Australian Accounting Standard **AAS 7**

November 1989

Accounting for the Extractive Industries

Prepared by the **Public Sector Accounting Standards Board** of the **Australian Accounting Research Foundation** and the **Accounting Standards Review Board**

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CONTENTS

AUSTRALIAN ACCOUNTING STANDARD

AAS 7 "ACCOUNTING FOR THE EXTRACTIVE INDUSTRIES"

Citation

1 This Standard may be cited as Australian Accounting Standard AAS 7 "Accounting for the Extractive Industries".

Accounting Standards and Commentary

2 The accounting standards set out in this Standard are shown in bold print. Commentary is shown in normal print immediately after the accounting standard(s) to which it relates, as an aid to the interpretation of the accounting standard(s).

Application and Operative Date

STANDARDS

3 **This Standard:**

(a) **applies to each non-corporate reporting entity in the private sector and each business undertaking in the public sector in relation to the first reporting period that ends on or after 31 December 1989, and in relation to subsequent reporting periods;**

(b) **supersedes Australian Accounting Standard AAS 7 "Accounting for the Extractive Industries" as issued in October 1976 and amended to September 1986; and**

(c) **does not apply to resources of a regenerative nature.**

Statement of Purpose

STANDARDS

4 **The purpose of this Standard is:**

(a) **to specify the accounting treatments for particular transactions and events relating to extractive industry operations; and**

(b) **to require disclosure, in the financial report, of information relating to extractive industry operations;**

so that the financial report provides information that is useful to users for making and evaluating decisions on the allocation of scarce resources.

Application of Materiality

STANDARDS

5 **The accounting standards set out in this Standard shall, in accordance with Australian Accounting Standard AAS 5 "Materiality in Financial Statements", apply to general purpose financial reports where such application is of material consequence.**

COMMENTARY

6 In deciding whether an item is material, its nature and amount usually need to be evaluated together.

Definitions

STANDARDS

7 **For the purposes of this Standard:**

five terms are used to describe different phases of extractive industry operations:

(a) **"exploration" means the search for a mineral deposit or an oil or natural gas field which appears capable of commercial exploitation by an extractive operation and includes topographical, geological, geochemical and geophysical studies and exploratory drilling;**

(b) **"evaluation" means the determination of the technical feasibility and commercial viability of a particular prospect and includes determination of the volume and grade of the deposit or field, examination and testing of extraction methods and metallurgical or treatment processes, surveys of transportation and infrastructure requirements, and market and finance studies;**

(c) **"development" means the establishment of access to the deposit or field and other preparation for commercial production and includes shafts, underground drives and**

permanent excavations, roads and tunnels, advance removal of overburden and waste rock, and drilling of oil or natural gas wells;

(d) "construction" means the establishment and commissioning of facilities including infrastructure, buildings, machinery and equipment for the extraction, treatment and transportation of product from the deposit or field; and

(e) "production" means the day-to-day activities directed to obtaining saleable product from the deposit or field on a commercial scale and includes extraction and any processing prior to sale;

"area of interest" means an individual geological area which is considered to constitute a favourable environment for the presence of a mineral deposit or an oil or natural gas field, or has been proved to contain such a deposit or field;

"economically recoverable reserves" means the estimated quantity of product in an area of interest, which can be expected to be profitably extracted, processed and sold under current and foreseeable economic conditions; and

"life of the area of interest" means the period of time over which the economically recoverable reserves in the area of interest can be expected to be depleted, or the period of time for which, under the terms of a lease or permit, extractive operations in the area of interest may continue, whichever is the shorter.

COMMENTARY

Phases of extractive industry operations

8 In practice, more than one phase of operation can occur at the same time in the same area of interest.

Costs arising from Exploration, Evaluation, Development and Construction:

Carry Forward or Write Off

STANDARDS

9 **Each area of interest shall be considered separately when deciding whether, and to what extent, costs arising from**

exploration, evaluation and development are carried forward or written off.

