

# ***TR 2017/1 - Income tax: deductions for mining and petroleum exploration expenditure***

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## Taxation Ruling

### Income tax: deductions for mining and petroleum exploration expenditure

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#### **❗ Relying on this Ruling**

This publication is a public ruling for the purposes of the *Taxation Administration Act 1953*.

If this Ruling applies to you, and you correctly rely on it, we will apply the law to you in the way set out in this Ruling. That is, you will not pay any more tax or penalties or interest in respect of the matters covered by this Ruling.

(Note: This is a consolidated version of this document. Refer to the ATO Legal database ([ato.gov.au/law](http://ato.gov.au/law)) to check its currency and to view the details of all changes.)

### What this Ruling is about

1. This Ruling deals with deductions under section 8-1 and subsection 40-730(1) of the *Income Tax Assessment Act 1997* (ITAA 1997) for expenditure on mining and petroleum<sup>2</sup> exploration, including prospecting, as defined in subsection 40-730(4).
2. For convenience, the Ruling refers to ‘exploration expenditure’ as expenditure on exploration or prospecting (EorP) within its ordinary meaning in the context of subsection 40-730(4) of the ITAA 1997 or within a statutory extension in paragraphs 40-730(4)(a) to (d) of the ITAA 1997 such as studies to evaluate the economic feasibility of mining minerals or quarry materials after they have been discovered.<sup>3</sup> For convenience, these studies are referred to as ‘EFS’ in the Ruling.
3. This Ruling also deals with some (but not all) aspects of section 40-80 of the ITAA 1997 which applies where a depreciating asset is first used for EorP (and the other requirements of the section are met) and section 40-25 allows an immediate deduction for its cost.
4. This Ruling does not deal with what constitutes ‘use’ of a mining, quarrying or prospecting right, nor whether such use is ‘for EorP’. However, some matters considered in this Ruling, such as the practical effect of subsection 40-730(3) of the ITAA 1997, the definition of EorP in subsection 40-730(4) of the ITAA 1997, and the scope of the exclusions in subsection 40-730(2) of the ITAA 1997 for operations in the course of working a mining property or petroleum

<sup>1</sup> [Omitted.]

<sup>2</sup> In this Ruling, a reference to ‘minerals’ includes a reference to ‘petroleum’ unless otherwise indicated.

<sup>3</sup> See paragraph 40-730(4)(c).

field, or development drilling for petroleum, will be relevant for the application of section 40-80 of the ITAA 1997.

4A. All further legislative references in this Ruling are to the ITAA 1997, unless otherwise indicated.

## Frequently used terms

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5. In this Ruling, the following terms and abbreviations have been used:

- 'EFS' means a feasibility study or studies to evaluate the economic feasibility of mining minerals or quarry materials after they have been discovered (paragraph 40-730(4)(c)).
- 'EM' means Explanatory Memorandum.
- 'EorP' means exploration or prospecting as defined inclusively in subsection 40-730(4)).
- 'Exploration expenditure' means expenditure on EorP as defined inclusively in subsection 40-730(4).
- 'FEED' means front end engineering and design.
- 'FID' means final investment decision.
- 'JVP' means joint venture participant.
- 'Minerals' includes petroleum unless otherwise indicated.
- 'MQPI' means mining quarrying and prospecting information as defined in subsection 40-730(8).

## Previous rulings

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6. This Ruling replaces Taxation Ruling TR 98/23 *Income tax: mining exploration and prospecting expenditure*, which was withdrawn from 28 October 2015. To the extent that the Commissioner's view in that Ruling still applies, it has been incorporated into this Ruling.

## Ruling

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### Division 40 – not a 'code'

7. Division 40 is not a code for deductions for exploration expenditure. An immediate deduction may be available under the general deduction provision (section 8-1) or under subsection 40-730(1).

8. These provisions provide alternative bases for deductions on their terms, but more than one deduction for the same amount cannot be obtained. In the event that both provisions apply to the same amount, and one provision provides a larger deduction, that provision is the more appropriate for the purposes of section 8-10.

### **Significance of decision (or commitment) to mine – not a bright line**

9. The mere point in time at which expenditure is incurred does not determine its character or nature for the purposes of section 8-1 or subsection 40-730(1). For example, the fact that expenditure is incurred during what is sometimes regarded as the 'exploration phase' of mining – that is, before any decision (or commitment) to mine has been made – does not determine the nature or character of the expenditure as 'exploratory' or as seeking to establish the economic feasibility of mining.

10. It follows that if a decision (or commitment) to mine has not been made, that does not mean that all expenditure incurred to date is immediately deductible. Or, if a decision (or commitment) to mine has been made, it is also not necessarily the case that all expenditure preceding that decision or commitment is immediately deductible. Further, the timing of an item of expenditure in relation to the timing of any decision (or commitment) to mine cannot on its own determine whether expenditure is revenue or capital in nature (for example, for the purposes of section 8-1).

11. Whether expenditure incurred before a decision to mine will satisfy the legislative requirements for an immediate deduction under section 8-1 or subsection 40-730(1) depends on the facts and circumstances and the specific legislative requirements. However, it is emphasised that certain expenditure incurred while the project is still being evaluated will *not* satisfy the tests for an immediate deduction under section 8-1 or subsection 40-730(1), such as:

- the cost of long-lead assets, and
- the cost of early development activities such as detailed executable engineering and design work commissioned for the purpose of planning the proposed development from which project assets can be designed or constructed – that is, design work going beyond the level of detail required to evaluate the economic feasibility of the project.

12. For the avoidance of doubt, exploration expenditure may be incurred after a decision (or commitment) to mine has been made.

**The statutory provisions****Section 8-1: positive limbs**

13. Exploration expenditure incurred in the context of an existing mining or exploration business will satisfy the positive limbs of section 8-1 where the expenditure has the necessary connection with the income-earning operations or is incidental and relevant to those operations.<sup>4</sup>

14. The positive limbs will not be satisfied where a mining or exploration business has not yet commenced, or where a new source of income of an existing business is being investigated. For example, an investigation which does not have a sufficient nexus to the existing income-earning operations of the business because it relates to a new mineral a miner has not previously mined.<sup>5</sup> This can be contrasted with a fresh opportunity to mine a mineral that has previously been mined.

**Section 8-1: capital limb**

15. Whether expenditure is on revenue or capital account is largely a matter of judgment based on what the expenditure is calculated to effect from a practical and business point of view.

16. On first principles, expenditure is on capital account if its real object is to establish, replace or enlarge a profit-yielding subject. In contrast, a revenue outlay has the character of a working expense that is part of the ongoing process of carrying on a business to obtain regular returns by means of regular outlays.<sup>6</sup>

17. Case law also establishes that expenditure which produces an enduring or lasting benefit or advantage may be regarded as capital expenditure.<sup>7</sup> However, the mere fact that some property right may emerge from the expenditure is not enough to make it capital.

**No presumption exploration expenditure is capital or revenue**

18. There is no presumption that exploration expenditure is capital, or capital in nature.<sup>8</sup> Similarly, there is no presumption that exploration expenditure is of a revenue nature. Regard must be had

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<sup>4</sup> Case law also establishes that expenditure which is considered desirable and appropriate to meet the needs of the business may also be deducted under the second limb.

<sup>5</sup> See, for example, *Esso Australia Resources Ltd (formerly Esso Exploration & Production Australia Inc) v The Commissioner of Taxation of the Commonwealth of Australia* [1998] FCA 851 (*Esso Australia Resources*).

<sup>6</sup> *Sun Newspapers Limited v Federal Commissioner of Taxation* [1938] HCA 73; 61 CLR 337 at [359], per Dixon J.

<sup>7</sup> *British Insulated and Helsby Cables Ltd v Atherton* [1926] AC 205 at [213–214].

<sup>8</sup> *Commissioner of Taxation v Ampol Exploration Ltd* [1986] FCA 554 (*Ampol Exploration*); 13 FCR 545 at [562], per Lockhart J.

to the nature and character of the expenditure in light of all the facts and circumstances.

19. Expenditure on EFS will have the hallmarks of a revenue outgoing in a mining business where undertaking such evaluative studies is part and parcel of the ongoing process by which the business operates 'to obtain regular returns by means of regular outlays'. This also applies to 'how to mine' investigations that are fundamental inputs to such EFS.

20. In contrast, expenditure on EFS will be of a capital nature where its real object is to establish, replace, or enlarge the taxpayer's profit-yielding subject – the business entity, structure or organisation which is set up or established for earning profit.

21. There are three key matters to consider in determining whether EFS expenditure is on revenue or capital account:<sup>9</sup>

- the character of the advantage sought<sup>10</sup>, (its lasting qualities may also be relevant here<sup>11</sup>)
- the manner in which it is to be used, relied upon or enjoyed, and in this and in the previous dot point recurrence may play a part, and
- the means adopted to obtain the advantage.

22. Regard must be had to all relevant facts and circumstances in the application of the above.

### **Mere production of information not enough for capital characterisation**

23. The mere fact that expenditure produces 'information' is not enough to stamp the expenditure with a capital nature because in knowledge there is an 'enduring benefit'. Otherwise, there would effectively be a presumption that all exploration expenditure was on capital account.

### **Nature or character of advantage sought rather than whether asset obtained (or not obtained)**

24. A miner who merely investigates and evaluates various mining opportunities in relation to an existing business to see if they may be commercially or economically viable may not be creating something with an enduring benefit in the sense required. The nature or character of the advantage sought, rather than any advantage that is

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<sup>9</sup> *Sun Newspapers Limited v Federal Commissioner of Taxation* [1938] HCA 73; 61 CLR 337 at [363], per Dixon J.

<sup>10</sup> *GP International Pipecoaters Pty Ltd v Federal Commissioner of Taxation* [1990] HCA 25; 170 CLR 124.

<sup>11</sup> *British Insulated and Helsby Cables Ltd v Atherton* [1926] AC 205.

ultimately obtained (for example, in the form of an asset or assets), is the essential matter to be determined.<sup>12</sup>

### **Expenditure that goes ‘too far’**

25. If activities go beyond an evaluation of economic feasibility and commence to erect a framework for the commencement of a project, or for the formation of some future asset, expenditure on such activities will be of a capital nature even if a definitive commitment to proceed with a project has not yet been made. The same applies even if a project does not actually go ahead because it is the nature of the advantage sought by the expenditure, as opposed to what is obtained, that is relevant.

### **Section 8-1 – apportionment**

26. Although the wording of section 8-1 contemplates apportionment of an outgoing, expenditure that indifferently serves both a revenue and capital purpose may not be capable of dissection on the basis of some arithmetic or rateable division. In such a case, apportionment proceeds on some fair and reasonable basis.<sup>13</sup> If apportionment is not possible on that basis, the nature of the expenditure is determined by the essential character of the outlay as a whole.<sup>14</sup>

### **Application of section 40-730**

#### ***Scope and application of subsection 40-730(1)***

27. Expenditure of a revenue or capital nature may qualify for a deduction under subsection 40-730(1).

28. To be deductible under subsection 40-730(1), exploration expenditure must be incurred ‘on’ exploration or prospecting activities (as defined in subsection 40-730(4) – EorP) for minerals and not be excluded by subsections 40-730(2) or (3).<sup>15</sup> For expenditure to be ‘on’ EorP for minerals there must be a direct or close link between the two.

29. For example, interest and finance charges on money borrowed to finance EorP are not deductible under subsection 40-730(1) as the amounts do not have the required direct or close link.

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<sup>12</sup> *Goodman Fielder Wattie Ltd v Commissioner of Taxation* [1991] FCA 264 (*Goodman Fielder Wattie*); 29 FCR 376 at [390], per Hill J.

<sup>13</sup> See *Ronpibon Tin NL and Tongkah Compound NL v Federal Commissioner of Taxation* [1949] HCA 15 (*Ronpibon Tin*).

<sup>14</sup> See *Goodman Fielder Wattie* 29 FCR 376 at [394–395], per Hill J.

<sup>15</sup> There are a number of other requirements in subsection 40-730(1) that need to be considered in determining if an amount of expenditure is deductible under this subsection. For example, one of paragraphs 40-730(1)(a) to (c) must be satisfied. These additional requirements are not addressed in this Ruling and will not be mentioned each time deductibility under subsection 40-730(1) is being considered. It should be taken that these other requirements must also be met before expenditure is deductible.

Non-capital administrative costs incurred in the course of carrying out EorP activities that have a direct or close link will be deductible.

30. EorP activities that are not dependent upon holding an exploration permit or right can occur before a miner acquires an interest in an exploration permit or right.<sup>16</sup> However, expenses relating to the acquisition of exploration or prospecting rights are not incurred 'on' EorP as required in subsection 40-730(1) as expenditure on acquiring exploration permits or rights, and any associated costs, are preparatory to, or a prerequisite of, being able to carry out the exploration activities in subsection 40-730(4).

31. Where an amount of exploration expenditure serves EorP for minerals and some other object or objects indifferently, all the expenditure will be 'on' EorP for minerals provided it is on such EorP to at least a non-trivial extent, unless dissection or some other reasonable basis of apportionment is possible. Although subsection 40-730(1) does not contain the words 'to the extent' the Commissioner is prepared to accept that apportionment may be made on a fair and reasonable basis, in the same way that the Commissioner has accepted that apportionment is possible under section 40-880 (see paragraphs 24 and 25 of Taxation Ruling TR 2011/6<sup>17</sup>).

### **Subsection 40-730(3) exclusion**

32. Exploration expenditure cannot form part of the cost of a depreciating asset and fall within the exclusion in subsection 40-730(3) where it is deductible under another provision<sup>18</sup> (for example, section 8-1) or where it is not of a capital nature. Even where, on the facts, subsection 40-730(3) is attracted and exploration expenditure that produces information forms part of the cost of a depreciating asset – mining, quarrying and prospecting information (MQPI) is a depreciating asset where it is not trading stock (paragraph 40-30(2)(b)) – the expenditure will be immediately deductible where its first 'use' is for EorP (and the other requirements in section 40-80 are met). Information produced from EFS expenditure is not MQPI in terms of the definition in subsection 40-730(8) which is limited to information about the physical characteristics of an area, as opposed to information about the economic feasibility of mining the minerals once they have been discovered.

33. Taxation Determination TD 2014/15 *Income tax: when is Design Expenditure incurred by an R&D entity included in the first element of the cost of a tangible depreciating asset for the purposes of paragraph 355-225(1)(b) of the Income Tax Assessment Act 1997 (and therefore not able to be deducted under section 355-205)?*

<sup>16</sup> For example, aerial surveys in some states can be undertaken without requiring the consent of the landholder or holder of an exploration permit or right.

<sup>17</sup> TR 2011/6 *Income tax: business related capital expenditure – section 40-880 of the Income Tax Assessment Act 1997 core issues*.

<sup>18</sup> Other than Division 40, Division 41 or Division 328 (see section 40-215).

observes that whether design expenditure is included in the cost of an asset for the purposes of Division 40 is a question of fact and degree, and will depend in large part on identifying the final shape, features and performance of the particular completed asset.

34. The Commissioner takes the following approach in relation to detailed design and engineering work that is integral to an EFS. Provided a decision or commitment to mine has not been made for a particular project, and provided the design and engineering work is not at the point of being executable (for example, it cannot actually be built from), it will not be regarded as having a direct connection with the bringing into existence of any depreciating assets subsequently constructed or acquired.

### **Meaning of exploration and prospecting in subsection 40-730(4)**

#### ***Ordinary meaning***

35. The form of the definition of EorP in subsection 40-730(4) allows the expression to include its ordinary, natural meaning having regard to the context and history of the subsection. In the context of subsection 40-730(4), that meaning is the discovery and identification of the existence, extent and nature of minerals and includes searching in order to discover the resource, as well as the process of ascertaining the size of the discovery and appraising its physical characteristics.

