1: The production process (pavement development).
- Part 2: Controlled dispatch of the site-won asphalt by-product.
  - This section requires the end user to approve the producer as an approved supplier as documented via a signed End User’s Declaration.

13 Section 2 National criteria: ‘producer’ means the holder who (i) is responsible for the generation/removal of the site-won asphalt from the pavement development and (ii) transfers the site-won asphalt to another holder for the first time as a by-product material e.g. main contractor or a sub-contractor at a road development.
- This section also requires the producer to *register* the by-product on the Agency’s public register prior to dispatch from the production process.

- **Part 3: Quality of site-won asphalt by-product from the production process.**

- This section requires the producer to demonstrate that their by-product meets the requirements of the National criteria via a signed Statement of Conformity.

- This section also requires the producer to raise a Non-Conformance Report for any by-product found to not meet the requirements of the National criteria.

**Section 5 Statement of Conformity** describes the requirements relating to *the producer* and *their completion and use* of a Statement of Conformity as a means of *providing evidence* that the by-product they generate and dispatch to the end user *meets* the requirements of the National criteria.

**Section 5** refers to **Annex III** which sets out the required Statement of Conformity form that must be completed by *the producer*. The form requires the producer to record and confirm the following:

<table>
<thead>
<tr>
<th></th>
<th>Details regarding the production process, the producer, and qualified staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The estimated quantity of by-product to be generated from the production process.</td>
</tr>
<tr>
<td>3</td>
<td>Confirmation that the by-product has been verified as not containing coal tar or tarred products.</td>
</tr>
<tr>
<td>4</td>
<td>Confirmation that the End User’s Declaration has been attached as evidence the producer is an approved supplier of by-product from the production process to the RAP plant.</td>
</tr>
<tr>
<td>5</td>
<td>Confirmation that the by-product has been generated as an integral part of the production process and is suitable for use without further processing other than normal industrial practice.</td>
</tr>
<tr>
<td>6</td>
<td>Confirmation that the by-product meets the requirements of Section 3 of the National criteria.</td>
</tr>
</tbody>
</table>
| 7 | Confirmation that the relevant details, as required by the Agency, have been recorded on the Agency’s public by-product register. 
  The data the producer is required to input into the register will facilitate reporting and compliance investigations. 
  Sections 5.5 and 5.6 below expands on registration and compliance. |
| 8 | Confirmation that the original signed copy of the statement will be held as part of the producer’s records and a copy will be transmitted with each consignment of by-product dispatched to the RAP plant. |
| 9 | Data entry requirement for the consignment docket number associated with each consignment. |

**5.2 Quality control measures used by the producer and the end user.**

Section 5.1 of this report makes reference to the following mechanisms (i) Supplier approval, (ii) End User’s Declaration and (iii) Non-Conformance Report. These mechanisms are discussed in greater detail below:

(i) **Supplier approval – attaining approved supplier status:**

**Section 4 End User’s Declaration** of the National criteria describes the requirements relating to the *end user* approving the *producer* as an *approved supplier* of by-product.

- Once the *producer* is satisfied that the production process will yield site-won asphalt by-product that *will meet* the requirements of the National criteria they must contact an end user (a RAP plant) to determine if they require this by-product material.
The RAP plant controls whether they wish to accept the by-product material that the producer is proposing to make available for their use as a raw material. The RAP plant assesses the pavement development, the site-won asphalt by-product proposed to be generated and the producer’s management system for suitability in supply of material that meets the National criteria and the RAP plant’s own specific raw material requirements.

Once the RAP plant has determined that their criteria have been satisfied, they complete and sign an End User’s Declaration and provide a copy of this to the producer. This serves as evidence that the producer has been approved by the end user as a supplier of site-won asphalt to their RAP plant (Reference National criteria Section 4, points 1, 2 and 3).

The RAP plant will only permit entry to by-product loads from producers that have evidence of their approved supplier status i.e. a signed copy of an End User’s Declaration specific to their RAP plant.

The RAP plant will control and monitor the incoming by-product material from the producer. Non-conforming loads of by-product material received at a RAP plant will activate their non-conformance procedure which will deal with the required rejection or quarantine of the consignment and the assessment of the producer’s approved supplier status.

If the end user is concerned about a trend of non-conformances being issued to an approved supplier or where corrective and/or preventative actions do not appear to be effective the end user may revoke the producer’s approved supplier status. This will prohibit the producer from dispatching further consignments to the plant. Where the producer wishes to re-establish their approved supplier status the above procedure will need to be repeated and a new End User’s Declaration, signed by the end user, would be required.

This system ensures that the RAP plant is responsible for the monitoring of the quality of incoming by-product material accepted into and used at their plant in accordance with the National criteria.

(ii) End User’s Declaration:

Section 4 of the National criteria refers to Annex II which sets out the required End User’s Declaration form that must be completed by the end user. The declaration form requires the end user to declare the following:

1. Details regarding the end user.
2. Details regarding the production process and producer.
3. Confirmation that the by-product will meet the requirements of the National criteria and the end user, if supplied to the quality level agreed with the producer.
4. Confirmation that the end user has approved the producer as an approved supplier.
5. Confirmation that the end user will only use the by-product to produce reclaimed asphalt and bituminous mixtures that meets the required standard.
6. Confirmation that the details entered on the declaration are correct regarding, planning status, any Air Pollution Act licence, certification of the management system and product certification.
7. Confirmation that any wish to cease acceptance of by-product temporarily or permanently from the producer will be communicated to the producer and recorded, where required, on the register on the Agency’s website.

Section 4 of the National criteria requires the end user to transmit a copy of the signed declaration to the producer as evidence that the RAP plant recognises the producer as an approved supplier of site-won asphalt by-product from a specific production process to their...
RAP plant. **Section 4** requires the **producer** to attach a **copy** of this declaration to the Statement of Conformity for the by-product material.

(iii) **Non-Conformance Report (NCR):**

The Non-Conformance Report form, set out in **Annex IV** of the National criteria\(^{14}\), can be issued for the detection of non-conforming by-product material by:

- A **producer** at the pavement development site prior to dispatch of the non-conforming material from the site; or
- An **end user** for non-conforming material received at the RAP plant as a by-product; or
- A relevant **regulatory/competent body** for non-conformances noted at either the pavement development, or during transit of a consignment between the source and end use locations, or at the RAP plant.

When non-conforming by-product is identified by either a producer, an end-user or a competent/regulated body, a Non-Conformance Report is created and issued. The non-conformance will be raised against the requirements of the National criteria. The Non-Conformance Report form requires the issuer to record:

1. An NCR number which can be traceable as part of the producer’s or end user’s management system.
2. The Issuer’s details and date issued.
3. The description of the non-conformance, with the National criteria, identified.
4. The initial instruction for the non-conforming consignment regarding segregation and quarantine of the consignment.
5. A list of the corrective and preventative actions taken.
6. The final decision made by the issuer on whether the consignment is a suitable **by-product** and whether the producer’s approved supplier status remains, is paused, or is revoked.
7. The issuer signs and dates the final decision, records the communication of their decision, and closes the NCR as complete with their signature and date.

The requirements listed in Annex I set out controls associated with Non-Conformance Reports as follows:

- **Part 2(d)** requires the **producer** to ensure the Non-Conformance Report is **completed** prior to dispatching by-product to the RAP plant.
- **Parts 3(b), 4(c), 4(f) and 4(g)** require the **end user** to assess any Non-Conformance Reports they issue as part of their assessment of the producer as an approved supplier.
- **Part 5(b)** states that the **end user** can only use by-product where the Non-Conformance Report has been **completed** and provides for the use of the by-product.