10 **Costs arising from exploration and evaluation related to an area of interest shall be written off as incurred, except that they may be carried forward provided that rights to tenure of the area of interest are current and provided further that at least one of the following conditions is met:**

(a) **such costs are expected to be recouped through successful development and exploitation of the area of interest, or alternatively, by its sale; and**

(b) **exploration and evaluation activities in the area of interest have not at reporting date reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or in relation to, the area of interest are continuing.**

11 **Costs arising from development related to an area of interest shall be carried forward to the extent that such costs, together with any costs arising from exploration and evaluation carried forward in respect of the area of interest, are expected to be recouped through successful exploitation of the area of interest, or alternatively, by its sale.**

12 **Construction costs which represent the costs of facilities in the nature of depreciable assets shall be accounted for in accordance with Australian Accounting Standard AAS 4 "Depreciation of Non-Current Assets". Construction costs which are not represented by depreciable assets shall be accounted for in the same way as development costs.**

13 **When development continues in an area of interest after the commencement of production in order to gain additional access to, or additional information about the extent of, the economically recoverable reserves, the respective development costs shall be carried forward, subject to paragraph 28.**

14 **Costs carried forward in respect of an area of interest subsequently abandoned shall be written off in the reporting period in which the decision to abandon is made.**

COMMENTARY

15 In the extractive industries, economically recoverable reserves are the ultimate source of revenue. Costs incurred in the exploration phase are directed towards the discovery of such reserves, while

costs in the evaluation phase are directed towards proving the reserves. Costs incurred during the development and construction phases have the purpose of preparing for effective exploitation of the reserves. Each unit of product sold needs to bear its proportionate share of exploration, evaluation, development and construction costs. To this end, it may be necessary to carry forward exploration, evaluation, development and construction costs for subsequent amortisation or depreciation during the production phase. On the other hand, if exploration and evaluation are unsuccessful, this results in a loss which cannot be reversed. The loss needs to be recognised in the financial report, no matter whether the funds for those activities were originally provided out of equity contributions (as, for example, with a newly formed exploration entity), or out of earnings (as, for example, with a entity engaged in production which at the same time continues further exploration and evaluation).

16 The method required to be used by this Standard for determining whether costs arising from exploration, evaluation, development and construction are carried forward or written off is known as the "area of interest method". It permits, subject to certain constraints, the carrying forward of exploration and evaluation costs, so as to achieve as far as possible a proper matching of revenue and related expenses. In most cases, the area of interest will comprise a single mine or deposit or a separate oil or gas field. For any one area of interest, the exploration and evaluation costs are carried forward so long as a reasonable probability of success in that area exists. If the search is unsuccessful or evaluation produces a negative result, the costs associated with the area are written off.

17 In determining whether active and significant operations in, or in relation to, the area of interest are continuing, a temporary interruption of operations because of seasonal or climatic factors or of governmental intervention is not viewed as a cessation of operations.

18 During exploration and, to some degree also, during evaluation, an area may be difficult to delimit. In the development, construction and production phases, the area will have been delimited as the mineral deposit or the oil or natural gas field constituting the economically recoverable reserves.

Accumulation of Costs and Revenues arising from Exploration, Evaluation, Development and Construction

STANDARDS

19 **Costs, both direct and indirect, arising from exploration, evaluation and development activities and specifically related to an area of interest, shall be allocated to that area of interest.**

20 **General and administrative costs shall be allocated to particular areas of interest only to the extent that they can be related directly to operational activities in those areas. In all other cases, they shall be written off as expenses as they are incurred.**

21 **Amounts (including subsidies) received during the exploration, evaluation, development or construction phases which are in the nature of reimbursement or recoupment of previously incurred costs shall be offset against such costs.**