36. The definition includes activities that are so incidental to, or so closely connected with, actual exploration or prospecting, as reasonably to be considered part of it. For example, environmental or heritage protection studies or activities connected with obtaining native title approvals where they are undertaken in preparation for, or as part of, an exploration program. It also covers marking out an exploration area with posts (pegging) and rent paid to a government on claims.

#### ***Specific matters***

37. The matters specifically listed in paragraphs 40-730(4)(a) to 40-730(4)(d) are express additions that are expansive of the ordinary meaning in the context of subsection 40-730(4) and are not conditioned by it. They are satisfied if the activity meets the legislative description, whether or not it is exploration or prospecting in the ordinary sense of those words, in the context of subsection 40-730(4). For example, geological mapping is EorP as defined in paragraph 40-730(4)(a) even if it is undertaken as part of extractive operations. In such a situation, deductibility of expenditure on such mapping would depend upon a consideration of the other conditions in subsection 40-730(1) (for example, it must be 'for minerals etcetera.') and the exclusions from deductibility under that subsection, such as those in subsection 40-730(2).

***Economic feasibility studies: paragraph 40-730(4)(c)***

38. Paragraph 40-730(4)(c) extends the meaning of EorP beyond its ordinary meaning in the context of subsection 40-730(4) to include feasibility studies to evaluate the economic feasibility of mining minerals or quarry materials after they have been discovered (EFS). These studies are directed at answering for a miner the question of 'whether to mine'. Considerations of 'how to mine' including the technical feasibility of a possible project and its likely costs can be relevant parts of a 'whether to mine' enquiry. The following matters, are relevant in interpreting the scope of EFS in paragraph 40-730(4)(c):

- (a) Whether a study is an EFS is determined on the basis of what a reasonable person would conclude the study represents, taking into account the perspective, and purposes, of the miner that commissioned it. Economic feasibility is not determined on the basis of whether it would exist for some 'hypothetical' miner. The characteristics of a hypothetical miner are not specified in the law, and the actual studies miners undertake pertain to whether they (rather than any hypothetical miner) will or will not mine.
- (b) An EFS may extend beyond whether the miner *could* mine to include consideration of whether the miner may or will mine given its own circumstances. For example, this would include comparing the rate of return of a proposed mining project to that of other potential mining projects the miner has under consideration.
- (c) EFS extend to assessing the economic feasibility of the entire mining project, not just the extractive and treatment processes involved. They include the assessment of commercial viability in its fullest sense and are not limited to 'early' or 'preliminary' feasibility studies.
- (d) EFS are not limited to economic 'number crunching', but includes analysis and input (feeder) studies which are integral to the overall economic feasibility assessment. For example, technical feasibility studies, pilot programs, research and development activities, environmental impact and heritage preservation studies.
- (e) EFS include those that 'refine' or 'redo' existing studies to identify whether projects remain viable (for example, where market conditions change) or to identify more commercially profitable options. Also included are EFS that consider whether to continue to mine once a decision or commitment to mine has been made. For example, where market conditions or other factors change significantly and a miner undertakes a new EFS to determine whether it is still economically feasible to mine.

- (f) EFS can include the re-examination of a project that has been suspended, recycled or abandoned.
- (g) Considerations of the economic feasibility of various development options, or how best to develop the resource, are not EFS for the purposes of the law if the miner is not (or no longer) considering whether or not to mine.

39. If EFS, and any analysis and input (feeder) studies to such studies, are undertaken for more than one purpose they will satisfy the terms of paragraph 40-730(4)(c) if, at least to a non-trivial extent, they relate to assessing the economic viability of mining. There is no requirement in this part of the law for the study to have a substantial, main or exclusive purpose of assessing the viability of mining, although the exceptions in subsection 40-730(2) may apply in particular cases to prevent deductions under subsection 40-730(1).

**Meaning of subsection 40-730(2) – ‘operations in the course of working a mining property’ and ‘development drilling for petroleum’**

40. A deduction is not available under subsection 40-730(1) for expenditure on EorP that is also ‘on’ operations in the course of working a mining property or ‘on’ development drilling for petroleum (subsection 40-730(2)). Where expenditure serves the activities in the exclusion and some other object or objects indifferently, so that it cannot be dissected or otherwise reasonably apportioned, the exclusion will apply if the expenditure is at least to some non-trivial extent ‘on’ the activities in the exclusion.

***Operations in the course of working a mining property***

41. The expression ‘operations in the course of working a mining property’ is a composite phase and it refers to operations that are directed towards the extraction of minerals. It embraces operations for ‘getting at’ as well as ‘getting out’ the minerals on a mining property. This refers to development, in its ordinary sense, of a mining property.

42. ‘Mining property’ is undefined and is a reference to land in relation to which a miner has a private right, and which the miner can mine or is mining. ‘Mining property’ is not the same term as a ‘mine’.<sup>19</sup>

43. The limits of a mining property are a question of fact and circumstances, but a mining property is not co-extensive with a mining tenement. A mining property may extend over one or more tenements, or it may relate to only part of one tenement (for example, as Kitto J observed, where although the mine operator has a right or

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<sup>19</sup> *Federal Commissioner of Taxation v Broken Hill Pty Co Ltd* [1968] HCA 16 (*Broken Hill*); 120 CLR 240 at [245–246], per Kitto J.

permission to mine the whole, it is known that the rest of the land has none of the relevant minerals in it).<sup>20</sup>

44. The existence of a mining right over land is not sufficient to impress it with the character of a mining property. There can be no mining property without some activity to attract the description of 'mining' to the property. Actual mining is not necessary but steps for mining including normal development activities must have been taken to stamp the description of mining onto a property.<sup>21</sup>

### ***Operations in the course of working a petroleum field***

45. The same reasoning (with necessary modifications) applies to 'operations in the course of working a petroleum field' in that it refers to operations directed towards the extraction of petroleum and embraces operations for 'getting at' as well as 'getting out' petroleum from a petroleum field. Further, this refers to development, in its ordinary sense, of a petroleum field in order to recover petroleum from it.

46. The term 'petroleum field' is not defined and is a reference to a naturally occurring discrete accumulation of petroleum.<sup>22</sup> The limits of a petroleum field are a question of fact to be determined in the circumstances and they may not be co-extensive with a right to explore or recover petroleum (such as an exploration permit, retention lease, or production licence). A field may only cover part of the area covered by such a right.

### ***Development drilling for petroleum***

47. 'Development drilling for petroleum' in paragraph 40-730(2)(a) describes drilling into areas of known reserves, and can be contrasted with an exploration or appraisal well.

48. The express reference to development drilling for petroleum does not imply that development drilling (or other development activities) in the context of minerals and quarry materials are not excluded.

### ***Mine extensions, expansions and augmentations***

49. There is no presumption that activities which answer the description of EorP in subsection 40-730(4) and which occur in relation to a mining property where there is an established mine, are operations in the course of working that mining property. Everything depends on the specific facts, and in particular what the activities are directed at achieving.

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<sup>20</sup> *Broken Hill* 120 CLR 240 at [245–246], per Kitto J.

<sup>21</sup> *Broken Hill* 120 CLR 240 at [271], per Barwick CJ, McTiernan and Menzies JJ.

<sup>22</sup> *Mitsui & Co (Australia) Ltd v Commissioner of Taxation* [2012] FCAFC 109; 205 FCR 523 at [526].

50. An activity that is genuinely exploratory in its ordinary sense in the context of subsection 40-730(4), or is (or is part of) assessing whether or not a new mine, mine extension or expansion would be economically feasible, is to be distinguished from an activity that is directed towards the 'getting at' or 'getting out' minerals in relation to the existing mine (development of that mine). The latter, but not the former, will be an operation in the course of working a mining property.

51. The following factors, which are not exhaustive, will, to the extent applicable on the facts, assist in resolving whether the activity is properly regarded as development of an existing mine. However, each of the factors at best can only be an indicator pointing in one direction or the other. A weighing of the factors, and judgment, must be applied in arriving at a conclusion.<sup>23</sup> The factors include:

- details relating to the mining property, such as
  - whether there is a commitment by the miner to extend or expand the mine
  - the nature of the mine, and operations being conducted on the property
  - whether the mine and the operations connected with that mine extend across a number of mining tenements
  - the history of the property, including whether extensions or expansions of an existing mine have been considered, or are planned to be considered
    - how the existing mine is defined in documentation, such as the mine plan and mine development plan
    - whether mine plans recognise or contemplate an extension or expansion
    - what other strategies exist for possible further extension or expansion of the property
  - what tenements and rights are involved, including any applications for tenements and rights, and whether the details available in relation to the tenements and rights support the view that an actual extension of an existing mine is occurring, or that there is merely the possibility of an extension subject to finding minerals and satisfactory economic feasibility of mining

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<sup>23</sup> It is also noted that exploration activities undertaken by a miner may vary depending on the nature of the minerals being sought.

- the state of knowledge about the mineralisation and economic feasibility of mining in relation to the mining property
- the nature of the activity being considered and its degree of connection with the existing mining property, including
  - the objective purpose and effect of the activity, and whether the activity is directed to exploration for minerals or development of a mining property
  - the relationship of the activity to the knowledge of the area and assessments of the potential for mining in the area
    - what the activity is expected to add to the existing knowledge of the area
    - whether it is known that a resource exists, but insufficient information is held to allow a determination of whether mining should or could occur (whether as a separate operation, or with an existing mine)
    - whether the activity relates to the obtaining of access or better access to known areas of mineralisation on or around the existing mine
    - whether the activity informs how existing activities will continue, or expand
    - whether the activity relates to how an extension would proceed as opposed to consideration of whether it should or could proceed
  - whether the activities relate to any prior, existing or contemplated plans for an extension or expansion
  - what the strength of the connection is between the activity and an actual extension that is happening
  - the proximity of the activity to the existing mine or mining property
  - whether the activity transcends both the existing mine site and the area of possible extension, or whether it is a discrete activity in relation to that area

- whether the activity relates to a different ore body or seam from the one currently being mined
- expenditure commitments in relation to the activity – whether they assist in determining the nature of the activity (that is, whether they suggest genuine exploration or feasibility studies rather than development)
- public statements made to the market or shareholders about the activity, and statements made to regulators in relation to the activity (the context of such statements needs to be fully understood to determine the weight that can be given to the statements – for example, if it is not known whether particular considerations may result in an extension to an existing mine or the development of a separate mine, a statement that there may be an extension should not carry much weight)
- where the activity relates to the economic feasibility of mining, the fact that facilities and services associated with an existing mine (for example, for extraction or processing) may be utilised in some way in the proposal being assessed, does not mean that the proposal is necessarily an operation in the course of working the mining property.

***Petroleum field extensions, expansions and augmentations***

52. There is no presumption that activities which answer the description of EorP in subsection 40-730(4) and which occur in relation to a petroleum field where there are existing operations to recover petroleum, are operations in the course of working a petroleum field. Everything depends on the particular facts.

53. Where an activity is directed towards 'getting at' or 'getting out' petroleum (including the development of the petroleum field to recover petroleum), then it will be operations in the course of working a petroleum field. If, however, the activity is genuinely exploratory in its ordinary sense in the context of subsection 40-730(4), or is (or is part of) assessing whether or not an extension or expansion would be economically feasible, then it will not be operations in the course of working a petroleum field.

**Examples**

54. The following examples address the application of subsection 40-730(1) without considering the exclusion in

subsection 40-730(3) as this would require a detailed analysis of whether certain expenditure in the examples forms part of the cost of a depreciating asset such as MQPI. To do this would require additional detailed facts to allow the identification of the extent to which MQPI is created by relevant activities and whether the expenditure on these activities is capital in nature. This level of detail is beyond the scope of these examples. Similarly, it is not possible in these examples to cover the circumstances in which appraisal wells and similar wells will or will not be depreciating assets.

55. It is also beyond the scope of these examples to go into the factual detail necessary to establish the context in which section 8-1 can be applied. For example, it would be necessary for each example to outline in detail the nature of any business being conducted and the relationship of the relevant expenditure to that business.

56. However, comments on the application of section 8-1 are provided for a number of the examples. It is to be noted that where expenditure is incurred in the context of an existing mining business, the expenditure can be deductible under section 8-1 to the extent the expenditure has the necessary connection with the income-earning operations, or is incidental and relevant to those operations, and is not of a capital nature. Also, where expenditure is not deductible under subsection 40-730(1) because it forms part of the cost of MQPI it will still be immediately deductible where its first use is for EorP for minerals and the other requirements in section 40-80 are met.

57. Examples 2 to 8 of this Ruling build upon Example 1 of this Ruling and reflect activities that may occur in discovering petroleum in an offshore context. The conclusions arrived at in the examples will apply equally to the same activities undertaken for the same purposes in an onshore context.

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### **Example 1 – identify and assess opportunities**

58. *The joint venture participants (JVPs) in an offshore petroleum exploration permit conduct the following activities:*

- *undertake geological and geophysical surveys*
- *develop geological models and interpret geological data*
- *negotiate contracts with third-party suppliers that will facilitate the exploration activities (for example, supply of drill rigs, support vessels, port or supply leases)*
- *drill three exploration wells (two of which are unsuccessful).*

59. *Only one exploration well, Exploration well number 3 is successful with a discovery of a large accumulation of water and carbon dioxide soaked natural gas in deep water 250 kilometres from the Australian mainland (the Great Gas project).*

60. *The JVPs conduct seismic studies and drill two appraisal wells to investigate the physical and chemical properties of the resource. Other studies are done to understand the nature of the areas between the appraisal wells. Flow testing is also undertaken to understand the potential production activity of the discovery.*

61. *These activities satisfy the ordinary meaning of exploration in the context of subsection 40-730(4) and the definition of EorP in subsection 40-730(4) as they are directed towards the searching for minerals to discover a resource as well as ascertaining the size of the discovery and appraising its physical characteristics. Expenditure on these activities will be deductible under subsection 40-730(1).<sup>24</sup>*

## **Example 2 – generate alternatives and select basis of design**

62. *Continuing with the facts described in Example 1 of this Ruling.*

63. *The JVPs agree to assess and compare a wide range of possible development scenarios for the Great Gas project. The concepts considered are:*

- *Domestic gas (Domgas): supply domestic gas into an existing pipeline.*
- *Liquefied Natural Gas (LNG): a deep water platform linked to an onshore LNG plant. A number of different sites for the LNG plant as well as various forms of LNG train technology and LNG train size configurations are considered as part of this concept.*

64. *A project team is established and work is undertaken to model the economics of the wide range of alternatives and assess them against a set of project value measures. This assessment has regard to information (at a conceptual level) including:*

- *the market for domestic gas and LNG, and marketing options*
- *possible integration opportunities relating to surrounding permits and projects*
- *geotechnical studies, to determine potential location of facilities and pipeline route*
- *the chemical composition of the resource*
- *reservoir studies and modelling*

<sup>24</sup> There are a number of other requirements in subsection 40-730(1), and exclusions in section 40-730, that need to be considered in determining if an amount of expenditure is deductible under this subsection. For example, one of paragraphs 40-730(1)(a) to (c) must be satisfied. These additional matters are not addressed in these examples (unless they are the focus of a particular example; for example, operations in the course of working a mining property) and will not be mentioned each time deductibility under subsection 40-730(1) is being considered. In such cases it will be taken that these other matters do not prevent a deduction for the purposes of these examples.

