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HMRC internal manual

Corporate Intangibles Research and Development Manual

From: **HM Revenue & Customs (/government/organisations/hm-revenue-customs)**

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CIRD82300 - R&D tax relief: categories of qualifying expenditure: consumable items

CTA09/Ss.1125 to 1126B

Revenue expenditure incurred on consumable items employed directly in R&D on or after 1 April 2004 is qualifying expenditure. For expenditure incurred before that date, it is necessary to decide whether this was incurred on consumable stores (CIRD82450 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82450)). Guidance on whether expenditure is capital or revenue is available at BIM35000 (https://www.gov.uk/hmrc-internal-manuals/business-income-manual/bim35000) onwards.

The consumable items must be consumed in activity that constitutes R&D for tax purposes, which includes ‘qualifying indirect activities’.

The term ‘consumable items’ covers consumable or transformable items (CIRD82400 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82400)). This includes water, fuel and power of any kind. Software is not within consumable items as it is not consumed or transformed (CIRD82500 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82500)). The same meanings are adopted for the large company scheme by FA02/SCH12/PARA17 (c).

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Use other than directly in R&D

Consumable items employed indirectly are not qualifying expenditure.

So for example, power used in a training facility would be included to the extent that the facility was providing training to directly support an R&D project (para 31(e) but not for training that was required for more general purposes.

Further guidance on the indirect aspects of R&D is given in the BIS Guidelines (formerly DTI Guidelines) (CIRD81900 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird81900) for the 2004 guidelines).

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Apportionments and changes introduced by Finance Act 2015

Where consumable items are partly employed directly in R&D an appropriate apportionment of the expenditure should be made.

For example if there was one electrical supply to a property, and the electricity used by the R&D was not separately metered, then it would be necessary to arrive at a suitable apportionment into R&D and non R&D use.

In this respect, HMRC would accept that expenditure on heating or lighting the part of the property used directly for R&D was being incurred directly on R&D, even if there were trivial non R&D activities also taking place.

How a suitable apportionment is to be achieved in practice is dependent on the particular facts of the R&D, and the premises.

Wherever possible a pragmatic approach should be adopted - for example, a broad-brush apportionment based on floor area or staff numbers may prove most suitable where there is no particularly high power consumption based on the nature of the R&D.

If a company offers a reasonable apportionment basis HMRC do not envisage detailed enquiries being desirable to establish a slightly more accurate alternative.

Changes introduced by Finance Act 2015

The law on consumable items has changed from 1 April 2015. Finance Act 2015 brought in new sections 1126A and 1126B CTA 2009, which apply to expenditure on consumable items incurred on or after 1 April 2015.

Section 1126A(1) CTA 2009

Where a company sells or otherwise transfers ownership of items produced in the course of its R&D activity as part of its ordinary business, then the cost of consumable items that form part of those products is excluded from expenditure qualifying for relief. This restriction will apply to expenditure incurred on or after 1 April 2015

Example 1

X Ltd manufactures and sells pottery kilns. It sets out to design a new improved kiln. One of the intended improvements is a kiln lining with an improved heat resistance performance. It carries out R&D into the heat resistance qualities of various materials. It discovers that a novel lining material, when initially fired to a high temperature in a propane gas kiln, acquires greatly improved heat resistance qualities. X Ltd produces three such kilns for testing. X Ltd then sells the three kilns with the new lining.

In this example, the kiln with the new lining is an item that X Ltd produces in the course of its R&D activity. Propane gas, a consumable item, is combusted in the kiln and becomes physically incorporated in the kiln lining. The kiln with the new lining is sold in the ordinary course of X Ltd's business.

The cost of the propane gas that is part of the kiln lining is not allowable as expenditure on a consumable item when incurred on or after 1 April 2015.

S1126(6) CTA 2009 makes clear that a consumable item forms part of an item produced if it is incorporated into the item produced , or if it is turned into the item produced. The Explanatory Note to the legislation further makes clear that 'forming part of' an item includes situations where that item has been physically and chemically changed in some way during the production process. In this example, the kiln lining material gas been chemically changed by the incorporation of combusted propane gas.