### 5.3 The role of the **end user** at the RAP plant.

The end user’s management system:

Prior to the end user acceptance of site-won asphalt by-product that meets the National criteria the end user must first satisfy the requirements of **Section 6** of the National criteria. **Section 6** provides the **baseline** management system requirements for the end user to have in place at the RAP plant. These baseline requirements assist in ensuring the consistent

\(^{14}\) Where the producer, end user or regulatory/competent authority utilises an alternative Non-conformance Report as part of their management system this alternative report can be used, provided the same information is recorded as set out in the Non-Conformance Report in Annex IV.
production of reclaimed asphalt (intermediate product) and bituminous mixtures (final products) that meet the required standard.

The Management System requirements include:

- The end user shall establish, maintain, and implement a management system suitable to demonstrate compliance with the criteria referred to in Section 3 of the National criteria.
- The management system shall include a set of documented procedures concerning each of the following aspects:
  
  1. Assessment of the production process, by-product, and producer for suitability as an approved supplier to the RAP plant.
  2. Approved supplier status and the End User’s Declaration.
  3. Completion and sign-off of the End User’s Declaration.
  4. Monitoring, pausing, revoking, and re-establishing approved supplier status.
  5. By-product acceptance controls.
  6. Monitoring the quality of site-won asphalt.
  7. Non-Conformance Reports.
  8. Quarantine, segregation, and control of non-conforming by-product.
  10. Monitoring of the quality of reclaimed asphalt and bituminous mixtures.
  11. Record maintenance, inclusive of records of the quantity of by-product accepted at the RAP plant.
  12. By-Product traceability within the RAP plant.
  13. Review and improvement of the management system.
  14. Training of staff and qualified staff.
  15. Registration requirements, where required.

Section 6 of the National criteria requires that “The end user’s management system shall be certified by a Management System Certification Body accredited by the Irish National Accreditation Board. This certification shall verify that the management system complies with the requirements of this Section. The verification shall be carried out every 3 years.”

Once the end user’s management system has been certified the end user will then be in a position to use the National criteria and accept site-won asphalt by-product from an approved supplier for use as a raw material at their RAP plant in the manufacture of reclaimed asphalt and bituminous mixtures.

The end user’s role in accordance with the National criteria – By-Product Acceptance:

Once the producer has completed Annex I Criteria (Parts 1-3), as described in Section 5.1, the next step is for the end user to accept this by-product material. Annex I, Part 4 sets out the criteria the end user must adhere to in the acceptance of site-won asphalt by-product at the RAP plant.

Once the site-won asphalt by-product has been accepted for use at the RAP plant it can then be made available for input in the manufacturing of reclaimed asphalt as described below.

The end user’s role in accordance with the National criteria – use of the by-product as a raw material in the production of reclaimed asphalt (intermediate product):

After the end user has accepted the site-won asphalt by-product material into the RAP plant it can then be used to produce an intermediary product, reclaimed asphalt. Reclaimed asphalt is subsequently used in the manufacture of the RAP plant’s final product(s).
Reclaimed asphalt is required to meet a certain standard and this standard is dependent on the final product being produced at the RAP plant. If the final product is a bituminous mixture manufactured to:

- a harmonised standard I.S. EN 13108 Parts 1 – 7, then the reclaimed asphalt is required to meet Irish Standard I.S. EN 13108-08 for reclaimed asphalt;
- the Irish Standard I.S. EN 13108-31, then the reclaimed asphalt is required to meet the reclaimed asphalt requirements of that standard i.e. “the properties of reclaimed asphalt declared in accordance with EN 13108-08 shall conform to requirements that may be selected appropriate to the intended use ... When defined in documents relating to the application of the product, the amount of reclaimed asphalt, the mix group and/or the courses from which the reclaimed asphalt has been or will be derived shall be declared in the Product Type Assessment report”.

Annex I, Part 5 sets out the criteria the end user must adhere to in the further use of the site-won asphalt by-product in the manufacture of reclaimed asphalt at the RAP plant.

The criteria set out in Annex I Part 5 limits the processing of the by-product to normal industrial practice as:

- This is a requirement of Regulation 27(1)(b) of the Regulations; and
- The European Commission’s Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste (July 2012) limits what processing is considered to be normal industrial practice to “modification of size or shape by mechanical treatment, does not prevent the production residue from being regarded as a by-product.”

Annex I, Part 5 limits the processing of the by-product to mechanical processing, which may be needed to modify the size/shape of the site-won asphalt by-product accepted as a raw material for the production of reclaimed asphalt.

RAP plants can agree with a producer, as part of the supplier approval process, their preferred form in which to receive by-product i.e. some plants may not wish to receive a high proportion of site-won asphalt in slab form versus planing form as slabs require additional mechanical treatment. Annex I, Part 1(c) also provides the producer with the ability to process the by-product using normal industrial practice as described above.

Annex I, Part 6 of the National criteria sets out the criteria the intermediary product reclaimed asphalt must meet prior to being used to make final products, namely bituminous mixtures.

The criteria set out in Annex I Part 6 ensures the reclaimed asphalt meets the relevant requirements of Irish Standard I.S. EN 13108-8 for reclaimed asphalt prior to being fed forward to make bituminous mixtures at the RAP plant.

The amount of reclaimed asphalt that can be used to make bituminous mixtures is limited by the harmonised standard for that bituminous mixture e.g. Section 4.2.2.3 of the harmonised standard I.S. EN 13108-1 Bituminous mixtures – Material specifications – Part 1: Asphalt Concrete states that “When using reclaimed asphalt from mixtures in which a modified bitumen and/or an additive has been used, ..., the amount of reclaimed asphalt for regulating courses, binder courses and base courses may be limited in documents related to the application of the product to a maximum of 20 % by mass of the total mixture.”

The RAP plant will be required to meet the requirements of the relevant standard for that bituminous mixture as a baseline requirement and more stringent requirements as may be agreed with the RAP plant’s customers.

Trials have been carried out this year with increased amounts of reclaimed asphalt being used to produce bituminous mixtures. These trials may inform future changes in the
standards that *set the limitation* on the percentage of reclaimed asphalt that can be used in bituminous mixtures. The National criteria require adherence to the relevant product standard only and *will allow for* these standards to be revised over the coming years i.e. the National criteria *do not limit* the amount of reclaimed asphalt used in a final product, the standard does.

The end user’s role in accordance with the National criteria – *use of the intermediate product to make the RAP plant’s final product(s):*

After the reclaimed asphalt has passed the above criteria, it can be used to make bituminous mixtures, the RAP plant’s final product(s) for use or placement on the market.

Bituminous mixtures are made in accordance with various standards depending on the type of product being manufactured. Standards can either be (i) harmonised with a European standard or (ii) an Irish Standard (adopted from a European Standard, but not harmonised). The Agency has previously made by-product determinations regarding single case notifications where the further use for the by-product has been the manufacture of bituminous mixtures which meet a *harmonised standard*; however, the Agency have *not* previously made a determination on by-product material where the further use is the manufacture of bituminous mixtures which meet an *Irish Standard*. Responses received as a result of the consultation process, discussed in Section 6 below, sought the further use of the bituminous mixtures *to be extended* beyond those that relate solely to harmonised standards and to include those products which *are compliant* with Irish Standards.