- *technical or technological limitations*
- *engineering and design alternatives*
- *environmental and other regulatory considerations*
- *estimated capital and operating costs.*

65. *These activities culminate in the selection of a recommended 'basis of design', being the extraction and sale of LNG using a deep water platform linked to an onshore LNG production plant, with a production capacity of 10 million tonnes per annum, located near Remote Township on the Australian mainland.*

66. *Activities to assess a wide range of conceptual development alternatives and to select a single 'basis of design' are a necessary input and part of the process of determining the economic feasibility of mining the discovered resource and would fall within the definition of EorP in paragraph 40-730(4)(c). Expenditure on these activities is deductible under subsection 40-730(1).*

### **Example 3 – evaluation of preferred alternative (including FEED)**

67. *Continuing with the facts described in Examples 1 and 2 of this Ruling.*

68. *The JVPs agree to evaluate further the upstream and downstream infrastructure and facilities for the selected 'basis of design' and 'ramp-up' the project team to perform certain evaluation activities, and to supervise and assess the activities by contractors working on the selected basis of design.*

69. *Work authorisations and instructions are issued to the contractors that set out the JVPs guidelines, expectations and requirements, timelines and specified budgets, for the preliminary engineering and design work that will be completed during the front end engineering and design (FEED) for the selected 'basis of design'.*

70. *FEED will not result in the production of executable or constructible designs and the work will only be progressed to a point where the project schedule, cost estimates, and risks can be understood by the JVPs to a sufficient level of certainty in order to ascertain whether a decision to mine should be made.*

71. *FEED includes technical feasibility and qualification to determine whether certain pieces of equipment for the selected 'basis of design' can in fact be built and can operate safely under the Great Gas Project's unique conditions.*

72. *Activities to evaluate the upstream and downstream infrastructure and facilities for the selected 'basis of design' and the preliminary design work undertaken during this FEED process would form part of the process of determining the economic feasibility of mining the discovered resource and will satisfy the definition of EorP in paragraph 40-730(4)(c) and expenditure on these activities is deductible under subsection 40-730(1).*

## **Example 4 – supporting and social infrastructure and environmental approvals**

73. *Continuing with the facts described in Examples 1 to 3 of this Ruling.*

74. *The JVPs also conduct FEED on supporting infrastructure that will facilitate the construction of the petroleum extraction, delivery and processing assets and their subsequent operation including accommodation, supply bases, roads, and material receiving facilities.*

75. *FEED is also done on the social infrastructure that local and state governments will require the JVPs to provide as a condition for approving the Great Gas project including upgrading the local airport and roads and constructing a hospital, school and childcare centre, which will be handed back to the relevant government agency on completion.*

76. *The FEED for the social and supporting infrastructure will not result in the production of executable or constructible designs and will only be progressed to a point where the project schedule, cost estimates, and risks can be understood by the JVPs to a sufficient level of certainty in order to ascertain whether a decision to mine should be made.*

77. *The JVPs also work with the relevant government authorities to determine and assess the impact of any State and Commonwealth environmental conditions and obligations that will be imposed during the construction and operation of the Great Gas Project. This includes undertaking environmental impact studies, preparing environmental management plans to demonstrate the Great Gas Project's ability to comply with the conditions to be imposed, and obtaining environmental approvals from State and Commonwealth government bodies.*

78. *Activities to evaluate the supporting infrastructure and social infrastructure that local and state governments will require the JVPs to provide, and the environmental requirements and obligations that will apply, as conditions for approving the Great Gas project are necessary inputs and part of the process of determining the economic feasibility of mining the discovered resource and will satisfy the definition of EorP in paragraph 40-730(4)(c) and expenditure on these activities will be deductible under subsection 40-730(1).*

## **Example 5 – preparing cost estimates, assurance and FID support package**

79. *Continuing with the facts described in Examples 1 to 4 of this Ruling.*

80. *The activities to evaluate the selected basis of design (including obtaining bids or quotes from suppliers, manufacturers and fabricators) allow the JVPs to ascertain the estimated cost of*

*constructing the Great Gas Project within a defined range (for example, plus or minus 10%).*

81. *The Operator for the project also prepares a Final Investment Decision (FID) support package that summarises the outcomes of the activities to evaluate the preferred option for the Great Gas Project. This includes a description of the recommended development, the estimated cost and project schedule, any remaining risks and uncertainties, the status of any government and regulatory approvals, and the project economics. The FID support package is one of the key documents used by the project interest holders to assist with their decision on whether to make a FID. The Great Gas Project Joint Operating Agreement requires all the project interest holders to agree to sanction the project or take a FID.*

82. *Each joint venture participant also undertakes assurance activities and technical and commercial reviews of the work undertaken to evaluate the preferred option for the project.*

83. *Preparing cost estimates and assurance activities by the JVPs and the preparation of the FID support package are necessary inputs into, and form part of the process of determining, the economic feasibility of mining the discovered resource and would inform a decision to mine. These activities would fall within the definition of EorP in paragraph 40-730(4)(c) and expenditure on these activities would be deductible under subsection 40-730(1).*

#### **Example 6 – early execution activities and long lead items**

84. *Continuing with the facts described in Examples 1 to 5 of this Ruling.*

85. *Due to the commercial considerations associated with ‘manning-down’ the Great Gas Project until the JVPs have decided whether to sanction the Great Gas Project, they agree to commit and spend \$10 million on a limited scope of early execution activities, including detailed executable engineering and design work, preliminary site works, and mobilising supply bases. This allows the project teams to remain in place and continue to progress limited aspects of the project while awaiting a FID.*

86. *The JVPs also agree to purchase a number of ‘long lead’ items from specialist vendors before a FID is made as they take a long time to manufacture or fabricate and will delay the entire project if they are not ready for installation in line with the project schedule.*

87. *Early execution activities and long lead items anticipate a decision to proceed with the project and their costs may become regret costs if the project does not ultimately proceed. The activities go beyond ascertaining the economic feasibility of the project and are outside the meaning of EorP in subsection 40-730(4) and expenditure on these activities is not deductible under subsection 40-730(1). The expenditure is also not deductible under section 8-1 as it is capital in nature.*

**Example 7 – execution and construction of project**

88. *Continuing with the facts described in Examples 1 to 6 of this Ruling.*

89. *The JVPs make a FID to proceed with the Great Gas Project. Work Authorisations are issued to contractors for execution activities, including detailed executable engineering drawings and designs, procurement and construction works. The Operator also undertakes activities directed at the execution, supervision and assessment of activities undertaken by the contractors.*

90. *Activities relating to the execution and construction of the project, such as detailed engineering and design of the plant, procurement of equipment and assets, and constructing the project including supporting infrastructure are not within the meaning of EorP in subsection 40-730(4) and expenditure on these activities is not deductible under subsection 40-730(1).*

91. *In addition, expenditure for the execution and construction of the project is capital in nature and not deductible under section 8-1.*

**Example 8 – project recycles to identify a new basis of design**

92. *Continuing with the facts described in Examples 1 to 7 of this Ruling.*

93. *Due to the escalating costs of construction, the JVPs decide the Great Gas Project is no longer economically viable and agree to abandon the proposed basis of design. After reassessing each of the concepts previously considered, as well as a number of new alternatives, a floating LNG concept is recommended to the JVPs as a new 'basis of design'.*

94. *The economic feasibility of mining a discovered resource can be re-examined after a previous project or basis of design has been abandoned or recycled. The activities in this case are directed at determining 'whether' to proceed with mining the discovered resource under an alternative basis of design. These activities fall within the definition of EorP in paragraph 40-730(4)(c) and expenditure on these activities will be deductible under subsection 40-730(1).*

**Example 9 – expenditure which is capital in nature before decision to mine**

95. *Mega Mining, a large mining company, purchases land surrounding a discovered resource before it makes a decision to mine the discovered resource in order to guarantee it will have unrestricted access to the discovery. In addition, purchasing the land before a decision to mine allows the company to acquire the land at a lower price.*

96. *Purchasing land is not within the meaning of EorP in subsection 40-730(4) and such expenditure is not deductible under*

*subsection 40-730(1). In addition, the expenditure is not deductible under section 8-1 as it is capital in nature.*

#### **Example 10 – feasibility studies on downstream infrastructure**

97. *Beatle Mining Co undertakes a feasibility study to evaluate the economic viability of developing a mine operation. Based on the outcomes of the feasibility study, the board of Beatle Mining Co will make a decision as to whether to proceed with the development of the mine or not.*

98. *The feasibility study will include engineering studies aimed at evaluating the economic viability of extracting the resource, including having regard to the costs of establishing related downstream infrastructure such as port and rail facilities. The feasibility study will evaluate the level of engineering and design required to define the project to a point at which the cost estimate, project schedule and risks can be understood to a sufficient level of certainty in order to make the decision to mine by the board of Beatle Mining Co. The feasibility study work undertaken is within the level of work necessary for the team to assess the economic viability of the development.*

99. *Engineering studies for the feasibility study can satisfy the meaning of EorP in paragraph 40-730(4)(c) and will be deductible under subsection 40-730(1), as the expenditure is on a necessary input into the study to evaluate the economic feasibility of mining the resource.*

#### **Example 11 – feasibility study and detailed design work**

100. *Digger Co. undertakes a feasibility study to evaluate the economic viability of developing a new mine. Based on the outcomes of the feasibility study, the Board of Digger Co. will make a decision whether to proceed with the development of the mine or not.*

101. *Upon review of the feasibility report, the Board of Directors approve the project on 15th March. The Tax Manager of Digger Co. reviews all costs incurred on the project for the 30 June year in order to identify feasibility study costs. He is advised by the project team that:*

- *The feasibility study was finalised in late February.*
- *Engineering work and analysis required for estimating capital costs for the purposes of the feasibility report were finalised at the end of December. Even though the project had not been approved, Engineers on the Project had been advised by management to continue their work in the hope that the Project would be approved.*
- *All other analysis prepared for the feasibility report was completed by late February.*

102. *The Engineering work and analysis by Digger Co. carried out after December is in excess of the level of work necessary to assess the economic viability of the discovered resource and expenditure on this work and analysis is not eligible for a deduction under subsection 40-730(1). The expenditure in this case is in the nature of development activities, is capital in nature and will not be deductible under section 8-1.*

#### **Example 12 – exploration expenditure after decision to mine**

103. *Following a feasibility study, the board of New Mining Co. decides to proceed with its first mine in Australia. Due to the complexity of the ore body New Mining Co. continues its exploratory drilling program after the decision to mine to improve its understanding of the ore body across the tenement. The drilling program is completed before any development activities, such as site preparation work, commence on the tenement.*

104. *The drilling program satisfies the meaning of EorP in subsection 40-730(4) as it is directed towards understanding the ore body. Expenditure on this drilling program will be deductible under subsection 40-730(1). The exclusion in subsection 40-730(2) will not apply as the expenditure on these activities is not directed at ‘getting at’ or ‘getting out’ the ore (including the development of the tenement).*

#### **Example 13 – activities not in the course of working a mining property**

105. *Mini Mining Co., a small mining company, owns and operates a number of small mines and wishes to explore the area of an exploration permit adjacent to one of its current operating mines.*

106. *Very little is known about the geology and the existence of the minerals in this area, so Mini Mining Co. undertakes a geological mapping and exploration drilling program to search for and identify potential minerals in that area. These activities are independent and separate to its current mining operations and are not reflected in its existing mine plans and will not impact or change its current mining operations in any way.*

107. *These activities satisfy the ordinary meaning of exploration in the context of subsection 40-730(4) and the definition of EorP in subsection 40-730(4) as they are directed towards the searching for minerals to discover a resource as well as ascertaining the size of the discovery and appraising its physical characteristics. Expenditure on these activities will be deductible under subsection 40-730(1) unless the exclusion in subsection 40-730(2) applies.*

108. *When viewed objectively, the exclusion does not apply in these circumstances as the expenditure is on activities that are genuinely exploratory in nature in its ordinary sense in the context of subsection 40-730(4) and are not directed towards the development*

*of the mine in the sense of expanding the existing mine or towards other activities involved in 'getting at' or 'getting out' minerals from the mine.*

**Example 14 – operations in the course of working a mining property**

109. *Dash Mining Co. decides to expand one of its small existing coal mine operations by expanding the main pit. Expanding the mine pit was always contemplated by the company, as indicated by the relevant mine plan and in public statements and community consultations. On the basis of prior drilling, it is confident that there are further reserves that can be mined in an economically viable manner. It undertakes a drilling program to further define the resource, to determine the direction in which to expand the mine and to enable the mine plan to be further developed, including determining the best location for the placement of the new wall for the pit.*

110. *While the drilling may satisfy the meaning of EorP in subsection 40-730(4), expenditure on these activities will not be deductible under subsection 40-730(1), as the exclusion in subsection 40-730(2) applies because the expenditure is on drilling directed at 'getting at' and 'getting out' minerals from the existing mine, as it informs the placement of the pit wall which is part of the development activities for expanding the mine.*

**Example 15 – operations leading to decision to mine**

111. *Yarrow Co. holds an interest in the ABC onshore production licence. Yarrow Co. has yet to make any decision to mine in relation to ABC but has delineated the Boomer petroleum field within the area of ABC. The Boomer field is made up of vertically stacked reservoirs in two individual sands, the Alpha and the Beta sands.*

112. *The reservoirs have been mapped based on a seismic program, an initial exploration well, which determined the presence of hydrocarbons, a number of appraisal wells which were drilled across the permit to address issues of geological uncertainty (such as the presence of hydrocarbons, the communication of hydrocarbons between wells and the permeability of the area), together with Yarrow Co.'s understanding of the regional geology.*

113. *Based on its assessment of the geological and commercial conditions the Board of Yarrow Co. makes the decision to mine part of the Alpha reservoir and approves the drilling of three development wells which are expected to address a defined area of the Alpha reservoir. Approval is also given for the construction of a field gas gathering pipeline network to transport the raw gas to an existing gas processing plant operated by Yarrow Co. on an adjacent production licence.*

114. *Following the making of the decision to mine, work commences on the drilling of the three development wells and the associated gas gathering pipeline network.*

115. *The seismic program and appraisal drilling are within the ordinary meaning of exploration in the context of subsection 40-730(4) as they were undertaken to search for petroleum and to ascertain the size and physical characteristics of the discovered petroleum field. Expenditure on these activities will be deductible under subsection 40-730(1).*

116. *However, the development wells and the construction of the gas gathering pipeline network are not directed towards ascertaining whether to proceed with developing the petroleum field and do not fall within the definition of EorP in subsection 40-730(4) and expenditure on these activities is not deductible under subsection 40-730(1). In addition, the expenditure for these activities is capital in nature and will not be deductible under section 8-1.*

#### **Example 16 – in-fill drilling to increase production**

117. *Continuing with the fact situation described in Example 15 of this Ruling.*

118. *After the initial three development wells have been in operation for 12 months, Yarrow Co. considers whether production of gas could be accelerated by drilling wells at 80 acre spacing (in-fill drilling).*

119. *Further investigative work, including geophysical and geological surveys, is carried out in the area and a feasibility study is also conducted to ascertain if the use of such well-spacings would be capable of accelerating production.*

120. *The feasibility studies do not fall within the meaning of EorP in paragraph 40-730(4)(c) because they are directed towards ascertaining how best to develop and recover petroleum from that part of the petroleum field as they are designed to improve the operational productivity of the development wells, rather than informing Yarrow Co. whether it should proceed to develop and recover petroleum from that part of the field. Expenditure on these studies will not be deductible under subsection 40-730(1).*

121. *While the geophysical and geological surveys satisfy the definition of EorP (see paragraph 40-730(4)(b)), the expenditure for these activities will not be deductible under section 40-730(1) as the exclusion in subsection 40-730(2) will apply because the expenditure on these activities is directed at ‘getting at’ and ‘getting out’ gas from that part of the petroleum field.*

#### **Example 17 – in-fill drilling to identify additional reservoirs**

122. *Continuing with the facts described in Example 15 of this Ruling.*

123. *After the initial three development wells have been in operation for 12 months, Yarrow Co. decides to consider an area of*