Section 1126A(2) CTA 2009

Where a company undertakes R&D on a production process, and consumable items form part of an item that is produced in that production process, and those items are sold or transferred as part of the company's ordinary business, then the cost of consumable items that form part of the sold item are not allowable as qualifying R&D expenditure. This applies when such expenditure on consumables is incurred on or after 1 April 2015.

Example 2

Y Ltd produces and sells soft drinks. The production process involves quantities of water being carbonated, flavourings are added and then the drinks are bottled and packed. As part of its product development activity, Y Ltd is carrying out R&D into the physical and chemical properties of new materials it wants to use to construct pipes used to transport water through the production process. Pipes are constructed from that new material, fitted to existing production equipment , and quantities of water are passed through the pipeline. Various configurations of piping are tested by water passed through under different pressures and temperatures. In every case, the water that is passed through the new piping is subsequently carbonated , flavoured and bottled, and the soft drink is sold.

In this example, Y Ltd is undertaking R&D on the production process of its soft drinks manufacture. The soft drinks are an 'item' that is produced in the production process, and a consumable item, water, forms part of the soft drink. The soft drinks are sold as part of the normal course of the business. The expenditure that relates to water that is passed through the pipes and is incorporated in the soft drink will not be allowable as qualifying R&D expenditure, if incurred on or after 1 April 2015.

Section 1126A(3) requires an apportionment where not all of the product referred to in sub-sections(1) and (2) are sold or transferred. This has the effect that, if some of the consumable item is retained for additional trials, or is disposed of as sub-standard, that element will continue to qualify as an allowable consumable item.

Subsection 1126B sets out how the Treasury may amend these rules by secondary regulation.

R&D projects that span more than one period

An R&D project can span more than one period. In these cases, you will need to consider how the new rules apply.

Example 3

X Ltd manufactures and sells pottery kilns. It sets out to design a new improved kiln. One of the intended improvements is a kiln lining with an improved heat resistance performance. It carries out R&D into the heat resistance qualities of various materials. It discovers that a novel lining material, when initially fired to a high temperature in a propane gas kiln, acquires greatly improved heat resistance qualities. In year 1, X Ltd decides to retain the kiln for further development, and claims the cost of the propane. In year 2, after further R&D is carried out, X Ltd sells the kiln.

In year 1, there has been no sale of the kiln, so the new consumables rules do not apply. In year 2, there is a disposal in the normal course of business, and the cost of the propane cannot be claimed.

Example 4

X Ltd manufactures and sells pottery kilns. It sets out to design a new improved kiln. One of the intended improvements is a kiln lining with an improved heat resistance performance. It carries out R&D into the heat resistance qualities of various materials. It discovers that a novel lining material, when initially fired to a high temperature in a propane gas kiln, acquires greatly improved heat resistance qualities. In year 1, X Ltd does not sell the kiln. In year 2, X Ltd decides to retain the kiln for further development.

In year 1, the item has not been transferred for consideration in the ordinary course of business, nor has such a transfer taken place in year 2. The cost of the propane gas is allowable as a consumable item in both years 1 and 2.

Ordinary course of business

‘Ordinary course of business’ is not defined in the legislation. Every person’s business is different, and it will be a matter of fact whether or not a transaction is in the ‘ordinary course’.

S1126A(9) CTA 2009 has the effect that the transfer of an item that is ‘waste’ is not regarded as a transfer in the ordinary course of business.

Regardless of whether consideration is received for waste or scrap items, that transfer will not be in the ordinary course of business.

HMRC take the view that the following transactions will also not be in the ordinary course of business:

- Where the item is an inevitable by-product of the R&D
- Where the item is an unintended consequence of the R&D
- Fortuitous sales of items that are not usually for sale
- Where the sale price does not cover the cost of consumable items incorporated in the item.

In these four situations, if it is decided on the facts that these situations do not occur in the ‘ordinary course of business’ , it should be recalled that this in itself is not enough for the relevant consumable or transformable item to become attributable expenditure. The requirements of S1126 CTA 2009 (on attributable expenditure) also need to be met.

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