**Annex I, Part 7** of the National Criteria sets out the criteria the bituminous mixtures (final product(s)) must meet *prior to* being used or placed on the market. **Part 7(a)** describes what certifications *the plant* is required to have in place prior to the manufacture of final products and **Part 7(b)** describes the standard the manufactured *final products* is required to meet. Part 7 demonstrates that there are different requirements set out for products which are required to meet a harmonised standard versus those which are required to meet an Irish Standard.

**Harmonised Standards:**

A harmonised standard is a European standard developed by a recognised European Standards Organisation e.g. CEN. Notified bodies can use harmonised standards to demonstrate that products comply with relevant European Union legislation.


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15 CEN, the European Committee for Standardisation: [https://www.cencenelec.eu/about-cen/](https://www.cencenelec.eu/about-cen/)

16 "Notified bodies carry out the tasks pertaining to the conformity assessment procedures referred to in the applicable technical harmonisation legislation when a third party is required." Source: [https://www.nsai.ie/legal-metrology/enforcement-information/conformity-assessment/](https://www.nsai.ie/legal-metrology/enforcement-information/conformity-assessment/)

17 Source: [190627_Construction_standard_list_for_CPR_for_website.pdf](https://nsai.ie/assets/190627_Construction_standard_list_for_CPR_for_website.pdf) (nsai.ie)
and - 7 (Porous Asphalt), and the Irish Standards I.S. EN 13108-08 Reclaimed Asphalt, -20 Type Testing and -21 Factory Production Control\(^{18}\).

A notified body assesses RAP plants and provides them with the *certification* to produce bituminous mixtures in accordance with the *harmonised standard* I.S. EN 13108 Parts 1-7 in a plant that operates factory production control in accordance with the Irish standard I.S. EN 13108-21.

**Part 7(a)** of *Annex I* of the National criteria requires the end user to attain the required certifications *prior to* manufacturing final products to these standards. When these certifications have been attained **Part 7(b)** requires the final products *to meet* harmonised standards and the requirements of S.R. 28, where relevant, *prior to* the final products being used or placed on the market.

**Irish Standards:**

I.S. EN 13108-31 Asphalt Concrete with Bituminous Emulsion, is an Irish Standard which is not currently harmonised. This Irish Standard is *not covered* in the scope of the National Standards Authority of Ireland (NSAI) Standard Recommendation, S.R. 28.

The NSAI have confirmed that:

- I.S. EN 13108-31:2019 is *the adopted Irish version* of the European document EN 13108-31:2019;
- There is no National Annex\(^{19}\) for I.S. EN 13108-31;
- The standard once adopted as I.S. EN 13108-31 is the Irish Standard *for use* in Ireland.

Section 1.6 of Transport Infrastructure Ireland’s (TIIs) Publication Specification for Road Works Series 900 – Road Pavements – Bituminous Materials (CC-SPW-00900) (June 2017) states that “The products and processes contained in this series that are not covered by a harmonised technical specification shall undergo an assessment and approval process ... Each product or process shall have defined FPC [Factory Production Control] requirements ...” It is noted that this publication does not cover I.S. EN 13108-31 in its scope; however, it demonstrates the application of Factory Production Control to products that are made to *Irish Standards* which have not been harmonised.

**Part 7(a)** of *Annex I* of the National criteria requires the end user to attain the required certifications *prior to* manufacturing final products. This includes - *Product Certification* to be issued under a *Product Certification Scheme* by a relevant *notified body* to demonstrate that the end user is manufacturing bituminous mixtures using the Factory Production Control measures set out in I.S. EN 13108-21 and has the ability to produce final products to meet the requirements of I.S. EN 13108-31.

**Part 7(b)** requires the final products *to meet* the requirements of I.S. EN 13108-21 Factory Production Control and I.S. EN 13108-31, *prior to* the final products being used or placed on the market.

The Product Certification Scheme described above *has not yet* been established. This measure has been built into the National criteria as a means of *future proofing* to provide for this functionality. There is evidence that schemes like this have been established e.g. the NSAI have set up a Product Certification Scheme which provides for a Certificate of Conformity to I.S. EN 206-1 and Irish National Annex for Ready Mix Concrete. This future proofing of the National criteria was requested during the consultation process as the local

\(^{18}\) The scope of this guidance does not include Parts – 2 (Asphalt Concrete for very thin layers) or - 3 (Soft Asphalt).

\(^{19}\) National Annex documents can give guidance for the implementation of the adopted Irish version of a European standard, within the National context.
authority sector has been trialling the production of bituminous mixtures to meet the requirements of I.S. EN 13108-31 using a cold mix mobile RAP plant. The local authority sector would like to be in a position to utilise the site-won asphalt by-product generated by pavement development for this purpose.

The National criteria requires the local authority, or other bodies/organisations manufacturing I.S. EN 13108-31 material, to:

- Ensure all producer requirements are satisfied.
- Complete all requirements as an end user as described in this report inclusive of the establishment and maintenance of a certified management system and the approval of suppliers.
- The End User’s Declaration will require evidence of planning approval (Part 8 planning approval for local authorities) for the location of the RAP plant and evidence of an Air Pollution Act Licence only where required.
- Annex 1 Part 7(a) and (b) requirements to be satisfied as described above.

Unless a Product Certification Scheme is established, and the requirements of the National criteria can be satisfied the site-won asphalt cannot be used as a by-product in accordance with these National criteria.

5.4 Overview of the process Critical Control Points

Table 4 below summarises the critical control points throughout the process, these are the points in the process which controls can be applied to minimise the risk of a negative outcome for the final product. These controls are applied via the procedures required in Section 6 of the National criteria and are indicated on the flow chart in Appendix 1 of this report.

Table 4: Critical Control Points (CCPs).

<table>
<thead>
<tr>
<th>CCP No.</th>
<th>Description of the Critical Control Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>RAP plant approves the producer as an approved supplier via an End User’s Declaration.</td>
</tr>
<tr>
<td>2.</td>
<td>The producer completes a Statement of Conformity confirming that the by-product material meets the National Criteria. This Statement includes the End User Declaration.</td>
</tr>
<tr>
<td>3.</td>
<td>Only consignments that are accompanied by a Statement of Conformity and are registered on the Agency’s public register are permitted entry to a RAP plant.</td>
</tr>
<tr>
<td>4.</td>
<td>A RAP plant monitors incoming by-product and can revoke a producer’s approved supplier status based on the detection of non-conforming by-product.</td>
</tr>
<tr>
<td>5.</td>
<td>A RAP plant is certified by a notified body to produce bituminous products in accordance with Annex I Part 7(a).</td>
</tr>
<tr>
<td>6.</td>
<td>A RAP plant will only accept by-product that meets their requirements to ensure they can meet their final product requirements set out in Annex 1 Part 7(b).</td>
</tr>
</tbody>
</table>

5.5 Registration

Section 3(10) and Section 7 of the National criteria set out registration requirements for producers of site-won asphalt by-product.

Section 7 of the National criteria requires that:

“Prior to dispatch from a production process, a producer of site-won asphalt in accordance with these criteria shall register the material on the Agency’s public register, or as otherwise prescribed by the Agency. An individual registration shall be made for each batch of site-won asphalt produced from a specific production process which is destined for dispatch to one specific end user.”
The producer shall submit registration information in a form and format as may be prescribed by the Agency.”