*the field situated between the development wells that was not subject to the earlier decision to mine and that was not part of Yarrow Co.'s existing field development plan due to the uncertain geological conditions in that particular area of the field.*

124. *Yarrow Co. conducts an in-fill drilling program in this area of the field to ascertain and appraise the physical characteristics of that part of the field in order to determine if it is commercially viable to recover gas from that part of the field.*

125. *The appraisal well drilling satisfies the meaning of EorP in subsection 40-730(4) and will be deductible under subsection 40-730(1). The exclusion in subsection 40-730(2) will not apply because the expenditure is on activities that are not directed at 'getting at' or 'getting out' the gas (including the development of the field). These activities, when taken in their context, are exploratory in nature.*

#### **Example 18 – drilling appraisal wells**

126. *Continuing with the facts described in Example 15 of this Ruling.*

127. *Yarrow Co. decides to drill two appraisal wells (step-out wells) in relation to the Alpha reservoir to address uncertainties about the nature of the resource in these areas which can only be clarified by contact with a well. Gas will not be recovered from this area until these uncertainties are clarified and a decision to mine is made. The appraisal drilling will be undertaken with the intention of generating new information that will enable Yarrow Co. to make a decision to develop that area of the field, which has not been previously included for development in Yarrow Co.'s existing field development plan.*

128. *The appraisal well drilling satisfies the meaning of EorP in subsection 40-730(4). Expenditure on this drilling will be deductible under subsection 40-730(1) as the exclusion in subsection 40-730(2) will not apply because the expenditure is on activities that are not directed at 'getting at' or 'getting out' the gas (including the development of the field). These activities, when taken in their context, are exploratory in nature.*

#### **Example 19 – drilling into undeveloped part of petroleum field**

129. *Continuing with the facts described in Example 15 of this Ruling.*

130. *Yarrow Co. begins to review an area of the Beta Sands which is undeveloped and that was not part of the original decision to mine. The area reviewed in the Beta Sands is not included for development in Yarrow Co.'s existing field development plan.*

131. *There is only limited information available about the nature of the resource in this area and this information is not sufficient to make a decision to mine in that area of the field.*

132. *Of specific concern is whether the lack of permeability of the reservoir in the Beta Sands area will mean that the rate of any gas flow will not be commercially viable.*

133. *Further work is needed to determine if the rate of gas flow from the Beta Sands area is at an acceptable level in order to be commercially viable to recover. This requires the drilling of a well (Z Well) to determine whether the poor permeability (the ability of the reservoir to allow gas flow) can be addressed by the fracture stimulation of the reservoir. This will be used to determine whether, given the reservoir conditions, a fracture stimulation treatment can be designed and placed which will successfully enhance the production of gas to commercially recoverable levels. During this process, the Z Well is connected to a small separator and any gas recovered is diverted to a flare line.*

134. *The drilling work and the fracture stimulation is successful and the resulting rate of gas flow is sufficient to identify a range of commercial outcomes for the development of the Beta Sands area.*

135. *The information from the Z Well, and fracture stimulation significantly reduces the uncertainties in respect of the Beta Sands area. Based on this new information, the board of Yarrow Co. makes the decision to develop this new area of the field.*

136. *The drilling of Z Well, and the fracture stimulation address the feasibility of producing gas in commercially recoverable quantities from the Beta Sands and forms the basis for a decision to mine for that area of the field.*

137. *The expenditure on drilling work will be deductible under subsection 40-730(1) as it is directed towards understanding the resource. The exclusion in subsection 40-730(2) will not apply as the expenditure is on activities incurred before development commences on the undeveloped area of the field.*

138. *The other activities are relevant to considering whether gas can be commercially recovered from that area of the field and will satisfy the meaning of EorP in subsection 40-730(4). The expenditure for these activities will be deductible under subsection 40-730(1) as the exclusion in subsection 40-730(2) will not apply. The expenditure is on activities that are not directed at 'getting at' or 'getting out' the gas (including the development of the field). These activities, when taken in their context, are to assess the economic feasibility of recovering gas from that undeveloped area of the field.*

### **Example 20 – unconventional gas**

139. *CSG Co. commences greenfield exploratory activity in an area covered by an authority to prospect with the drilling of core holes, primarily to obtain and evaluate the properties of coal beds to enable the characterisation of the coal seam gas reservoir, such as gas content and saturation and other data.*

140. *To further appraise the physical characteristics of the coal and associated coal seam gas, the JVPs conduct seismic studies and drill two appraisal wells. The JVPs then drill and operate a number of pilot wells to obtain dynamic reservoir data to enhance their sub-surface knowledge and to reduce sub-surface uncertainties in order to help define the reservoir model and to gain a better understanding of the potential recoverability of gas from the coal. Gaining this understanding about the recoverability of the gas is an important factor for CSG Co. to ascertain the commercial viability of the project.*

141. *The pilot wells are drilled in a 5 spot arrangement to maximise dewatering in a localised and controlled area and will produce for an initial period of twelve months. Any gas recovered will be flared as the pilot wells are not connected to a gas gathering system.*

142. *Following this work, CSG Co. enters a definition stage which will involve the preparation of a field development plan and basis of design, and entry into FEED before consideration of a decision to mine.*

143. *The core hole drilling program and pilot well program satisfy the meaning of EorP in subsection 40-730(4) as they are directed towards understanding the resource. The expenditure on these activities is deductible under subsection 40-730(1). The exclusion in subsection 40-730(2) will not apply as the expenditure is on activities that are part of assessing whether or not to proceed with mining in that area, rather than being directed at developing or working the petroleum field, notwithstanding that the pilot well program recovers petroleum from that area.*

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## Date of effect

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144. This Ruling applies to years of income commencing both before and after the date of issue, subject to the commencement and application provisions of each amending Act or Regulation to which it refers.

145. The ATO previously issued Taxation Ruling TR 98/23 which set out the Commissioner's view on deductions for mining and petroleum exploration expenditure, which was withdrawn from 28 October 2015.

146. We anticipate that the views in this Ruling will not provide a less favourable outcome to taxpayers than would an application of the views in TR 98/23. However, a taxpayer should approach the ATO to discuss appropriate action if:

- they have incurred expenditure before 28 October 2015 and applied the views in TR 98/23 in their entirety to that expenditure, and

- the application of those views in their entirety to that expenditure results in a more favourable outcome than applying the views in this Ruling, and
- they do not wish to apply the views in this Ruling to that expenditure.

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**Commissioner of Taxation**

22 February 2017

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## Appendix 1 – Explanation

**❶** *This Appendix is provided as information to help you understand how the Commissioner's view has been reached. It does not form part of the binding public ruling.*

### Deductions for exploration expenditure are a concession

147. In *Commissioner of Taxation v Bargwanna*<sup>25</sup>, Edmonds J explained that concessions such as those given to the mining industry, such as that for EorP, are to be given a liberal, rather than a narrow, construction and application<sup>26</sup>:

28. It can be accepted that where Parliament has enacted legislation to encourage a particular activity, for example, legislation which gives particular concessions to the mining or petroleum industries, the legislation must be construed so as to promote Parliament's purpose and not so as to detract from that purpose: *Totalizator Agency Board v Commissioner of Taxation* (1996) 69 FCR 311 at 323A per Hill J, with whom Tamberlin J and Sundberg J agreed. Thus an exemption which exists for the purpose of encouraging, rewarding or protecting some class of activity is to be given a liberal rather than a narrow construction and application: see *Commissioner of Taxation v Reynolds Australia Alumina Ltd* (1987) 18 FCR 29 at 35 per Beaumont J and at 46 – 47 per Burchett J; *Diethelm Manufacturing Pty Ltd v Commissioner of Taxation* (1993) 44 FCR 450 at 457 per French J.

### Division 40 – not a Code

148. There is no legislative evidence to suggest that Division 40 is a code for exploration expenditure deductions. There is also no reason why, from a policy perspective, a taxpayer who would otherwise obtain a deduction for exploration expenditure under section 8-1 should have to seek to claim, and may not obtain, a deduction under Division 40 (more specifically under subsection 40-730(1)).

149. The Commissioner's view that Division 40 is not a code is consistent with his approach to the first general mining exploration deduction introduced into the *Income Tax Assessment Act 1936* in 1947, former section 123AA (section 123AA). At that time, exploration expenditure under section 123AA could only be offset against mining income but could be carried forward indefinitely, whereas under subsection 51(1) of the *Income Tax Assessment Act 1936* (ITAA 1936), deductions could be offset against income generally although a 4-year loss carry-forward limit applied. The Commissioner was asked whether taxpayers could still claim exploration deductions under subsection 51(1). The Commissioner sought advice from the Attorney General while the relevant legislation was in the Parliament, and advised the industry that the

<sup>25</sup> [2009] FCA 620.

<sup>26</sup> [2009] FCA 620 at [28], per Edmonds J.

introduction of section 123AA supplemented or augmented, but did not take away, existing avenues to deduct expenditure under subsection 51(1).

**Which prevails if both section 8-1 and subsection 40-730(1) satisfied?**

150. It is unclear which provision prevails where an amount of exploration expenditure satisfies the requirements for an immediate deduction under both section 8-1 and subsection 40-730(1).

151. On one view, subsection 40-730(1), being more specific in nature, prevails. On another view, subsection 40-730(1) supplements section 8-1, potentially applying only where section 8-1 does not. A third view is that they are true alternatives, which may present a 'tie-breaker' problem for section 8-10 which strictly requires identification of the more appropriate provision.

152. The better view is that section 8-1 and subsection 40-730(1) provide alternative bases for deductions on their terms, but more than one deduction for the same amount cannot be obtained. In the event that both provisions apply, and one provision provides a larger deduction, that provision is the more appropriate for the purposes of section 8-10. This is consistent with the provisions being true alternatives, and with the concessional nature of the deduction.

153. Cases may arise where an amount of expenditure relating to EorP, as defined, is denied deductibility under section 8-1 to some extent because of the capital exclusionary limb. In such a case a taxpayer may, deduct the amount calculated under subsection 40-730(1) (for example, if it is larger than the section 8-1 amount).

154. However, only one deduction is available for any one amount because:

- deductible expenditure (for example, under section 8-1) cannot form part of the cost of a depreciating asset which might be deductible via section 40-80 and section 40-25, and
- a double deduction cannot be obtained for the same amount (section 8-10).

155. On the basis that subsection 40-730(1) may be said (consistently with the legislative history of like provisions) to be essentially supplementary to section 8-1, this may indicate that section 8-1 has some primacy.

156. The hierarchy of the provisions in section 40-730 also suggests that expenditure should be tested under section 8-1 before considering the application of subsection 40-730(1). For instance, subsection 40-730(3) specifically excludes expenditure from being deductible under subsection 40-730(1) if it forms part of the cost of a depreciating asset. Since the cost of a depreciating asset does not

include amounts that are deductible under another provision<sup>27</sup> (for example, under section 8-1 – see section 40-215), or that are not capital in nature (see section 40-220), the expenditure must be tested under section 8-1 first, before it can be ascertained if the exclusion in subsection 40-730(3) applies.

157. This suggests the application of section 8-1 should be considered before turning to section 40-730, otherwise expenditure would potentially have to be re-tested under section 8-1, even if it satisfies subsection 40-730(1), in order to ascertain if the exclusion in subsection 40-730(3) applies. This clearly was not intended.

158. In practical terms, it will often not matter whether the deduction can be claimed under section 8-1 or under Division 40 as both will often allow an immediate deduction. However, in some cases now section 40-80 deductions (for example, for mining quarrying or prospecting information) are not immediately deductible, so it will be significant whether the expenditure is within section 8-1 or not.

159. As a matter of practical tax administration, the Commissioner will accept the reasonable approach put to him by industry that section 8-1 should be considered first, so that subsection 40-730(1) operates essentially as a backstop where section 8-1 does not apply to allow a deduction. For example, where a business has not yet commenced, or a new line of business is being opened up, or where, though expended within the framework of an existing business, the expenditure is capital in nature.

### **Significance of decision (or commitment) to mine – not a bright line**

160. The point at which a ‘decision to mine’ (or commitment to mine) occurs does not provide a bright line for determining the nature or character of expenditure incurred before or after the decision for the purposes of section 8-1 or subsection 40-730(1).

161. However, for the purposes of subsection 40-730(1), whether an activity is carried out before or after a decision (or commitment) to mine has long been regarded as a helpful guide for characterising exploration activities. For instance, in *Mount Isa Mines Ltd v Federal Commissioner of Taxation*<sup>28</sup> (*Mount Isa Mines*) Taylor J observed<sup>28A</sup>:

... in general, prospecting and exploration work precedes the work of “development” ... As a rule the former work is undertaken to ascertain, as far as possible, whether the commencement of mining operations would be justified or prudent.

162. It is emphasised that the guidance is ‘in general’. Clearly, expenditure preceding a decision (or commitment) to mine may not

<sup>27</sup> Outside of Division 40, Division 41 or Division 328.

<sup>28</sup> [1954] HCA 53; 92 CLR 483.

<sup>28A</sup> 92 CLR 483 at [490].

<sup>29</sup> [Omitted.]

be exploratory and equally clearly exploration expenditure can occur after a decision (or commitment) to mine has been made.

163. For example, the cost of a long-lead asset is a non-exploratory capital expense even though it might be incurred while a project is still being evaluated. The same can be said for the cost of early development activities such as detailed engineering and design work commissioned to plan the proposed development from which project assets can be designed or constructed.

164. Expenditure with a nature or character of exploration, or expenditure on EFS, may be incurred after a decision (or commitment) to mine has been made. This may be the case where activities are undertaken in finding or evaluating a separate discovery on parts of a tenement not currently being mined, or proposed to be mined. Although the same general principles apply to determine whether expenditure is exploratory or for the assessment of feasibility in such cases, the expenditure may be excluded from immediate deductibility because it represents development of the existing mining property. For example, if a decision (or commitment) to mine has been made a subsequent EFS could not relate to the making of that particular decision (or commitment).

## The statutory provisions

### Section 8-1

165. Section 8-1 relevantly provides:

- (1) You can **deduct** from your assessable income any loss or outgoing to the extent that:
  - (a) it is incurred in gaining or producing your assessable income; or
  - (b) it is necessarily incurred in carrying on a business for the purpose of gaining or producing your assessable income.

Note: Division 35 prevents losses from non-commercial business activities that may contribute to a tax loss being offset against other assessable income.

- (2) However, you cannot deduct a loss or outgoing under this section to the extent that:
  - (a) it is a loss or outgoing of capital, or of a capital nature ...

166. Expenditure is deductible under section 8-1 to the extent it satisfies one of the positive limbs contained in paragraphs 8-1(1)(a) or (b) and to the extent it does not come within the negative limbs in subsection 8-1(2).

167. There is a substantial body of case law considering the meaning, scope and application of this provision and its predecessor, subsection 51(1) of the ITAA 1936.

168. Although Australian case law on the deductibility of exploration expenditure under the general deduction provision (now section 8-1) is not extensive, there are a number of cases which are relevant. The following three are discussed in this Ruling:

- *Ampol Exploration*
- *Esso Australia Resources*
- *Griffin Coal Mining Co Ltd v Commissioner of Taxation*<sup>30</sup> (*Griffin Coal*).

