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HMRC internal manual

Corporate Intangibles Research and Development Manual

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CIRD136000 - R&D Tax Reliefs: reformed reliefs: categories of qualifying expenditure: software, data licenses, cloud computing services and consumables: consumable items

Consumable items

Revenue expenditure (see and following) incurred on consumable items employed directly in R&D (which includes both direct R&D and qualifying indirect activity within para. 31 of the DSIT guidelines – see CIRD81910 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird81910)) is qualifying expenditure for both new RDEC and ERIS.

The term ‘consumable items’ covers consumable or transformable items (see CIRD136100 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird136100)). This includes water, fuel and power of any kind. Software (see CIRD134000 (https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird134000)) is not within consumable items as it is not consumed or transformed.

Use other than in R&D

Consumable items which are not employed directly in R&D activities 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) DSIT) but not for training that was required for more general purposes.

Use of apportionments

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.

Items represented in products for onward sale CTA09S1126A(1)

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.

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.

CTA09/S1126(6) 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.

CTA/S1126A(2)

Where a company undertakes R&D on a production process, 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 those consumable items are not allowable as qualifying R&D expenditure.

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.

CTA09/S1126A(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.

CTA09/S1126B sets out how the Treasury may amend these rules by regulations (secondary legislation).

Projects which 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 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’.

CTA09/S1126A(9) 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 CTA09/S1126 (on attributable expenditure) also need to be met.