The register will be publicly available on the Agency’s website. The relevant environmental enforcement authority shall receive an automatic alert (via the EPA register) when by-product site-won asphalt within their remit has been added to the register. Further details in relation to the register and its functionality are provided within the explanatory note.

Registration will require the entry of data which may include: (i) the producer’s name, (ii) the location of the production process, (iii) the estimated amount of by-product to be produced, (iv) the estimated start and finish dates of the production process, (v) the end user’s details, (vi) upload of the Statement of Conformity and End User’s Declaration and (vii) any removal of approved supplier status as a consequence of e.g. an action in a Non-Conforming Report. The data entered in the register will enable the collection of data which will support the National circular economy and material statistics reporting in relation to by-products.

5.6 Compliance

Section 3(11) and Section 8 of the National criteria set out compliance requirements for producers, holders and end users of site-won asphalt by-product, reclaimed asphalt (intermediate product) or bituminous mixtures (final product).

Section 8 of the National criteria require:

"The producer, holder or end user shall comply with any request made by a competent authority and/or authorised person in relation to the provision of evidence of compliance with these criteria or any requirements associated with these criteria e.g. product, or health and safety requirements.

Any person who gives either to an authorised person, a relevant local authority or the Agency, information which to that person’s knowledge is false or misleading in a material respect, shall be guilty of an offence.”

Regulatory oversight will be key in ensuring that the criteria are implemented correctly and to build confidence and trust in by-product material and its use in the production of bituminous mixtures. Accordingly, Section 8 (Compliance) of the National criteria is intended to support competent authorities in their enforcement, monitoring and surveillance activities relating to by-product material and its use. Appendix 1, Tables 6 and 7 set out the key records required and the other requirements to be considered e.g., requirements of notified bodies and competent authorities at each stage of the process.

5.7 Legislative controls – offences.

The Department of Environment, Climate and Communications are preparing Regulations in accordance with Part 3, Section 30 of the Circular Economy and Miscellaneous Provisions Act 2022 which provides powers to make regulations in respect of by-product processes.

Section 30 of the Act inserted Section 75A in the Waste Management Act 1996, as amended, which requires the Regulations made to provide for:

“A person who, in relation to any matter to which regulations under this section relates, makes a statement in writing which to his knowledge is false or misleading in a materials respect, shall be guilty of an offence.”

Part 3 Section 46(6)(c) of the European Communities (Waste Directive) Regulations 2011 state that "Any person who ... gives either to an authorised person, a relevant local authority or the Agency, information which is to his or her knowledge is false or misleading in a material respect, or ... fails to comply with any requirement of this Regulation or of an authorised

The National criteria reflects these requirements in Section 1: “Any person who gives either to an authorised person, a relevant local authority or the Agency, information which to that person’s knowledge is false or misleading in a material respect, shall be guilty of an offence.”

6. **Stakeholder Consultation**

6.1 Initial Stakeholder Consultation – Consultation Paper

The Agency consulted with stakeholders, listed in Appendix 2, on the proposal to create National criteria by issuing a *Consultation Paper* on the 30th of June 2022.

After the consultation paper was issued two separate meetings were requested by stakeholders and they took place on the 19th of July 2022 with:

- The Irish Asphalt Pavement Association (IAPA), Roadstone Ltd, Kilsaran International and SIAC Bituminous Products.
- The Climate Action Regional Office (CARO) at Cork County Council and the Department of Transport.

The Agency completed a site visit on the 13th September 2022 at a RAP plant which:

- manufactures reclaimed asphalt and bituminous mixtures to meet the requirements of I.S. EN 13108.
- has been issued with a Certificate of Conformity of the Factory Production Control for the production of bituminous mixtures in accordance with Annex ZA of the harmonised standards I.S. EN 13108 Parts 1, 2, 4, 5 and 7.

This site visit facilitated further discussions on the Consultation Paper.

Submissions on the consultation paper issued were received from:

<table>
<thead>
<tr>
<th>National Standards Authority of Ireland (NSAI)</th>
<th>Department of Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Safety Authority (HSA)</td>
<td>Irish Asphalt Pavement Association (IAPA)</td>
</tr>
<tr>
<td>Climate Action Regional Office (CARO) - Atlantic Seaboard South CARO;</td>
<td>Construction Industry Federation (CIF)</td>
</tr>
<tr>
<td>Monaghan County Council</td>
<td>County and City Management Association (CCMA)</td>
</tr>
<tr>
<td>Cork County Council</td>
<td>Mid-West National Roads Design Office</td>
</tr>
<tr>
<td>Longford County Council</td>
<td>COLAS</td>
</tr>
</tbody>
</table>

ISO 9001 Quality Management | NSAI
gov.ie - Department of Transport (www.gov.ie)
Home - Health and Safety Authority (hsa.ie)
https://asphaltireland.ie/
The 4 CAROs - CARO
Construction Industry Federation (cif.ie)
https://monaghan.ie/
https://www.limerick.ie/ga/council/department/mid-west-national-road-design-office
LongfordCoCo - LongfordCoCo
https://www.colas.ie/
The submissions received were assessed and this informed the *draft* National Criteria document.

**6.2 Further Stakeholder Consultation – Draft National Criteria**

The Agency consulted with stakeholders on the *draft* National criteria on the 14th February 2023 by issuing stakeholders with the *draft* National criteria and associated *draft* Explanatory Note.

The Agency carried out further site visits at RAP plants in February 2023 to further test the *draft* National criteria and to gather stakeholder feedback.

The Agency held two webinars on the 28th February 2023 in order to facilitate further explanation of the *draft* National criteria and provide a forum for feedback and questions, from the 110 attendees, to facilitate the submission of detailed submissions on the *draft* National criteria.

Six submissions, attached as supporting documents, were received on the *draft* National criteria and draft Explanatory Note. These submissions welcomed the new approach using the National criteria. The submissions also shared items for consideration, these items and how they were addressed are summarised in detail in Appendix 3 and the main topics are summarised below.

Table 5: Overview of the categories of submissions received on the *draft* National criteria and draft Explanatory Note.

<table>
<thead>
<tr>
<th>Submission</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Requirement of the formation of a National Group and rollout of training.</td>
<td>For consideration by the Circular Economy Programme once the European Commission have responded to the proposed criteria.</td>
</tr>
<tr>
<td>2. Clarification regarding the role of competent authorities using a flow chart.</td>
<td>A table has been added to Appendix 1, Table 7 which describes how notified bodies and competent authorities connect with each phase of the process. This table has been added to the Explanatory Note.</td>
</tr>
<tr>
<td>3. Changes requested to the sections relating to REACH requirements.</td>
<td>The changes requested by the HSA have been completed.</td>
</tr>
<tr>
<td>4. Record retention required &gt;1 year.</td>
<td>Record retention extended to 3 years, or any other period required by relevant Regulations.</td>
</tr>
<tr>
<td>5. Removal of the option to allow cold mix RAP plants that accept site-won asphalt to produce bituminous mixtures which meet the Irish Standard I.S. EN 13108-31 as they don't have the same requirements as mixtures which meet harmonised standards.</td>
<td>Irish Standards are subject to different requirements to mixtures that are made to harmonised standards that are required to meet the requirements of the Construction Products Regulations. The NSAI confirmed that Irish Standard I.S. EN 13108-31 is the Irish Standard <em>for use</em> in Ireland.</td>
</tr>
<tr>
<td>6. The requirements for cold mix RAP plants are a substantial barrier to the use of site-won asphalt by-product.</td>
<td>The requirements for warm/hot mix RAP plants were mirrored for cold mix plants to provide an equivalent level of control. These RAP plants all fall under the same definition ‘RAP plant’ and controls are consistent.</td>
</tr>
</tbody>
</table>

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32 Arkil Limited, Rathangan Co.Kildare; Breedon Group, Kinnegad, Co.Westmeath; SIAC Construction Limited, Clondalkin, Co. Dublin; Kilsaran, Ballinasconey, Co. Dublin.
The feedback from consultation and engagement regarding the draft National criteria and explanatory note informed the recommended National criteria and explanatory note.