169. Although not exploration cases, Hill J's decision in *Goodman Fielder Wattie* is also of relevance in this context, as is Menhennitt J's decision in *Softwood Pulp and Paper Ltd v Federal Commissioner of Taxation*<sup>31</sup> (*Softwood Pulp*). Mention is also made of the recent decision of the New Zealand Supreme Court in *Trustpower Limited v. Commissioner of Inland Revenue (Trustpower)*.<sup>32</sup>

### **Section 8-1: positive limbs**

170. Factual matters are fundamental in determining whether exploration expenditure is deductible under section 8-1.

171. In terms of the first of the positive limbs, an outgoing will not properly be characterised as having been incurred in gaining or producing assessable income, unless it is incidental and relevant to that end.<sup>33</sup> The phrase 'incidental and relevant' in this context refers to the nature or character of the outgoing. The outgoings must be connected with the operations which gain or produce the assessable income.<sup>34</sup>

172. As to the second positive limb, there must be a sufficient nexus between the expenditure and the carrying on of the relevant business.<sup>35</sup> The word 'necessarily' means in the context 'clearly appropriate or adapted for' in the conduct of the business.<sup>36</sup> In *Magna Alloys & Research Pty Ltd v Commissioner of Taxation of the Commonwealth of Australia*<sup>37</sup>, Deane and Fisher JJ expressed the requirement as<sup>37A</sup>:

The controlling factor is that, viewed objectively, the outgoing must, in the circumstances, be reasonably capable of being seen as desirable or appropriate from the point of view of the pursuit of the business ends of the business being carried on for the purpose of earning assessable income. Provided it comes within that wide ambit, it will, for the purposes of [section] 51(1), be necessarily

<sup>30</sup> [1990] FCA 496.

<sup>31</sup> 76 ATC 4439; 7 ATR 101.

<sup>32</sup> [2016] NZSC 91.

<sup>33</sup> *Ronpibon Tin* 78 CLR 47 at [56].

<sup>34</sup> *Ampol Exploration* 13 FCR 545 at [558], per Lockhart J.

<sup>35</sup> *Ampol Exploration* 13 FCR 545 at [558], per Lockhart J.

<sup>36</sup> *Ronpibon Tin* 78 CLR 47 at [56].

<sup>37</sup> [1980] FCA 180.

<sup>37A</sup> 80 ATC 4542 at [4559].

incurred in carrying on that business if those responsible for carrying on the business so saw it.

173. Therefore, identifying the nature and scope of the taxpayer's income-earning operations is critical to determining whether the expenditure exhibits the required nexus or relationship to those operations to be deductible under section 8-1. The characterisation of the facts, rather than the facts themselves, will often be critical in determining if exploration expenditure is deductible.

174. This point is evident in *Ampol Exploration* and *Esso Australia Resources* where the courts considered the nature of the business being conducted by the taxpayer in an exploration context.

175. In *Ampol Exploration* the taxpayer was the Ampol group's exploration company, and entered into several agreements with the Chinese Government to participate in seismic surveys in offshore China to discover possible oil and gas fields.

176. All of the taxpayer's rights under the agreements were assigned to another group company for a fee to be agreed in writing or the taxpayer's costs in connection with the surveys plus a percentage. These rights consisted of no more than a mere possibility that the survey work would lead to rights to bid for further work.

177. The taxpayer was to continue to meet all of the obligations and liabilities under the agreements, including to conduct the seismic survey work. The taxpayer held no tenements or interests in relation to the areas being explored.

178. The taxpayer had no interests from which an income-producing asset could arise.<sup>39</sup> The facts were, therefore, somewhat unusual.

179. However, it was clear that the taxpayer's role in the Chinese venture was perceived to be a commercially sound way of carrying on its exploration business.<sup>40</sup>

180. The scope of the taxpayer's business was critical to Lockhart J's finding (and Burchett J agreeing)<sup>41</sup> that the expenditure was necessarily incurred in the carrying on of the taxpayer's business.

181. Lockhart J said<sup>41A</sup>:

The characterisation of the expenditure, and, therefore, of the outgoing which it represents, is to be discerned from the business activities of the taxpayer generally and its role as the prospecting arm of the Ampol group in the Chinese project in particular. The understanding between the Boards of Ampol and the taxpayer, ... that a benefit, in the form at least of some payment to the taxpayer in the nature of reward or profit, would accrue to it, requires that the question of deductibility should be approached in a practical fashion.

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<sup>38</sup> [Omitted.]

<sup>39</sup> *Ampol Exploration* 13 FCR 545 at [559], per Lockhart J.

<sup>40</sup> *Ampol Exploration* 13 FCR 545 at [559], per Lockhart J.

<sup>41</sup> *Ampol Exploration* 13 FCR 545 at [578].

<sup>41A</sup> *Ampol Exploration* 13 FCR 545 at [560–561].

The whole of the relevant expenditure was incurred in the course of the carrying on of the taxpayer's business of petroleum exploration.

182. A different outcome emerged in the subsequently decided case of *Esso Australia Resources* where the taxpayer was in the business of exploring for, producing, and selling oil and gas, and decided to explore for coal, oil shale and certain other minerals. The Full Federal Court held there that the costs of investigating the acquisition of interests in potential joint ventures for the exploration and mining of coal, oil shale and certain minerals were not deductible under subsection 51(1) of the ITAA 1936.<sup>43</sup>

183. The Full Federal Court agreed that the findings of Sundberg J at first instance<sup>44</sup> were open to him in this case. Sundberg J's findings were that a deduction was not available because the taxpayer was not in the business of exploring for coal and oil shale, or selling the information obtained, nor was it committed to the commercial production of these minerals.<sup>45</sup>

184. Exploration expenditure for activities, and studies, that are preparatory to the commencement of a business will not be deductible as it cannot be said to be incurred 'in carrying on a business'.<sup>46</sup>

185. Similarly, expenditure that is preparatory to a proposed diversification of a business into a new line of trade will not satisfy the positive limbs of section 8-1.<sup>47</sup>

186. When determining whether a new business or new income-earning activity has commenced, the element of commitment is a critical factor. Where the element of commitment is absent, the nexus between the expenditure and the derivation of income will be too tenuous and remote to satisfy the positive limbs in section 8-1.<sup>48</sup>

187. It follows that where a proposal has not gone beyond the stage of considering whether to make a commitment to a business or new income activity, the expenditure incurred to facilitate (including EFS) that decision will not satisfy the positive limbs of subsection 8-1(1). (For example, expenditure in relation to a new mineral that has not previously been mined which does not have a sufficient nexus to the existing income-earning operations of the business).<sup>49</sup>

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<sup>42</sup> [Omitted.]

<sup>43</sup> *Esso Australia Resources* 84 FCR 541 at [551].

<sup>44</sup> See *Esso Australia Resources Ltd (formerly ESSO Exploration and Production Australia Incorporated) v Commissioner of Taxation of the Commonwealth of Australia* [1997] FCA 353.

<sup>45</sup> *Esso Australia Resources* 84 FCR 541 at [551].

<sup>46</sup> See *Softwood Pulp* 76 ATC 4439 at [4451]; *Goodman Fielder Wattie* 91 ATC 4438 at [4448]; *Esso Australia Resources* 98 ATC 4768 at [4781–4782], and *Case 62/94* 94 ATC 520; *AAT Case 9871* 29 ATR 1208.

<sup>47</sup> See *Griffin Coal* 90 ATC 4870 at [4887–4888].

<sup>48</sup> *Esso Australia Resources* 84 FCR 541 at [558].

<sup>49</sup> See, for example, *Esso Australia Resources* 98 ATC 4768 at [4782], *Softwood Pulp* 76 ATC 4439 at [4450–4451].

**Application of positive limbs of section 8-1 to exploration expenditure**

188. In the Commissioner's view searching for, and appraising, minerals will normally be an ordinary operating activity that serves the commercial objective of maintaining and sustaining a business that mines those minerals. This will also be the case for most EFS undertaken within the scope of the miner's existing business.

189. The nature and scope of the business being conducted and the relationship of the expenditure to that business is very significant in determining whether the relevant nexus exists. For example, in a large mining company which undertakes EorP and related evaluative activities as part of its ordinary business activities – in search of new possibilities which are aligned with existing operations – it will typically be the case that expenditure on such activities will be deductible under section 8-1 unless on capital account. The more diversified the business, the less likely the activity would be seeking to open up a new venture or new line of business.

190. It is also the case that exploration expenditure will usually be deductible under section 8-1 if it is clearly connected with an exploration business carried on with a view to generating a profit directly from that effort (for example, by selling exploration tenements and information) or, less commonly, as in *Ampol Exploration*<sup>50</sup>, where there is a connection to assessable income and no lasting advantage is obtained.

191. In addition, an EFS that informs a decision by a large mining company not to proceed to mine the discovered resource can be an integral part of the income-earning process, even though the expenditure does not directly generate assessable income. Deductibility does not depend on the outcome of the expenditure in the sense of the success or failure of what the outlay was intended to achieve.<sup>51</sup> Rather, what is relevant is the nature and character of the outgoing and the presence of a relevant connection with the actual or expected potential income.<sup>52</sup>

<sup>50</sup> 13 FCR 545 at [562], per Lockhart J.

<sup>51</sup> See *John Fairfax & Sons Pty Ltd v Federal Commissioner of Taxation* [1959] HCA 4; 101 CLR 30 at [49], per Menzies J.

<sup>52</sup> See *Spassked Pty Limited v Commissioner of Taxation* [2003] FCAFC 282; 136 FCR 441 at [463–464], per Hill and Lander JJ; *Goodman Fielder Wattie* 29 FCR 376 at [390], per Hill J, citing Dixon J in *Hallstroms Pty Ltd v Federal Commissioner of Taxation*. See also *Ronpibon Tin* 78 CLR 47 at [57] which underscores this proposition:

... it is both sufficient and necessary that the occasion of the loss or outgoing should be found in whatever is productive of the assessable income or, if none be produced, would be expected to produce assessable income.

**Section 8-1: capital limb**

192. Expenditure that satisfies, one of the positive limbs, is only deductible under section 8-1 to the extent it is not capital or capital in nature.

193. In *Hallstroms Pty Ltd v Federal Commissioner of Taxation*<sup>53</sup> (*Hallstroms*) Dixon J observed that determining that an outgoing is either on capital or revenue account depends, on the 'cause or the purpose of incurring the expenditure' and 'what the expenditure is calculated to effect from a practical and business point of view, rather than upon the juristic classification of legal rights, if any, secured, employed or exhausted in the process'.<sup>54</sup> His Honour summarised the principles relevant to the characterisation of expenditure as follows<sup>54A</sup>:

... the contrast between the two forms of expenditure corresponds to the distinction between the acquisition of the means of production and the use of them; between establishing or extending a business organization and carrying on the business; between the implements employed in work and the regular performance of the work in which they are employed; between an enterprise itself and the sustained effort of those engaged in it.

194. In considering the nature of the advantage sought by making the outlay, Fullagar J remarked in *Colonial Mutual Life Assurance Society Ltd v Federal Commissioner of Taxation*<sup>56</sup> (*CML*) that<sup>56A</sup>:

The questions which commonly arise ...are (1) What is the money really paid *for*?—and (2) Is what it is really paid for, in truth and in substance, a capital asset?

195. Case law<sup>58</sup> indicates that expenditure secures a capital advantage if the real and practical purpose of its incurrence is to establish, replace or expand the profit-yielding subject. Further, expenditure which produces an enduring or lasting benefit or advantage may be regarded as capital expenditure. On the other hand, a working expense that is part of the process of carrying on the business to obtain regular returns has the character of a revenue outgoing. Of course, this practical distinction, being one of judgment is not always clear cut, particularly at the margins, as demonstrated in *Ampol Exploration*.

196. In *Ampol Exploration* Lockhart J found that the seismic survey expenditure was not capital in nature as the expenditure could not lead to the establishment of an income-producing asset that the taxpayer could exploit and was not incurred for the purpose of

<sup>53</sup> [1946] HCA 34; 72 CLR 634.

<sup>54</sup> *Hallstroms* 72 CLR 634 at [648].

<sup>54A</sup> *Hallstroms* 72 CLR 634 at [647].

<sup>55</sup> [Omitted.]

<sup>56</sup> [1953] HCA 68; 89 CLR 428.

<sup>56A</sup> *CML* 89 CLR 428 at [454].

<sup>57</sup> [Omitted.]

<sup>58</sup> For example, see *Goodman Fielder Wattie*.

creating or enlarging the business structure.<sup>59,60</sup> Burchett J also agreed that the expenditure was revenue in nature.<sup>61</sup>

197. Relevant to this conclusion is Lockhart J's general observation about the activities of exploration and prospecting<sup>61A</sup>:

... Exploration or prospecting activities (for example, geological, geophysical or geochemical surveys and appraisal digging) are the kinds of activities in which a prospecting company engages if petroleum is to be found. It is, as the title of the activity suggests, of an exploratory nature. Petroleum may or may not be found; but unless expenses of this kind are incurred it will not be found. Once a proven field has been established other expenses, for example, development drilling or activities in the course of working or establishing a petroleum field will be incurred and *they savour more of a capital nature since the work is done to bring into being a proven capital asset which will be the source of income-producing activity.*

198. It should be observed that Beaumont J was strongly in dissent.

199. He drew a different conclusion on the basis that he thought that the expenditure was made for the purpose of obtaining seismic information and the right to bid for the privilege of possible involvement in the next phase of exploration. This gave rise to assets or enduring benefits and therefore he concluded the expenditure was capital in nature.<sup>63</sup>

200. The different conclusions drawn by Lockhart J and Beaumont J highlight the characterisation of the facts, rather than the facts themselves, will often be critical in the resolution of these issues.

201. An important consideration is that the mere fact that some property right may emerge from the expenditure is not enough to make it capital in nature.

202. Hill J in *Goodman Fielder Wattie* made a number of observations about research and development expenditure incurred after the commencement of the taxpayer's pharmaceutical business in terms of subsection 51(1) of the ITAA 1936.

203. Hill J observed that research and development may be directed towards obtaining patentable rights which could be viewed as being of an enduring kind and for that reason could be seen as being of a capital nature.<sup>64</sup> However, he said the fact that property rights were obtained from incurring the expenditure was not determinative of the character of the expenditure. Rather he referred to Dixon J's comments in *Hallstroms*, that what the expenditure is

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<sup>59</sup> *Ampol Exploration* 13 FCR 545 at [561].

<sup>60</sup> As noted previously, the facts in *Ampol Exploration* were unusual as the taxpayer held no relevant tenements, and there was only a possibility that anything further would flow from the seismic activities undertaken by the taxpayer.

<sup>61</sup> *Ampol Exploration* 13 FCR 545 at [577].

<sup>61A</sup> *Ampol Exploration* 13 FCR 545 at [560].

<sup>62</sup> [Omitted.]

<sup>63</sup> *Ampol Exploration* 13 FCR 545 at [568].

<sup>64</sup> See *Goodman Fielder Wattie* 29 FCR 376 at [390].

calculated to effect from a practical and business point of view rather than the precise legal rights (if any) obtained, will be highly significant in determining the character of the expenditure.<sup>65</sup>

204. *Griffin Coal* highlights another important matter, that ascertaining the real purpose or object for a 'feasibility study' is critical in determining if expenditure for the study is deductible under section 8-1. Of course, as the different judgments in that case attest, identifying the purpose or object of an outlay is a matter of judgment where differences of opinion can reasonably be held.

205. In *Griffin Coal* a taxpayer whose existing business was mining and selling coal, undertook a feasibility study for an aluminium smelter. Ultimately the smelter did not proceed. Initially, there was some prospect the taxpayer would supply coal to the smelter, but this became less likely as time went on, yet the taxpayer continued its interest in the proposed project. The majority of the Federal Court found that the smelter feasibility costs were not deductible under subsection 51(1) of the ITAA 1936 as they related to a new source of income, rather than being under the umbrella of the taxpayer's existing business.<sup>66</sup>

206. In reaching this conclusion the majority<sup>67</sup> agreed with Lee J's findings at first instance<sup>68</sup> that the economic feasibility studies were not just assessments of whether a project could be undertaken, but flowed into site selection, settlement of environmental questions and negotiation of contracts and firm commitments. In this regard, the taxpayer had gone well beyond an incident occurring in the course of the taxpayer's existing business of coal extraction and sale. The activities were found to be clearly directed at bringing about the formation of an asset, being a right of participation in a joint venture for the construction and operation of an aluminium smelter.<sup>69</sup> These findings and conclusions appear to be consistent with a decision having been made by the taxpayer to seek to acquire the right of participation.

207. Notwithstanding that the majority adopted Lee J's findings outlined above, they did not deal with the question of whether the expenditure was capital in nature. Lee J however did consider this aspect and concluded that the expenditure was capital in nature as<sup>69A</sup>:

The object of the expenditure was to establish a new arm of the business of Griffin Coal and a new source of income and the outgoings were stamped with that character accordingly.

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<sup>65</sup> See *Goodman Fielder Wattie* 29 FCR 376 at [390].

<sup>66</sup> *Griffin Coal* 90 ATC 4870 at [4888].

<sup>67</sup> *Griffin Coal* 90 ATC 4870 at [4888].

<sup>68</sup> *Griffin Coal* 90 ATC 4870 at [4888].

<sup>69</sup> See *Griffin Coal Mining Co Ltd v Commissioner of Taxation* [1989] FCA 426 (*Griffin Coal at first Instance*); 89 ATC 4745 at [4760], per Lee J.

<sup>69A</sup> See *Griffin Coal at first Instance* 89 ATC 4745 at [4760].

The outgoings were in the nature of establishment expenses designed to create and secure a lasting advantage and accordingly should be regarded as capital in nature.

208. However, Davies J was in dissent finding that the expenditure did satisfy the positive limbs of subsection 51(1) of the ITAA 1936 in relation to the taxpayer's business of mining and selling coal.<sup>71</sup> He also concluded it was not capital in nature as<sup>71A</sup>:

The expenditure was not itself directed to or appropriate for the acquisition of a capital asset. The activity was too preliminary for that. The time for capital expenditure had not arisen and did not arise.

209. Davies J noted that the case was a marginal one and that the expenditure was incurred in unusual circumstances.<sup>73</sup>

210. *Griffin Coal* also illustrates that where a decision has been made to go ahead with a project to develop a capital asset, feasibility study expenditure, is more likely to take its character from the capital advantage that it secures. Conversely, where the purpose of the expenditure is to determine whether the project 'could' proceed – that is to inform the decision-making process – then it is less likely to be an affair of capital.

211. Care should be taken not to put undue emphasis on judicial decisions in comparable tax jurisdictions where different statutory and administrative contexts were at play. However, in a recent decision of the New Zealand Supreme Court in *Trustpower* it was held that expenditure incurred by a retail electricity supplier in obtaining resource consents or permits in connexion with certain electricity generation projects was on capital account and non-deductible. This was so even though the taxpayer had not committed to any of the projects (and may never do so) and even though the fact of having the permits, and being aware of their terms, would assist the taxpayer to determine whether the projects were feasible.

212. The Court considered the expenditure was directly related to specific projects that would be on capital account if they came to fruition. The projects could not succeed without the resource consents and obtaining them represented tangible progress, or intermediate steps, towards their completion.<sup>74</sup>

213. Though not in a mining or exploration context, the decision is broadly consistent with several approaches taken in this Ruling, that is, that commitment does not provide a bright line for determining the character of expenditure and that expenditure on long-lead items or where the taxpayer has gone 'too far' and is building part of the profit yielding structure will be on capital account.

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<sup>70</sup> [Omitted.]

<sup>71</sup> See *Griffin Coal* 90 ATC 4870 at [4877].

<sup>71A</sup> *Griffin Coal* 90 ATC 4870 at [4872].

<sup>72</sup> [Omitted.]

<sup>73</sup> *Griffin Coal* 90 ATC 4870 at [4871].

<sup>74</sup> *Trustpower* at [3] and [71].

**No presumption exploration expenditure is capital or revenue**

214. It is important to note that *Ampol Exploration* clearly establishes that there is no presumption that exploration expenditure is capital in nature.<sup>75</sup> Regard must be had to the nature of the expenditure in all the facts and circumstances.

215. EFS expenditure will have the hallmarks of a revenue outgoing in a mining business where undertaking such evaluative studies is part and parcel of the business operations which yield profits. From a practical business point of view, expenditure which facilitates the making of a prudent and informed decision about whether or not to proceed with a project to extract a discovered resource can satisfy a recurring need of such a business and exhibit a sufficient connection with its trading operations. If it is part of the process of carrying on the business to obtain regular returns it will have the character of a revenue outgoing. This can be the character of the expenditure notwithstanding that the proposal being evaluated, if implemented, would give rise to the enlargement of the 'profit-yielding subject'.

**Mere production of information not enough for capital characterisation**

216. In considering whether expenditure produces an enduring or lasting benefit or advantage and is therefore capital in nature, the mere fact that the expenditure produces 'information' (for example, from exploration or economic feasibility activities) is not enough of itself to give the expenditure the character of an enduring benefit. If this were not the case, there would effectively be a presumption that all exploration expenditure is on capital account.

**Nature or character of advantage sought rather than whether asset obtained (or not obtained)**

217. Hill J in *Goodman Fielder Wattie* indicated that the essential question is what is the nature or character of the advantage sought, rather than what advantage was ultimately obtained.

218. So, in the case of a mining company, merely investigating and evaluating the commercial or economic viability of various mining opportunities relating to their existing business would not create an enduring benefit in the sense required to make the relevant expenditure capital in nature.

219. This is the case notwithstanding that the evaluation activities may ultimately lead, in some cases, to a commitment to a project, or to acquire, build or construct an asset. It also follows that just because a project does not go ahead, this does not mean that the character of the expenditure cannot be on capital account.<sup>76</sup>

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<sup>75</sup> *Ampol Exploration* 13 FCR 545 at [562].

<sup>76</sup> See, for example, *Softwood Pulp*.

220. The outcome of the expenditure or whether it achieves its purpose is not determinative of its character. For example, an outlay has the character of capital if its purpose is to enlarge the 'profit-yielding' structure: the fact that the project subsequently fails does not prevent the expenditure being of a capital nature.<sup>77</sup> Likewise, expenditure on matters to inform a decision of an existing mining business about whether to commit to a project has the hallmarks of a revenue outgoing even though a favourable decision to commit to the project is ultimately made.

221. Where, however, a decision to mine has been made – that is to proceed with the development of the project, it is more likely the purpose of any EFS expenditure from a practical and business point of view will be to establish or expand the profit yielding structure of the business and will be capital in nature.

### **Expenditure that goes 'too far'**

222. Where activities go beyond evaluation of economic feasibility and commence to erect a framework for commencement of a project or the formation of some future asset, and even if a definitive commitment has not been made to go ahead, the expenditure on such activities will be of a capital nature.

223. In two cases expenditure was thought to have gone beyond mere economic feasibility assessment so as to be clearly directed at the acquisition or construction of some future capital asset (such as a production facility<sup>78</sup> or aluminium smelter<sup>79</sup>). As such, they would also be regarded for the purposes of this Ruling as expenditure from early development or early execution activities.

### **Apportionment section 8-1**

224. Where distinct and severable parts of expenditure are devoted to exploration and other things, it may be possible to divide or dissect the expenditure accordingly. *Ronpibon Tin*<sup>80</sup> suggests that even where a single outlay or charge serves objects indifferently, it may be possible to apportion it on a fair and reasonable basis. This is a far more difficult task. Dissection on the basis of some arithmetical or rateable division may not be possible. In such a case, the nature of the expenditure will be determined by the essential character of the outlay as a whole. Determining the extent to which expenditure is of a particular nature is a question of judgment regarding the relative purposes served by the outlay. To adapt Fullagar J's remarks in *CML* – the essence of the enquiry should ask what is the money really paid for?<sup>81</sup>

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<sup>77</sup> *Griffin Coal at first Instance* 89 ATC 4745 at [4760], per Lee J.

<sup>78</sup> See *Softwood Pulp* 76 ATC 4439 at [4453–4454], per Menhennitt J.

<sup>79</sup> See *Griffin Coal at first Instance* 89 ATC 4745 at [4760], per Lee J.

<sup>80</sup> 78 CLR 47 at [59].

<sup>81</sup> See also *Goodman Fielder Wattie* 29 FCR 376 at [394–395], per Hill J.

**Scope and application of subsection 40-730(1)**

225. Expenditure of a revenue or capital nature may qualify for a deduction under subsection 40-730(1).

226. When former section 330-15 (now subsection 40-730(1)) was introduced, the EM indicated that '[I]t will be made clear that a deduction is allowable under this Division for expenditure on exploration or prospecting, even if the expenditure is in nature revenue expenditure'. And further that the 'existing law intends to allow a deduction for exploration or prospecting expenditure, whether it is on capital or revenue account'.<sup>82</sup>

227. Similar concepts and approaches apply to characterising expenditure for the purposes of section 8-1 and to characterising an activity for the purposes of subsection 40-730(4). In both cases, it is the essential character of the expenditure or the activity (that the expenditure funds) having regard to its real and practical purpose that is determinative. In this regard the significance of what the expenditure or activity is for – from the point of view of the business ends it serves will be critical.

228. Exploration expenditure must be 'on' EorP for minerals to be deductible under subsection 40-730(1). Further, the expenditure must not be excluded from deductibility by either of subsections 40-730(2) or (3). Subsection 40-730(4) covers what EorP means in subsection 40-730(1).

229. The use of the word 'on' compared to an expression such as 'in connection with' signifies that a close connection or a direct relationship between the specified expenditure and the exploration activity is required.<sup>83</sup>

230. Expenditure that has only a tenuous or remote connection with EorP for mineral activities cannot be described as being 'on' EorP.

231. Some EorP activities can occur before a miner acquires an interest in an exploration permit or right where they are not dependent upon holding an exploration permit or right. For example, in some states, aerial surveys that do not require physical access to the land can be undertaken without requiring the consent of the landholder or the holder of an exploration permit or right.<sup>84</sup>

232. However, expenses relating to the acquisition of exploration or prospecting rights are not incurred 'on' EorP as required in subsection 40-730(1) as expenditure on acquiring exploration permits or rights, and any associated costs, are preparatory to, or a

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<sup>82</sup> EM to the Income Tax Assessment Bill 1996 at 95.

<sup>83</sup> See, for example, *Commissioner of Taxation of the Commonwealth of Australia v Mount Isa Mines Ltd* [1991] FCA 59; *Robe River Mining Co. Pty Ltd v The Commissioner of Taxation* [1989] FCA 334; 21 FCR 1 at [12] and *QCT Resources Ltd v Commissioner of Taxation* [1997] FCA 405; 97 ATC 4432 at [4441].

<sup>84</sup> See, for example, section 155A of the *Mining Act 1978* (WA).

prerequisite of, being able to carry out the EorP activities in subsection 40-730(4). Examples of this expenditure include:

- (a) survey fees to check the mineral claims area
- (b) advertising to comply with mining regulations
- (c) attending court hearings to confirm rights
- (d) payments to holders of tenements for abortive options
- (e) lump sum buying-in and lump sum compensation payments to landlords or other interested parties for long term rights to enter the property
- (f) application fees for exploration licences
- (g) legal costs in connection with (e) and (f) above, and
- (h) cost incurred in negotiating and effecting farm-out and farm-in arrangements.

233. Support for this view is found in *Utah Development Co v Commissioner of Taxation*.<sup>85</sup> In that case, in order to obtain a mining lease over Crown land, the taxpayer was required to pay compensation to the holders of pastoral leases over the land as compensation for disturbance to the land. The court held the amounts were not spent in carrying on mining operations upon a mining property for the extraction of minerals from their natural site, but for the purpose of acquiring a mining property or for the purpose of acquiring the right to use a property as a mining property. The court categorised the payments as being merely preparatory to, or a prerequisite of, the carrying on of prescribed mining operations.

234. Where exploration expenditure serves EorP for minerals and some other object or objects indifferently, all the expenditure will be 'on' EorP for minerals provided it is on such EorP to at least a non-trivial extent, unless dissection or some other reasonable basis of apportionment is possible.

235. Although subsection 40-730(1) does not contain the words 'to the extent' the Commissioner is prepared to accept that apportionment may be made on a fair and reasonable basis, in the same way that the Commissioner has accepted that apportionment is possible under section 40-880 (see paragraphs 24 and 25 of Taxation Ruling TR 2011/6).<sup>86</sup>

236. It is noted that the exclusions in subsection 40-730(2) may operate to prevent what might otherwise have been deductible under subsection 40-730(1).

<sup>85</sup> 75 ATC 4103; (1975) 5 ATR 334.

<sup>86</sup> Contrast the approach taken in *Esso Australia Resources Pty Ltd v Commissioner of Taxation* [2012] FCAFC 5. However, the statutory context of the PRRT is very different to income tax, being a 'project based tax' and at the time of the decision the relevant deductible expenditure provision required a payment liable to be made in carrying on or providing the operations facilities or other things comprising the project.

**Subsection 40-730(3) exclusion**

237. To the extent exploration expenditure forms part of the cost of a depreciating asset it cannot be deducted under subsection 40-730(1) (subsection 40-730(3)). However, where exploration expenditure forms part of the cost of a depreciating asset, it may still be immediately deductible under ITAA 1997, where the depreciating asset is first used for EorP (see section 40-80).

238. The cost of a depreciating asset does not include an amount that is deductible under another provision of the ITAA 1997<sup>87</sup> (such as section 8-1) or an amount that is not of a capital nature.<sup>88</sup>

239. Because deductible items (or items that are not capital) cannot form part of the cost of a depreciating asset, in practice much exploration expenditure will not, in the Commissioner's view, be affected by subsection 40-730(3). That is, the Commissioner considers that in the context of an existing mining business, section 8-1 will often apply to provide a deduction for exploration expenditure.

240. Even if, on the facts, subsection 40-730(3) is attracted and exploration expenditure that produces information forms part of the cost of a depreciating asset – MQPI as defined in subsection 40-730(8) is a depreciating asset where it is not trading stock (paragraph 40-30(2)(b)) – it would generally be the case that this asset was itself first 'used' for EorP in the context of an exploration program with the practical result that the expenditure would be immediately deducted, where the requirements in section 40-80 are met. This would be the case, for example, where MQPI was purchased or acquired (for example, by engaging a contractor) and the expenditure was on capital account.

241. Information from EFS within paragraph 40-730(4)(c) does not produce MQPI as defined in subsection 40-730(8). MQPI in terms of subsection 40-730(8) is confined to information about the physical characteristics of an area, rather than information about the economic feasibility of mining minerals once they are discovered. Information generated by a study covered by paragraph 40-730(4)(c) is therefore not a depreciating asset under paragraph 40-30(2)(b) and section 40-80 cannot apply to it. Such expenditure, if not deducted under section 8-1 would fall for consideration as a deduction under subsection 40-730(1) provided it did not form part of the cost of another depreciating asset (for example, one coming later into existence).

242. Expenditure on design and engineering studies will only form part of the cost of any depreciating assets that later come into existence where the expenditure is 'directly connected with holding the asset' (subsection 40-180(3)). The time for testing if the expenditure is included in the cost of a depreciating asset is when

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<sup>87</sup> Section 40-215.

<sup>88</sup> Section 40-220.

the miner begins to hold the asset, which, in this context could be several years after the expenditure has been incurred.

243. Taxation Determination TD 2014/15 observes that whether design expenditure is included in the cost of an asset for the purposes of Division 40 is a question of fact and degree, and will depend in large part on identifying the final shape, features and performance of the particular completed asset.