7. **The By-Product Test**

Regulation 27(1) of the European Union (Waste Directive) Regulations 2011-2020, states that:

"the Agency shall take appropriate measures to ensure that a substance or object resulting from a production process the primary aim of which is not the production of that substance or object is considered not to be waste, but to be a by-product if the following conditions are met:

(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 in that 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."

The National criteria ensure compliance with Regulation 27(1)(a) – (d) as follows:

7.1 **Regulation 27(1)**

"the Agency shall take appropriate measures to ensure that a substance or object resulting from a production process the primary aim of which is not the production of that substance or object is considered not to be waste, but to be a by-product if the following conditions are met".

National criteria include:

- **Section 3(1)** requires the conditions of **Annex I Part 1** to be satisfied.

  **Annex I, Parts 1(a) and (b)** requires the producer to ensure the primary aim of the production process is not the production of site-won asphalt and that alternatively the site-won asphalt is the production residue from the production process which can be assessed for compliance with the National criteria.

- **Section 5** sets out the requirements regarding the completion of the Statement of Conformity.

  **Part 3(a)** of the Statement of Conformity in **Annex III** requires the producer to confirm the requirements of **Annex I Parts 1(a) and (b)** as described above.
7.2 Regulation 27(1)(a)
“further use of the substance or object is certain”.

National criteria include:

- **Section 3(2)** requires the conditions of Annex I Part 2 to be satisfied.
  
  Annex I, Part 2 sets out the requirements for an end user to approve the producer as an approved supplier of site-won asphalt by-product, from a specific production process, as a raw material for use in their RAP plant.

- **Section 4** sets out the requirements regarding the completion of the End User’s Declaration.
  
  The End User’s Declaration in Annex II requires the RAP plant to confirm they require the by-product from a producer’s production process prior to the end user signing the declaration and approving the producer as an approved supplier of site-won asphalt by-product.

7.3 Regulation 27(1)(b)
“the substance or object can be used directly **without any further processing other than normal industrial practice**”.

National criteria include:

- **Section 3(2)** requires the conditions of Annex I Part 2 to be satisfied.
  
  Annex I, Part 2 sets out the requirements for an end user to approve the producer as an approved supplier of site-won asphalt by-product.

- **Part 3(d)** of the Statement of Conformity in Annex III requires the producer to confirm that "The site-won asphalt by-product generated at the production process and consigned to an end user is suitable for direct use at the Reclaimed Asphalt Pavement plant without any further processing other than normal industrial practice.”

7.4 Regulation 27(1)(c)
“the substance or object is produced as an **integral part of a production process**”.

National criteria include:

- **Section 3(3)** requires the conditions of Annex I Part 3 to be satisfied.
  
  Annex I, Part 3(c) requires the producer to complete the Statement of Conformity form in Annex III.

  Part 2(e) of the Statement of Conformity in Annex III requires the producer to confirm that "The site-won asphalt by-product has resulted from pavement improvement works which are an integral part of the overall production process.”

7.5 Regulation 27(1)(d)
“**further use is lawful in that 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.**”

National criteria include:

- The RAP plant ensures that the site-won asphalt by-product they accept from the producer **meets their requirements** by approving the producer as an approved supplier and providing the producer with a signed End User’s Declaration as required by Section 4. This ensures
the RAP plant only receives site-won asphalt by-product which they can use as a raw material in the production of reclaimed asphalt which is required to meet the specifications in Irish Standard I.S. EN 13108-8, where relevant, for reclaimed asphalt. This reclaimed asphalt is then required to be used to make final products that meet the product standards set out in the harmonised standards I.S. EN 13108 Parts 1-7 or the Irish Standard I.S. EN 13108-31.

- **Section 4** of the National criteria sets out the requirements regarding the completion of the End User’s Declaration.
  - The End User’s Declaration in Annex II requires the RAP plant to confirm the details of the following which relate to the manufacturing of reclaimed asphalt and bituminous mixtures:
    - Planning approval/exemption reference number and expiry date.
    - Air Pollution Act Licence reference number and expiry date, where applicable.
    - Details of the certification of their management system by a notified body.
    - Details of the certification of their manufacturing controls in accordance with the Factory Production control requirements set out in the harmonised standard I.S. EN 13108-21, by a notified body.
    - Details of the plant’s product certification by a notified body.

### 8. **RECOMMENDATION**

I consider that the recommended National By-Product Criteria Reference Number BP-N001/2023 satisfies the requirements of Regulation 27 (By-Product) of the European Union (Waste Directive) Regulations 2011-2020, and I recommend that the Agency:

- Decides that site-won asphalt which is a production residue from a pavement development is a by-product in accordance with Regulation 27 when the requirements of recommended National By-Product Criteria Reference Number BP-N001/2023 have been satisfied.

I recommend that the recommended National criteria (Reference Number BP-N001/2023) are notified to the European Commission as detailed criteria, in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council.

Any comment or submission made by the European Commission, if one is made, will be assessed and any recommendations for amendment to the criteria document, on foot of the comment or submission, will be made for the Board’s consideration. If no comment or submission is made, the criteria document will be adopted as the final decision of the Agency. I further recommend that for transparency the proposed National criteria, proposed explanatory note and this Inspector’s Report are published on the Agency’s website following Board approval.

Signed:

[Signature]

Caroline Murphy
Senior Inspector,
Office of Environmental Sustainability.

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Appendix 1

Figure 1: Process flow of site-won asphalt by-product from the production process to the acceptance at a RAP plant as a raw material.  

34 CCP: Critical Control Point – Reference Section 5.4 of this report for further detail. Key code: Blue line = producer control, Yellow line = end user control, red arrow = not covered by the National criteria, green arrow = positive flow meeting the National criteria.
Figure 2: Process flow of site-won asphalt by-product from acceptance at the RAP plant as a raw material through to manufacture of intermediate and final products.

The RAP plant mechanically processes the site-won asphalt by-product, as required, to ensure the physical grading size is suitable as a feedstock for the manufacture of reclaimed asphalt.

The certified RAP plant uses the site-won asphalt feedstock to manufacture reclaimed asphalt that meets the requirements of Irish Standard I.S. EN 13108-08, or any part of this standard required by Irish Standard I.S. EN 13108-31, and any additional tighter customer specification.

The certified RAP plant uses the reclaimed asphalt to manufacture specific bituminous mixtures, in accordance with the relevant requirements of I.S. EN 13108-21, that meet the requirements of the:

(i) harmonised standard I.S. EN 13108 Parts 1-7; or
(ii) Irish Standard I.S. EN 13108-31; or
(iii) any additional tighter customer specification.