244. The example in TD 2014/15 includes the scenario where in Year 1 of a research and development activity broad concept designs are developed to enable directors to evaluate the feasibility of proceeding to the detailed design of a vessel, *'but no detailed designs which would allow the construction and testing of the vessel are produced at this stage'* (emphasis added).<sup>89</sup> It is stated that there is considerable uncertainty over the final shape, features and performance of the vessel, so that it is not possible to say that there is a direct connection between the expenditure and the bringing into existence of an asset (the vessel).

245. In the context of mining, design and engineering studies are commissioned to ascertain the economic feasibility of the project as a whole. Individual project assets must be able to function effectively on their own and as part of an integrated project or process. They are studied for feasibility in this context, and not just at the individual asset level. While these studies are often detailed, the final shape, features and performance of the individual assets which will form part of a larger integrated project will usually fall short of the level of detail necessary to bring these assets into existence in their final form, should the miner choose to proceed with the project.

246. The Commissioner takes the approach that, provided a decision to mine has not been made, detailed design and engineering work which is integral to an EFS, but which is not executable (for example, it cannot be built from) will not be regarded as having a direct connection with the bringing into existence of any depreciating assets subsequently constructed or acquired.

### **Meaning of exploration or prospecting in subsection 40-730(4)**

247. The meaning of EorP in subsection 40-730(4) is an inclusive definition which allows the expression to take its ordinary, natural meaning having regard to the context and history of the subsection.

248. The meaning of EorP changed from an exhaustive definition to an inclusive definition in 1997. The EM<sup>90</sup> highlights this was an intentional change to allow the meaning to 'have flexibility to take in, over time, comparable activities that evolve from technological and other changes'.

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<sup>89</sup> See paragraph 7 of TD 2014/15.

<sup>90</sup> EM to the Income Tax Assessment Bill 1996 at 96.

**Ordinary meaning**

249. In *Commissioner of Taxation v Shell Energy Holdings Australia Limited*<sup>94A</sup> (*Shell*), it was found by reference to different dictionary definitions that the ordinary meaning of 'exploration' and 'explore' could in one sense be limited to activities directed to the discovery of petroleum, while in another sense could also encompass activities conducted to evaluate the feasibility of recovering petroleum.<sup>94B</sup> Given this difference, the Court did not find that the interpretation of the relevant Petroleum Acts<sup>94C</sup> was greatly assisted by the ordinary dictionary meanings of those terms.<sup>94D</sup> Ultimately, it was held that the meaning of 'exploration' and 'explore' in the context of the Petroleum Acts was intended to encompass activities directed to evaluating commercial viability based on a consideration of the wider regulatory framework, including the international law position, and the legislative history.<sup>94E</sup> In considering this, the Court had regard to the sovereignty conferred in the Commonwealth in respect of the seabed<sup>94F</sup>, and that there be a consistent regulatory prohibition covering each stage of an offshore petroleum project so that no lacuna might arise in the activities requiring authorisation under the Petroleum Acts.<sup>94G</sup>

249A. This can be contrasted with the decision in *ZZGN and Commissioner of Taxation*<sup>94H</sup> (*ZZGN*), in which it was held after extensive consideration of the legislative history, purpose and context of the *Petroleum Resource Rent Tax Assessment Act 1987* (PRRTAA 1987)<sup>94I</sup> that the meaning of exploration was limited to the discovery and identification of the existence, extent and nature of petroleum and includes searching in order to discover the resource, as well as the process of ascertaining the size of the discovery and appraising its physical characteristics.<sup>94J</sup> This meaning was also held to be consistent with the ordinary meaning of that word found by reference to dictionary definitions.<sup>94K</sup>

250. The findings of the Administrative Appeals Tribunal in *ZZGN* about the meaning of 'exploration' are considered to be equally applicable to the inclusive definition in subsection 40-730(4). That is, the ordinary meaning of exploration or prospecting in the context of subsection 40-730(4) is limited to the discovery and identification of

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<sup>91</sup> [Omitted.]

<sup>92</sup> [Omitted.]

<sup>93</sup> [Omitted.]

<sup>94</sup> [Omitted.]

<sup>94A</sup> [2022] FCAFC 2.

<sup>94B</sup> *Shell* at [18] and [29–31].

<sup>94C</sup> The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* and *Petroleum (Submerged Lands) Act 1982* (WA).

<sup>94D</sup> *Shell* at [31].

<sup>94E</sup> *Shell* at [5] and [34].

<sup>94F</sup> *Shell* at [33].

<sup>94G</sup> *Shell* at [51].

<sup>94H</sup> [2013] AATA 351.

<sup>94I</sup> *ZZGN* at [251–282] and [312].

<sup>94J</sup> *ZZGN* at [317] and [322]. This view of exploration is also expressed at paragraph 4 of Taxation Ruling TR 2014/9 *Petroleum resource rent tax: what does 'involved in or in connection with exploration for petroleum' mean?*

<sup>94K</sup> *ZZGN* at [312].

the existence, extent and nature of minerals and includes searching in order to discover the resource, as well as the process of ascertaining the size of the discovery and appraising its physical characteristics.

251. This ordinary meaning also includes activities that are so incidental to, or so closely connected with, actual exploration or prospecting, as to reasonably be considered part of it. For example, environmental or heritage studies or activities connected with obtaining native title approvals where they are undertaken in preparation for, or as part of, an exploration program can fall within the ordinary meaning in the context of subsection 40-730(4). It also covers marking out an exploration area with posts (pegging) and rent paid to a government on claims.

251A. The history of subsection 40-730(4), in particular the inclusion of paragraph (c), supports this conclusion. It indicates that the precursor to the current paragraph was originally introduced in 1997<sup>94L</sup> to align the law with the Commissioner's long-standing administrative approach (see Taxation Ruling IT 2642 *Income tax: mining exploration and prospecting expenditure*)<sup>94M</sup> of treating certain feasibility studies as exploration or prospecting.<sup>94N</sup> By inserting the words that appeared in subparagraph (c) of that definition, parliament recognised that they were not part of the ordinary meaning of the words 'exploration or prospecting' in the context of subsection 40-730(4). If they had been, there would have been no need for their inclusion.

### ***Specific matters***

252. The items specifically listed<sup>95</sup> in the definition of EorP are express additions that are expansive of the ordinary meaning of exploration or prospecting in the context of subsection 40-730(4) and are not conditioned by it. They are satisfied if the activity meets the legislative description, whether or not it is exploration or prospecting in the ordinary sense of those words in the context of subsection 40-730(4).

253. Activities that are not specifically listed must come within the ordinary meaning of exploration or prospecting in the context of subsection 40-730(4) to be included in the meaning of EorP in subsection 40-730(4) as there is no other basis upon which their eligibility can be determined.

254. For example, since geological mapping is specifically listed at paragraph 40-730(4)(a) it will satisfy the meaning of EorP in subsection 40-730(4) even where it relates to something other than

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<sup>94L</sup> As former paragraph 330-20(1)(c).

<sup>94M</sup> See also paragraph 49 of TR 98/23.

<sup>94N</sup> The EM to the Income Tax Assessment Bill 1996, the Income Tax (Consequential Amendments) Bill 1996 and the Income Tax (Transitional Provisions) Bill 1996 at page 115.

<sup>95</sup> See paragraph 40-730(4)(a) to paragraph 40-730(4)(d).

exploration or prospecting in its ordinary meaning in the context of subsection 40-730(4) (for example, extractive operations). However, a comparable technique to geological mapping that is not listed in one of the paragraphs of subsection 40-730(4), and does not relate to exploration or prospecting in its ordinary meaning in the context of subsection 40-730(4), would not come within the meaning of EorP in this subsection.

255. The other requirements of subsection 40-730(1) and the exclusions to deductibility (for example, subsection 40-730(2)) would need to be considered in determining the deductibility of expenditure in cases such as the geological mapping mentioned above.

***Economic feasibility studies: paragraph 40-730(4)(c)***

256. EFS in paragraph 40-730(4)(c) is a statutory addition to the ordinary meaning of exploration in the context of subsection 40-730(4).

257. In *ZZGN*, it was held that the ordinary meaning of ‘exploration’ in a *PRRTAA* 1987 context did not include ‘ascertaining the viability of developing a resource’<sup>96</sup> or ‘extend to include feasibility studies of the field for future development and production’.<sup>97</sup> This view is considered to equally apply in the context of subsection 40-730(4). That is, the EFS of a discovered resource in paragraph 40-730(4)(c) is a statutory addition to the ordinary meaning of exploration or prospecting in the context of subsection 40-730(4).

258. The Commissioner’s approach has been that an EFS is equivalent to assessing the commercial viability of mining from the perspective of the miner undertaking the studies. Indeed, in practical terms, the ATO has accepted that a broad range of project evaluation expenditure (including feasibility studies, pilot plant, and environmental impact studies) can come within the meaning of paragraph 40-730(4)(c).

259. A literal reading of paragraph 40-730(4)(c) could suggest it is only directed at studies which evaluate the ‘economic feasibility’ of a particular way or ways of extracting and treating a discovered resource. However, this would cause the provision to have a narrower scope than the established practice of the Commissioner which had been to accept that the commercial viability of mining from the perspective of the miner undertaking the studies was relevant, which was clearly not intended. Accordingly, the provision is not considered to be limited in this way, and can include studies directed at both the technical and economic feasibility of the entire mining project from the perspective of the miner.

260. Paragraph 38 of this Ruling outlines a number of matters relevant in interpreting the scope of EFS in paragraph 40-730(4)(c).

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<sup>96</sup> See *ZZGN* at [315].

<sup>97</sup> See *ZZGN* at [322].

<sup>98</sup> [Omitted.]

This list of matters is not intended to be exhaustive. The Commissioner considers that paragraph 40-730(4)(c) should be given a broad ambit that is consistent with its policy intent.

261. The Commissioner considers paragraph 40-730(4)(c) contemplates the making of a full assessment or evaluation of the commercial or economic viability of a mining project to develop a resource, including determining how best to develop it as part of the assessment or evaluation. This would include a range of feasibility studies (both technical and economic or commercial), and relevant environmental or heritage studies.

262. These studies are directed at answering for a miner the question of 'whether to mine', and will often involve considerations of 'how to mine' that can include expenditure on engineering and design work that is required in order to specify the project to a point where the cost, project schedule and risks can be understood with sufficient definition for project participants to assess the economic or commercial feasibility of the project. This is in contrast to activities which are directed to the development or construction of the project itself such as detailed executable engineering and design drawings.

263. This approach is consistent with the nature of EFS, which is to inform a miner regarding the question of 'whether to mine' a particular discovery. This question will most often require consideration of 'how to mine' factors, including the technical feasibility of a possible project and the likely costs.

264. Economic feasibility in paragraph 40-730(4)(c) has a broad compass and refers to the practicability of mining in an economic sense. It covers assessments of the technical feasibility of mining and includes the inputs and feeder studies which are undertaken and integral to the EFS. This would include such things as pilot programs and research and development necessary to determine the economic feasibility of the mining project.

265. Paragraph 40-730(4)(c) is directed at what is economically feasible for the particular miner undertaking the analysis. Therefore, the study should be considered from the point of view of the relevant miner, in their particular circumstances. The provision is not directed at considering if the study would constitute an EFS from the perspective of other miners.

266. It is the character of the study at the time it is implemented that is critical in determining if it is an EFS. Regard should be had to the real and practical object of the activity and what a reasonable person would conclude the study represents, taking into account the perspective, and purposes, of the miner. In this sense, a study that merely touches on the economics of a proposed mine in a trivial way is not within paragraph 40-730(4)(c).

267. However, a study does not satisfy paragraph 40-730(4)(c) simply because a miner considers it does. In this sense the true nature and character of the study must be objectively verifiable having regard to all of the relevant facts and circumstances. In this

regard the test is whether an independent observer or reasonable person would conclude that, in all the circumstances, the real and practical object of the study is the assessment of economic feasibility of mining the discovered resource by the miner. The test is not whether the miner 'needed' to do the study, but rather whether the miner genuinely undertook the study to assess the economic feasibility of the discovered resource.

268. Although a view might be taken on the words of the law that economic feasibility is to be assessed assuming the circumstances of a 'hypothetical' miner, such an approach cannot be operationalised because the characteristics of a hypothetical miner are not specified, and the actual studies miners undertake pertain to whether they (rather than any hypothetical miner) will or will not mine.

269. EFS that 'refine' or 'redo' existing studies to identify more commercially profitable options are not outside the scope of paragraph 40-730(4)(c).

270. If a decision to mine has been made, further feasibility studies will generally relate to whether to continue with or adopt development approaches and will not be covered by paragraph 40-730(4)(c). Such studies relate to 'how to mine' rather than 'whether to mine'. It may, however, be the case, that after a decision to mine has been made (or even after mining has commenced), the venture is suspended or abandoned and the feasibility of mining again reassessed at a later time. This can still come within the provision.

271. EFS, and any analysis and input (feeder) studies to such studies, can be undertaken for a number of different purposes. Such studies will come within paragraph 40-730(4)(c) if, at least to a non-trivial extent, they relate to assessing the economic viability of mining. For example, design work undertaken for costing purposes will satisfy paragraph 40-730(4)(c) even if there are benefits in doing this work for development, were a favourable decision to mine be later made.

272. Matters such as the scale of the operations, the amount of the expenditure incurred or the subsequent application of the product of that expenditure are not of themselves determinative of whether paragraph 40-730(4)(c) applies. For example, a pilot program may involve a substantial investment to determine whether the discovered minerals are commercially recoverable. The amount expended on the study and the scale of the operations may simply reflect the technical complexity of the proposal, the risk involved and the degree of commercial confidence the taxpayer requires before committing to development.

273. However, if the nature of the study addresses specific development topics such as detailed planning issues concerning the design of the mine, these matters are unlikely to fall within paragraph 40-730(4)(c) unless there is also a non-trivial economic feasibility aspect. Even in this situation a deduction will not be available under subsection 40-730(1) if either of the exclusions in

subsections 40-730(2) or (3) applies. If subsection 40-730(1) does not apply, then the expenditure on such a study may be deductible under section 40-830 over the life of the project, rather than immediately deductible at the time it is incurred under subsection 40-730(1).

274. Where the deductibility of EFS expenditure, including the analysis and input (feeder) studies to such studies, is being considered under subsection 40-730(1), the exclusions to that subsection in subsections 40-730(2) and (3) also need to be considered.

275. Expenditure on the following would not be included under paragraph 40-730(4)(c):

- (a) Early development or early execution costs that anticipate a decision to proceed with the project and which may become regret costs if the project does not ultimately proceed. Early development activities go beyond ascertaining economic or commercial feasibility. Such activities could include detailed development engineering and design work (as opposed to engineering and design work for feasibility) execution planning, preliminary site works, or mobilising supply bases.
- (b) The cost of certain project assets that have long-lead times (long-lead assets) which are ordered while commercial feasibility is still being assessed but in anticipation of a decision to proceed. These costs may become regret costs if the project does not proceed.

**Meaning of subsection 40-730(2) – ‘operations in the course of working a mining property’ and ‘development drilling for petroleum’**

276. The exclusion in subsection 40-730(2) applies where expenditure on EorP is also ‘on’ development drilling for petroleum or operations in the course of working a mining property, quarrying property or petroleum field.

277. The approach to the word ‘on’ used in subsection 40-730(1) equally applies in the context of subsection 40-730(2). This means a close connection or a direct relationship between the specified expenditure and the activities in subsection 40-730(2) is required for the exclusion to apply.

278. In addition, there is no requirement for expenditure to be ‘exclusively’, or ‘mainly’ or ‘principally’ on development drilling or on operations in the course of working a mining property<sup>99</sup> in order for the exclusion to apply. Where expenditure serves these activities and some other object or objects indifferently, so that it cannot be dissected or otherwise reasonably apportioned, the exclusion will

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<sup>99</sup> This equally applies to operations in the course of working a quarrying property or petroleum field.

apply if it is at least to some non-trivial extent 'on' the activities outlined in the exclusion. Where the exclusion applies, the expenditure can still be immediately deductible where section 8-1 applies<sup>100</sup>.