The RAP plant determines the final product to meet the requirements of the National Criteria and all additional product requirements. The final product is now ready for use/placement on the market.
Table 6: Key documents required at each stage of the process.

<table>
<thead>
<tr>
<th>Stage in the process</th>
<th>Record Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By-Product at Source</strong></td>
<td><strong>By-Product in Transit</strong></td>
</tr>
<tr>
<td>Pavement development e.g. a road</td>
<td>Collection and Transport, from producer to RAP plant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Producer’s records include:</th>
<th>Holder (in transit) records include:</th>
<th>RAP plant’s records include:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement of Conformity</strong></td>
<td>□ An original Statement of Conformity signed by the producer; □ For each batch of by-product produced.</td>
<td>□ A copy of the Statement of Conformity signed by the producer; □ For the consignment in transit.</td>
<td>□ A copy of the Statement of Conformity signed by the producer; □ For each batch of by-product accepted at the plant.</td>
</tr>
<tr>
<td><strong>End User’s Declaration</strong></td>
<td>□ A copy of the End User’s Declaration signed by the RAP plant; □ For each RAP plant that has approved the producer as an “approved supplier”.</td>
<td>□ A copy of the End User’s Declaration signed by the RAP plant; □ Relating to the destination RAP plant.</td>
<td>□ An original End User’s Declaration signed by the RAP plant; □ For each Producer approved as an “approved supplier”.</td>
</tr>
</tbody>
</table>
**Table 7: Requirements to be considered at each stage of the process.**

<table>
<thead>
<tr>
<th>Stage in the process</th>
<th>By-Product at Source</th>
<th>By-Product in Transit</th>
<th>By-Product at End Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement development e.g. a road</td>
<td>Collection and Transport, from producer to RAP plant</td>
<td>RAP plant</td>
<td></td>
</tr>
</tbody>
</table>

Requirements of the National Criteria include:

| Adherence to National Criteria | □ Required | □ Required | □ Required |
| EPA Registration | □ Required | □ As required | □ As required |
| Inspection | □ As required | □ As required | □ As required |

Satisfaction of the requirements of the **competent authority** responsible for:

| Planning permission | □ N/A to this process | □ N/A to this process | □ Required |
| Air Pollutant Act Licence | □ N/A to this process | □ N/A to this process | □ As required |
| Inspection/site visit/audit in accordance with Waste legislation. | □ As required | □ As required | □ As required |
| REACH Regulations | □ As required | □ As required | □ As required |
| CLP Regulations | □ As required | □ As required | □ As required |
| Construction Products Regulations | □ As required | □ As required | □ As required |
| Inspection | □ As required | □ As required | □ As required |

Satisfy the requirements of a **notified body** responsible for:

| Verification of the Management System | □ N/A to this process | □ N/A to this process | □ Required |
| Issuing Notified Factory Production Control Certification | □ N/A to this process | □ N/A to this process | □ As Required |
| Issuing Notified Product Certification | □ N/A to this process | □ N/A to this process | □ As Required |
| Issuing a certificate under a Production Certification Scheme | □ N/A to this process | □ N/A to this process | □ As Required |
| Inspection | □ As required | □ As required | □ As required |

**Note 1:** Inspection, site visit or audit to confirm e.g., registered data or compliance with the National criteria or suitability for approved supplier status.

**Note 2:** Inspection, site visit or audit by a competent body to confirm e.g., the requirements of the competent body have been satisfied, where relevant.

**Note 3:** Inspection, site visit or audit by a notified body to confirm e.g., the requirements of the notified body have been satisfied, where relevant.
# Appendix 2

**Table 8:** Stakeholders requested to provide comment on the Consultation Paper, draft National criteria and Draft Explanatory Note as described in Section 6 above.

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Note 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Office of Environmental Enforcement</td>
<td>Transport Infrastructure Ireland (TII)</td>
<td>Michael Cronin (Ready-mix) Unlimited Company</td>
</tr>
<tr>
<td>The Office of Environmental Sustainability</td>
<td>Irish Asphalt Pavement Association (IAPA)</td>
<td>Hanly quarries</td>
</tr>
<tr>
<td>Waste Enforcement Regional Lead Authorities (WERLAs)</td>
<td>Irish Branch Institute of Asphalt Technology (IAT)</td>
<td>Pavement Management Services Ltd</td>
</tr>
<tr>
<td>Regional Waste Management Planning Offices (RWMPOs)</td>
<td>Construction Industry Federation (CIF)</td>
<td>CP Road Planing.ie</td>
</tr>
<tr>
<td>Local Government Management Agency (LGMA)</td>
<td>Chartered Institute of Wastes Management (CIWM)</td>
<td>Arkil Ltd</td>
</tr>
<tr>
<td>Local authority by-product contact points.</td>
<td>Irish Waste Management Association (IWMA)</td>
<td>McSweeney Bros</td>
</tr>
<tr>
<td>Local authorities</td>
<td>Irish Concrete Federation</td>
<td>Ryan Road Planings Services/ StreetSweep Ltd</td>
</tr>
<tr>
<td>Department of the Environment, Climate and Communication.</td>
<td>Irish Tar and Bitumen</td>
<td>Various notifiers which have submitted notifications to the Agency regarding road planing by-product.</td>
</tr>
<tr>
<td>Department of Housing, Local Government and Heritage</td>
<td>Roadstone Ltd</td>
<td></td>
</tr>
<tr>
<td>Department of Transport</td>
<td>Kilsaran</td>
<td></td>
</tr>
<tr>
<td>Health and Safety Authority (HSA)</td>
<td>Lagan</td>
<td></td>
</tr>
<tr>
<td>National Standards Authority of Ireland (NSAI) inclusive of the Asphalt Working Group.</td>
<td>SIAC</td>
<td></td>
</tr>
<tr>
<td>IBEC</td>
<td>Frank Murphy and Sons Plant Hire</td>
<td></td>
</tr>
<tr>
<td>Engineer’s Ireland</td>
<td>MAST Construction Ltd</td>
<td></td>
</tr>
<tr>
<td>COLAS</td>
<td>Harrington Concrete and Quarries Unlimited Company</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** All Stakeholders listed above were provided the opportunity to provide feedback on the consultation paper; however, only those who actively consulted with the Agency were formally invited to provide feedback on the draft National criteria and associated explanatory document. These documents were made available on the Agency’s website to provide for public consultation.
Table 9: Summary of the submissions and their assessment by the Agency as referenced in Section 6 of this report.

<table>
<thead>
<tr>
<th>Item 1 – Formation of a National Group and Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submission</strong></td>
</tr>
<tr>
<td><strong>Response and action</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 2 – Clarification on the role of Competent Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submission</strong></td>
</tr>
<tr>
<td><strong>Response and Action</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 3 – Record Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Submission</strong></td>
</tr>
</tbody>
</table>
| **Response and action** | The record retention period of *one year* mirrored the period set out in European End-of-Waste Criteria for Copper Scrap\(^{35}\). The Waste Framework Directive nor the European Union (Waste Directive) Regulations 2011-2020 set out a retention period for documents used to demonstrate compliance with Regulation 27 (By-Products); however, it is

noted that this legislation does require records relating to hazardous waste to be preserved for at least 3 years.

It may be more suitable for the records to be retained for a longer period (3 years) initially and for the system to remain flexible in providing for any retention period being set out in future legislation e.g. the regulations that are discussed in Section 5.7 above.

**Action:** The wording of Sections 4 and 5 of the National criteria has been updated to: state “for at least 3 years, or as otherwise directed by relevant Regulation,...”.

### Item 4 - Definitions

**Submission** Requests to modify/align/clarify the definitions including:

(i) ‘Site-won asphalt’ – a request to clarify the scope of this material type has been received as the meaning of ‘asphalt’ can be viewed by industry to exclude certain types of bituminous macadams when considered in line with the TII specification.

(ii) ‘Batch’ – request to streamline this definition with the definition used in EoW-N001/2023.

**Response and actions**

(i) The definition of the term ‘asphalt’ has been added to the definition for the term ‘site-won asphalt’ for clarity. Both definitions have been sourced from the Irish Standard I.S. EN 13108-08 for reclaimed asphalt because as the introduction of this standard explains:

   “The processing of site-won asphalt results in reclaimed asphalt, suitable and ready to be used as constituent material for asphalt, ... Reclaimed asphalt (RA) may be used as a constituent material for bituminous mixtures manufactured in an asphalt plant, in accordance with the specifications for those mixtures.”

   It should be noted that:

   - ‘Site-won asphalt’ is sourced from ‘asphalt’ in a pavement. ‘Site-won asphalt’ is used to make ‘reclaimed asphalt’, an intermediate product. This ‘reclaimed asphalt’ is in turn used to make ‘bituminous mixtures’, final products, in accordance with the harmonised/Irish standard in the series I.S. EN 13108 for various bituminous mixtures. This standard series relates to bituminous mixtures as a general term for the series; however, each part of the series relates to a specific type of asphalt e.g. Asphalt Concrete, Hot rolled asphalt, Stone Mastic Asphalt, Asphalt Concrete with Bituminous Emulsion etc.

   - The National criteria look to the baseline requirements and definitions set out in the harmonised standards and the Irish standards in the series: I.S. EN 13108 only.

   - The TII Specification CC-SPW-00900 definitions may vary to those of the standard; however, it is noted that Section 9 Reclaimed Asphalt of this Specification states that “Reclaimed asphalt shall comply with this specification, which is derived from IS EN 13108-08.”

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**Action:** Greater explanation is provided for the various descriptors in Section 2 'site-won asphalt’ and ‘bituminous mixtures’ of the Explanatory Note.

(ii) ‘Batch’ definitions in both sets of criteria are not aligned. The ‘batch’ definition in these criteria is based on stakeholder feedback to provide for greater clarity with regard to this specific process.

**Action:** no change.

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**Item 5 – Requests for Clarity**

**Submission**

The criteria and explanatory note should provide increased clarity regarding:

(i) End uses other than a RAP plant are not provided for in the National criteria.

(ii) The verification required in Annex I, Part 3(a) for the absence of coal tar and tarred products in the site-won asphalt.

(iii) Temporary storage of site-won asphalt *prior to* dispatch to the RAP plant.

(iv) The link between a RAP plant and satellite storage ‘linked’ to the RAP plant.

(v) What point a material becomes a by-product and what record should be in place to back this up.

(vi) Non-conformances i.e. how it is recorded, who is notified, who the competent authority is for non-conforming consignments.

(vii) What the criteria does *not* apply to.

(viii) Whether the local authority is the producer where the local authority contracts the main contractor to produce ‘site-won asphalt’. Clarity is required on the liability sitting with the local authority and the main contractor related to ensuring compliance with the criteria. Clarity is also required as to whether an approved supplier will be the local authority or main contractor.

(ix) How the end user will be monitored/audited in terms of their producer/supplier approval process to ensure there is no abuse of the position and power afforded to the end user.

(x) Whether the term RAP plant includes cold mix asphalt/asphalt concrete with emulsion plants. Clarity also required on whether RAP plant and end user is the one plant in one location and if the term refers to the legal or natural person who operates a RAP plant in one location.

(xi) Whether RAP plants referred to in parts (i) and (ii) of the definition are the same.

(xii) Who will accredit the management system.

(xiii) What the relevant standard is for bituminous mixtures.

(xiv) How long material can be stored at a RAP plant prior to usage.

(xv) The requirement for third party accredited management systems is onerous. Is this requirement necessary?

(xvi) Who is responsible for carrying out ‘self-monitoring’ checks?

(xvii) The ‘Overall person responsible’ in Annex I Part 3(3)(a).

(xviii) The number of approved suppliers’ that can deliver to one RAP plant, whether if one RAP plant removes a producer’s approved supplier status if this impacts the producer’s ability to attain approved supplier status with another RAP plant, how a review is undertaken of a producer’s approved supplier status and how approved supplier’s status is ‘paused’.
(xix) Changes to a producer’s approved supplier status during the course of the production process may have cost and material storage implications at the production process. Changes to the producer’s approved supplier status should be made by the Agency.

(xx) Annex I, Part 2(2)(a) requires the producer and the RAP plant to agree the quality of site-won asphalt prior to the producer dispatching site-won asphalt to the RAP plant. How is this separate agreement recorded?

<table>
<thead>
<tr>
<th>Response and action</th>
</tr>
</thead>
</table>
| (i) Section 1 Subject Matter, of the Explanatory Note was updated to state: “does not cover the use of site-won asphalt outside the context of a RAP plant, as defined in the National criteria.” Section 2 of the National criteria provides a definition of the term ‘RAP plant’.

(ii) Section 3(3) of the Explanatory Note has been updated to ensure it is clear that the verification comprises of the producer contacting a competent person from the production process to verify that the site-won asphalt by-product is free from coal tar and tarred products and that the name of the competent person and their verification of the absence of these items is recorded by the producer in the by-product’s Statement of Conformity.

(iii) The National criteria does not control the storage of materials, inclusive of by-products, at the production process. The producer will be required to ensure the by-product satisfies the requirements of the National criteria which includes attaching an End User’s Declaration to the Statement of Conformity which will indicate certainty of use of the site-won asphalt by-product.

(iv) The term ‘linked’ was removed and the text updated to include: “Any site-won asphalt storage carried on in satellite by-product storage locations connected or associated with a RAP plant and come under the control of the RAP plant’s accredited Management System.”

(v) Section 4 of the National criteria requires a completed Statement of Conformity (with an End User’s Declaration attached) to be issued for each batch of site-won asphalt by-product and Section 7 requires each batch of site-won asphalt by-product to be registered by the producer on the Agency’s register prior to dispatch. It may be the case that material will be stored at the production process while the producer is seeking to comply with the requirements of the National criteria. It should be noted that Regulation 27(2)(b) states that “Where no notice is given to the Agency ... in respect of a substance or object, as the case may be, is discarded or otherwise dealt with as if it were waste, the substance or object, as the case may be, shall be presumed to be waste until the contrary is proved.” Reference Section 5.7 of this report.

(vi) Non-Conformance Reports:
- Section 2 of the criteria defines a ‘Non-Conformance Report’ (NCR) and refers to the NCR template in Annex IV of the National criteria.
- The template form indicates that a producer, RAP plant or other body e.g. competent body can initiate an NCR. The definition in Section 2 indicates that the person who is in possession of the by-product and notes the non-conformance with the National criteria initiates the NCR.
- **Action:** this definition has been updated to provide for a competent body initiating an NCR where the by-product is not in their possession.
- The NCR template requires the initiator of the NCR to communicate the final decision, required as part of the NCR, to the holder of the by-product. Section 3 Part 5(b) of the National criteria states that site-won asphalt associated with an open NCR or a closed NCR that does not provide for the material to be used in the manufacture of reclaimed asphalt, shall not be used to manufacture reclaimed asphalt.