### ***Operations in the course of working a mining property***

279. The expression 'operations in the course of working a mining property' was first used in the 1968 rewrite<sup>101</sup> of Division 10 of Part III of the ITAA 1936 when the exclusions were part of the definition of exploration or prospecting. Prior to the 1968 rewrite, the exclusion referred to 'normal development' rather than 'operations in the course of working a mining property.'

280. The EM for the re-write of Division 10 of Part III of the ITAA 1936 stated that the changes were only intended to provide more detail on the classes of expenditure that fell within the provisions<sup>102</sup> and were not intended to disturb the principles of the provisions.<sup>103</sup>

281. In particular, the EM noted that the meaning of exploration or prospecting in the re-write 'did not extend to normal mining operations which were directed towards the extraction of minerals as opposed to the discovery of mineral deposits'<sup>104</sup> as it substantially re-enacted the former meaning of exploration or prospecting which excluded 'normal development' activities.<sup>105</sup>

282. The EM also indicated that the re-write was not intended to narrow the scope of allowable capital expenditure, which specifically included site preparation and related activities that would be regarded as 'normal development' activities, so that these provisions in a practical sense would only apply to activities involved in the extraction process.<sup>106</sup>

283. The legislative history of the provision suggests that, whilst there was a change in wording, the provision continued to refer then (and continues to refer now) to what are essentially development activities on a mining property. This is also wholly consistent with the long established basis of providing an immediate deduction for exploration or prospecting under one provision, while allowing a deduction for expenditure for development and extractive activities over the life of the mine under another provision.

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<sup>100</sup> For example, see Taxation Ruling TR 95/36 *Income tax: characterisation of expenditure incurred in establishing and extending a mine*.

<sup>101</sup> EM to the Income Tax Assessment Bill (No. 2) 1968.

<sup>102</sup> EM to the Income Tax Assessment Bill (No. 2) 1968 at 2.

<sup>103</sup> EM to the Income Tax Assessment Bill (No. 2) 1968 at 23.

<sup>104</sup> EM to the Income Tax Assessment Bill (No. 2) 1968 at 44.

<sup>105</sup> EM to the Income Tax Assessment Bill (No. 2) 1968 at 42.

<sup>106</sup> EM to the Income Tax Assessment Bill (No. 2) 1968 at 24.

***Mining property***

284. A mining property must exist for there to be ‘operations in the course of working a mining property’. Whether a mining property exists is a question of fact to be determined in the circumstances.

285. ‘Property’ has been held<sup>107</sup> to take its ordinary meaning being land over which a private right is held. A mining property is therefore land which a miner can mine or is mining pursuant to a right to do so.

286. The limits of a mining property can be difficult to determine and will be based on the facts and circumstances in each case. A mining property is not co-extensive with the relevant tenement. For example, there may be more than one mining property on a single tenement, and a single mining property may involve more than one tenement.

287. In *Broken Hill*, Kitto J also suggested that: (a) just because a miner was mining part of the tenement it did not mean that the entire tenement was a mining property (for example, where the miner knew that there was no mineral on other parts of the tenement); and (b) adjacent mining tenements may form a single mining property where the workings or ancillary activities on a tenement are expected to spread in due course to other tenements.<sup>108</sup> These are just examples. In any particular case, it would be necessary to take into account all relevant facts and circumstances.

288. A mining property comes into existence when steps have been taken which would stamp the description of mining onto the property.<sup>109</sup> Normal development activities such as site preparation work can stamp the description of mining onto a property. Therefore, a mining property can exist before the physical extraction of minerals has commenced. The High Court in *Broken Hill* made the following observation about when a mining property came into existence for the purposes of former subsection 122(1) of the *Income Tax and Social Services Contribution Assessment Act 1936-1964*<sup>109A</sup>:

There can be no mining property without some activity to attract the description of “mining” to the property. ... Actual mining may not be necessary but steps for mining, at least, must have been taken.

***Working a mining property***

289. The phrase ‘working a mining property’ was considered by the High Court in *Parker v Federal Commissioner of Taxation*<sup>111</sup> (*Parker*)

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<sup>107</sup> See *Broken Hill* 120 CLR 240 at [245], per Kitto J.

<sup>108</sup> *Broken Hill* 120 CLR 240 at [245–246].

<sup>109</sup> Similar considerations are relevant when a mine that has ceased operations is reactivated. It remains a question of fact and degree in all the circumstances whether the activities being undertaken to recommission the mine have stamped the description of mining onto the property.

<sup>109A</sup> *Broken Hill* 120 CLR 240 at [271], per Barwick CJ, McTiernan and Menzies JJ.

<sup>110</sup> [Omitted.]

<sup>111</sup> [1953] HCA 80; 90 CLR 489.

in the context of the former exemption for gold mining income.<sup>112</sup> At issue was whether the taxpayer's activities of crushing and treating minerals extracted from other mines gave rise to income derived from the 'working' of the taxpayer's mining property. Dixon CJ and Taylor J (with Webb J concurring) concluded it did not.

290. In reaching his conclusion, Dixon CJ observed the phrase 'working a mining property' looks to the exploitation of a mining lease or other form of interest in the soil.<sup>113</sup> He also said (emphasis added)<sup>113A</sup>:

The word "working" has, I think, a definite meaning in its application to "mining property". It describes the *working of the thing itself*—not the revolution of the machinery upon it nor the chemical treatment of residues brought upon it. We are not *dealing with a case where from the raising of the ore to the extraction by every available means of the maximum gold content a series of processes is pursued in the working of the mining property in order to win the gold from the soil*.

291. So while a mining lease is exploited by extracting a mineral from the soil, it is not clear what Dixon CJ means by 'a series of processes is pursued in the working of the mining property in order to win the gold from the soil', and whether this could include any development or post-extraction activity. On the agreed facts of the case, there was no such process that Dixon CJ had to consider on the facts before him, as he observed.

292. Taylor J seems to envisage that 'all processes designed for the purposes of recovering gold' may be employed in working a mine, and not just the pure extractive process which takes the gold from the soil. Taylor J said that (emphasis added)<sup>114A</sup>:

... The expression "the working of a mining property... for the purposes of obtaining gold", it seems to me, denotes the exploitation of the soil for the purpose of the recovery of gold. This is not equivalent to the operation of a plant established for the treatment of tailings brought from mining properties, though of course, that operation might well constitute, in appropriate circumstances, one incident in the working of a mining property. *No doubt all processes designed for the purposes of recovering gold may be employed in the working of a mining property as I understand that expression; but it is equally true that some of these processes may be employed commercially and quite independently of the working of a mining property ...*

293. While the exploitation of a mining lease may focus upon extraction of the mineral contained therein, it is not clear that it excludes, for example, what might be termed normal development

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<sup>112</sup> Section 23(o) of the ITAA 1936.

<sup>113</sup> *Parker* 90 CLR 489 at [494].

<sup>113A</sup> *Parker* 90 CLR 489 at [493].

<sup>114</sup> [Omitted.]

<sup>114A</sup> *Parker* 90 CLR 489 at [498].

<sup>115</sup> [Omitted.]

work which is part of the series of processes that are necessary, in order to make the extraction of minerals possible.

294. In *Wade v New South Wales Rutile Mining Co Pty Ltd*<sup>116</sup> Windeyer J while considering a different legislative context observed that 'mining' is predicated on the notion of 'working for the extraction of minerals from the earth', and that the term 'mining' connotes operations both for 'getting at' as well as 'getting out' minerals.<sup>117</sup>

295. There is High Court dicta to the effect that working a mining property may not include development activities. In *Broken Hill*, Kitto J observed that in relation to the meaning of 'mining operations' (emphasis added)<sup>117A</sup>:

*This expression is wider than "the working of a mining property". It embraces not only the extraction of mineral from the soil, but also all operations pertaining to mining ... . Thus it comprehends more than mining in the narrow sense which imports the detaching of lumps of material from the position in which in a state of nature they form part of the soil. It extends to any work done on a mineral-bearing property in preparation for or as ancillary to the actual winning of the mineral (as distinguished from work for the purpose of ascertaining whether it is worthwhile to undertake mining at all) ... .*

296. In the Full Court, Barwick CJ, McTiernan and Menzies JJ agreed with Kitto J that 'mining operations' covers 'work done on a mineral-bearing property in preparation for, or as ancillary to, the actual winning of the mineral.'

297. These judgments suggest that while preparatory work on a mining property such as development work amounts to mining operations, it does not amount to the 'working of a mining property'. The working of a mining property is more limited to what can be called mining in the narrow sense (that is, the extraction or working of the physical asset). However, it should be noted that the Court was considering the meaning of 'mining operations' and not the boundaries of 'the working of a mining property'.

### ***'Operations in the course of'***

298. The reference to 'operations in the course of' is broad enough to include activities for expenditure on normal development in preparation for extraction on a mining property ('in the course of' meaning 'in furtherance of' as opposed to 'during').

299. Although in a different context, support for this approach can be drawn from the way the expression 'in gaining or producing assessable income' in subsection 51(1) of the ITAA 1936 was construed as having the force of 'in the course of gaining or producing

<sup>116</sup> [1969] HCA 28.

<sup>117</sup> The meaning of *bona fide* mining operations in section 70D of the *Mining Act 1906* (NSW).

<sup>117A</sup> *Broken Hill* 120 CLR 240 at [244–245].

<sup>118</sup> [Omitted.]

assessable income'<sup>119</sup> where the phrase was said to 'look rather to the scope of relevant operations or activities and the relevance thereto of expenditure rather than to the purpose in itself.' Further, in subsequent cases<sup>120</sup> reference was made to the consideration of what is, '*... productive of the assessable income or, if none be produced, would be expected to produce assessable income.*'

300. However, the phrase does not refer to activities undertaken before work commences on the process of 'getting at' the minerals from the mining property (for example, what might be referred to as 'pre-development' expenditure).

301. On one view, the exclusion in subsection 40-730(2) could be read to apply only to activities involved in the extraction process. However, this view focuses on 'working the mining property' and does not place any emphasis on the other words in the expression – 'operations in the course of.' If the legislature had intended the exclusion to only apply to the extraction process it could have simply referred to 'working a mining property' rather than using the composite phrase chosen.

302. It is considered that the legislature could not have intended that site preparations or similar development activities designed to 'get at' minerals after a decision to mine has been made, and undertaken pursuant to, and in exploitation of, a mining or production right, would not be excluded from EorP. This is supported by the legislative history and context which suggest the notion that the meaning of EorP does not extend to carrying on mining operations on a mining property for the extraction of minerals (including the preparation of site for such operations) and on buildings, other improvements and plant which are necessary for such operations.

### ***Mine extensions, expansions and augmentations***

303. There is no presumption that activities which answer the description of EorP in subsection 40-730(4) and which occur in relation to a mining property on which exists an established mine, are operations in the course of working that mining property. Everything depends on the particular facts.

304. It is often necessary for a mine to expand over time as minerals are extracted from the soil. In *Mount Isa Mines*, Taylor J in the context of the former mining provisions in former section 122 of the *Income Tax Assessment Act 1936–1949*, observed<sup>120A</sup>:

A mine is not constructed once and for all, it is not static but constantly progresses and grows to enable the winning of minerals to proceed. Sometimes this process goes hand in hand with working operations whilst on other occasions it may be the outcome of deliberate and independent operations designed to render the

<sup>119</sup> See *Amalgamated Zinc (De Bavay's) Limited v Federal Commissioner of Taxation* [1935] HCA 81; 54 CLR 295 at [309], per Dixon J.

<sup>120</sup> Such as *Ronpibon Tin* 78 CLR 47 at [57].

<sup>120A</sup> *Mount Isa Mines* 92 CLR 483 at [489].

underlying minerals more easily accessible or to further plans for the expansion or extension of the mining operations.

305. Broadly the same analysis must be undertaken as to the character of such activities as is undertaken where there is no mining property or no mining property yet.

306. However, where there is an existing property which has attracted mining operations, care needs to be taken to ensure that the activities do not represent development of a mining property, in the sense of operations to get at or get out minerals as opposed to operations for the discovery of minerals or to assess whether their extraction would be economically feasible.

307. The observations of Taylor J in the *Mount Isa Mines* case regarding the nature of development illustrate the issue<sup>121A</sup>:

... it is reasonably clear that, in general, prospecting and exploration work precedes the work of "development" ... . It is probable, however, that work which may broadly answer the description of prospecting, in one sense, may be carried on upon an established mining property for the purpose of determining the best means to be adopted to facilitate the winning of minerals, the existence of which is already known. Such work goes hand in hand with the development of the mining property and should, I think, be regarded as expenditure on development.<sup>123</sup>

308. Where the activity is directed towards the 'getting at' or 'getting out' minerals in relation to the existing mine (development of that mine), it will be an operation in the course of working a mining property. If, however, the activity is genuinely exploratory in its ordinary sense in the context of subsection 40-730(4), or is (or is part of) assessing whether or not a new mine, mine extension or expansion would be economically feasible, then it will not.

309. It will be necessary to determine whether the operation is in the course of working a particular mining property, and what that mining property is. But just because the activity occurs on the same mining property as contains the existing mine will not determine the matter as the activity itself may be exploratory or relate to assessing economic feasibility as opposed to 'getting at' or 'getting out' minerals.

310. The absence of an actual commitment to extend or expand a mine does not mean an activity must be exploratory in nature or directed at feasibility assessment. The nature of the particular activity, and the surrounding circumstances, will be determinative. For example, if the activity involves 'determining the best means to be adopted to facilitate the winning of minerals, the existence of which is already known' this would point to the activity being developmental in

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<sup>121</sup> [Omitted.]

<sup>121A</sup> *Mount Isa Mines* 92 CLR 483 at [489].

<sup>122</sup> [Omitted.]

<sup>123</sup> It is noted the ordinary meaning of exploration in the context of subsection 40-730(4) is not necessarily limited to the discovery of the resource. (See paragraphs 35 and 36 of this Ruling).

nature (unless it was part of an economic feasibility assessment as defined in paragraph 40-730(4)(c)). A development activity would include a case where a commitment exists, as reflected in a mine plan or plans, to develop a tenement progressively (for example, in stages), but would not be limited to such a case.

311. Whether an activity that meets the description of EorP in subsection 40-730(4), and which occurs in relation to a mining property whereupon exists an established mine, is an operation in the course of working a mining property, is a question that can only be answered after consideration of all the relevant facts and circumstances.

312. The factors listed at paragraph 51 of this Ruling can assist in resolving whether an activity is properly regarded as development of an existing mine.

### ***Petroleum field extensions, expansions and augmentations***

313. There is no presumption activities which answer the description of EorP in subsection 40-730(4) and which occur in relation to a petroleum field where there are existing operations to recover petroleum, are operations in the course of working a petroleum field. Everything depends on the particular facts.

314. Where the activity is directed towards the 'getting at' or 'getting out' petroleum (including the development of the petroleum field to recover petroleum), it will be operations in the course of working a petroleum field. If, however, the activity is genuinely exploratory in its ordinary sense in the context of subsection 40-730(4), or is (or is part of) assessing whether or not an extension or expansion would be economically feasible, then it will not.

315. For example, drilling an exploration well in part of a petroleum field (that is outside the known area of the field that will be recovered from under existing operations working that field) to determine the physical characteristics of that part of the field and whether that part of the field should be recovered is not directed at 'getting at' or 'getting out' petroleum and is not an operation in the course of working a petroleum field. However, drilling a development well into a known part of the petroleum field in order to develop the field is directed at 'getting at' petroleum from the field and is an operation in the course of working a petroleum field.

## Appendix 2 – Detailed contents list

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