- Section 6 of the National criteria requires the producer and end user to have documented procedures concerning the assessment, investigation actioning and tracking of NCRs and concerning record keeping. The RAP plant’s management system is required to be certified and the RAP plant will assess the producer’s management system as part of the approved supplier process.

- There is no obligation on the initiator of the NCR to notify a competent body. A competent body can review any NCRs issued during any inspection in their functional area with regard to by-product material and the requirements if the European Union (Waste Directive) Regulations 2011-2020 inclusive of the National criteria.

- Action: The section that relates to Annex IV of the Explanatory note has been updated with a confirmation that it is not a requirement to inform a competent authority when an NCR has been initiated and that it is not the responsibility of a competent body to close an NCR where that NCR was not initiated by a competent body.

(vii) Further detail has been added as a notes section in Section 1 Subject Matter which includes a note that the criteria only apply where the end use is at a RAP plant.

(viii) The local authority can fulfil the role of producer (and a producer who is an approved supplier) and can designate the main contractor as qualified staff. Section 2 Definitions notes that where the producer designates qualified staff, the producer has ultimate responsibility for the action of the delegated qualified staff and in ensuring the requirements of the National criteria are satisfied.

(ix) Each RAP plant seeking suppliers of site-won asphalt by-product will approve their suppliers to ensure their requirements can be satisfied. Section 6 of the criteria requires RAP plants to have procedures in place for this selection process and the RAP plants management system will be certified.

(x) Section 2 definitions of the criteria states that ‘RAP plant’ includes cold mix plants. The definition for ‘end user’ states the end user is the RAP plant which has signed an End User’s Declaration, which is specific to one RAP plant location.

(xi) The important factor is that descriptors falling within the meaning of ‘RAP plant’ that can meet the requirements of the criteria can utilise the National criteria.

(xii) Section 2 Definitions of the criteria sets out the meaning of a ‘Management System Certification Body’.

(xiii) Section 2 of the criteria describes the meaning if Irish and harmonised standards. Section 7(d) of the End User’s Declaration outlines the standards required.

(xiv) The period within which material can be stored at the RAP plant is not specified. The RAP plant confirmed their intention to use this material to produce reclaimed asphalt in the End User’s Declaration.
(xv) The RAP plant approves the suppliers of by-product and accepts this by-product for use in the manufacture of products. It is optimal that the RAP plant would have a certified management system. It is noted that the European Commission Regulation (EU) No 715/2013 establishing criteria determining when copper scrap cease to be waste under Directive 2008/98/EC requires under Article 5 (5) that “A conformity assessment body, …shall verify that the management system complies with the requirements of this article [Management System]. The verification shall be carried out every 3 years.”

(xvi) Self-monitoring requirements set out in Annex I specify the owner of the action to be carried out.

(xvii) Section 3(3) of the explanatory note outlines how the overall person responsible is identified.

(xviii) Notes added to Explanatory Note: Section 2 definitions for ‘approved supplier’ and Annex IV Non-Conformance Report.

(xix) The producer shall only dispatch by-product that meets the requirements of the National criteria and any RAP plant requirements. If the RAP plant receives by-product that does not meet the criteria and e.g. multiple NCRs are recorded for by-product consignments from one production process, the RAP plant will be required under their certified management system to unsure they segregate, control, quarantine and limit the acceptance of non-conforming materials to their site.

(xx) Annex I, Part 2(2)(a) requires the producer and the RAP plant to agree the quality of site-won asphalt prior to the producer dispatching site-won asphalt to the RAP plant. This is to ensure any specific requirements of the end user are known to the producer where they may be additional to the requirements of the National criteria. These requirements will be agreed between the producer and the end user and recorded in a manner that is in accordance with their management systems.

### Item 6 – Cold mixes and use of I.S. EN 13108-31

**Submission**

The use of site-won asphalt in cold mix processes that yields bituminous mixtures that meet the requirements of Irish Standard I.S. EN 13108-31 should not be provided for under the National Criteria due to:

(i) The Irish Standard I.S. EN 13108-31 not being referenced in the scope of Standard Recommendation (SR) 28.

(ii) SR 28 provides for a Product Certification Processes for harmonised bituminous mixtures in accordance with the requirements of the Construction Products Regulation.

(iii) The Introduction section of I.S. EN 13108-08 for reclaimed asphalt states that its use in bituminous mixtures I.S. EN 13108-1-7 and -9 is permitted.

**Response and action**

(i) Standard Recommendation 28 provides for bituminous mixtures manufactured to meet harmonised standards and not those manufactured to Irish Standard I.S. EN 13108-31. Bituminous mixtures manufactured to Irish standards are not required to meet the requirements of CPR or the associated Product Certification Processes.

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(ii) An equivalent Product Certification Scheme to that in place for harmonised mixtures does not exist for bituminous mixtures using this Irish Standard; however, in order to facilitate stakeholders seeking to attain the equivalent controls for the use of bituminous mixtures manufactured to Irish standard the National criteria have been future proofed with a provision for RAP plants to attain production certification from a notified body. The industry would need to work with a notified body in order to establish this certification structure and by-product destined for a future use in accordance with I.S. EN 13108-31 cannot be registered until this certification scheme is in place.

(iii) The Introduction section of I.S. EN 13108-08:2016 does not state that its use in I.S. EN 13108-31 is prohibited. Irish Standard I.S. EN 13108-31:2019 Section 4.4 relates specifically to reclaimed asphalt and states that "The properties of reclaimed asphalt declared in accordance with EN 13108-8 shall conform to requirements that may be selected appropriate to the intended use".

The NSAI confirmed that:
- EN 13108-31 was published 25/9/2019. I.S. EN 13108-31 was published on 14/10/2019.
- EN 13108-31 once adopted by NSAI as I.S. EN 13108-31, is the Irish Standard for use in Ireland.

Action: no change to the National criteria.

**Item 7 – Certification of the RAP plants**

<table>
<thead>
<tr>
<th>Submission</th>
<th>The requirements for a RAP plant will provide a significant barrier to the use of site-won asphalt for cold mix material production as part of local authority road maintenance projects.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response and actions</td>
<td>The requirements for cold mix material production have been set up to mirror the requirements for warm/hot mix material production as they both fall under the definition of RAP plant.</td>
</tr>
<tr>
<td><strong>Hot/warm mix material production</strong></td>
<td><strong>Cold mix material production</strong></td>
</tr>
<tr>
<td>Planning permission (granted)</td>
<td>Part 8 development report</td>
</tr>
<tr>
<td>Air pollution Act Licence, where required.</td>
<td>Air pollution Act Licence, where required.</td>
</tr>
<tr>
<td>Management System Certification</td>
<td>Management System Certification</td>
</tr>
<tr>
<td>Notified Factory Control Certification</td>
<td>N/A</td>
</tr>
<tr>
<td>Notified Product Certification</td>
<td>Product Certificate under a Product Certification Scheme.</td>
</tr>
<tr>
<td>Action: no change.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Bituminous mixtures made to harmonised standards in the I.S. EN 13108 series.</td>
<td>Bituminous mixtures made to Irish standards in the I.S. EN 13108 series.</td>
</tr>
</tbody>
</table>