22 **Costs shall continue to be accumulated in respect of an area of interest notwithstanding that its size may contract as operations progress from exploration through evaluation, development, construction and production. When two or more separate and distinct development, construction and production operations arise within the one area of interest, exploration and evaluation costs allocated to the area shall be apportioned equitably between such operations, and each operation shall be accounted for separately from then on.**

COMMENTARY

23 All direct and indirect costs incurred during the exploration, evaluation, development and construction phases, and specifically identifiable with an area of interest, are allocated to that area of interest. In making this allocation, no distinction is drawn between costs incurred within the reporting entity and the cost of services performed by outside contractors or consultants on behalf of the reporting entity. Indirect costs would include, inter alia, charges for depreciation of equipment used in exploration, evaluation, development and construction activities.

24 The costs of acquiring leases or other rights of tenure in the area of interest are classified as exploration, evaluation or development costs depending on the stage in which such leases or other rights are acquired.

25 General and administrative costs related only indirectly to operational activities (such as head office fees, secretarial expenses, salaries and other expenses of general management), are treated as expenses of the reporting period in which they are incurred. Accordingly, they are not apportioned to areas of interest.

26 Consideration needs to be given to whether revenue received during the exploration, evaluation, development and construction phases is

recognised immediately in the profit and loss or other operating statement or whether it is in the first place to be deducted from the respective exploration, evaluation, development and construction costs. In this context it is necessary to distinguish between sales revenue and revenue which, directly or indirectly, represents a recoupment of exploration, evaluation, development and construction costs. In the case of the latter, a deduction from the respective exploration, evaluation, development and construction costs clearly is the appropriate accounting treatment.

27 It is common for an area of interest to contract in size progressively, as exploration and evaluation lead towards the identification of a mineral deposit or an oil or natural gas field, which may prove to contain economically recoverable reserves. In consequence, the question arises whether all exploration, evaluation, development and construction costs incurred in relation to the initial area of interest ought to be accumulated against that area without regard for the contraction of its size, or whether such costs ought to be apportioned between those parts of the area which continue to be the subject of activities, and those parts which have been abandoned. For the purposes of this Standard the first alternative is required.

Amortisation of Exploration, Evaluation, Development and Construction Costs Carried Forward

STANDARDS

28 **Exploration, evaluation and development costs carried forward shall be amortised over the life of the area of interest to which they relate. Amortisation charges shall be determined on a production output basis, unless, in the particular circumstances, a time basis is more appropriate. The basis of amortisation adopted shall be applied consistently from reporting period to reporting period. The rate of amortisation shall not lag behind the rate of depletion of the economically recoverable reserves in the area of interest.**

29 **In calculating amortisation charges, economically recoverable reserves and any development costs still to be incurred shall be reassessed annually.**

30 **Amortisation charges shall be treated as forming part of the cost of production.**

31 **To the extent that costs carried forward have been fully amortised and relate to facilities physically abandoned or of no further use, or to overburden and waste rock removal in areas**

worked out, those costs and the related accumulated amortisation shall be written off the appropriate asset and accumulated amortisation accounts.

COMMENTARY

32 Exploration, evaluation and development costs carried forward need to be charged, by appropriate amortisation, against revenue earned during the production phase. The costs of facilities established during the construction phase which are in the nature of depreciable assets, will be written off by means of depreciation charges made over the useful lives of the assets concerned. It follows from Australian Accounting Standard AAS 4 "Depreciation of Non-Current Assets" that the useful lives are not greater than the expected life of the area of interest for which they are acquired except where any such assets may be transferred to some other area of interest or may have further use not necessarily connected with any particular area of interest.

33 Amortisation based on production output for costs carried forward in respect of an area of interest is determined by apportioning such costs in the ratio of the production output for the reporting period to the total of this output and the economically recoverable reserves at the end of the reporting period.

34 Amortisation based on time for costs carried forward in respect of an area of interest is related to the expiration of time permitted or contemplated for extraction of the economically recoverable reserves. This basis is suitable where production is limited by time, as it would be under a fixed-period tenure of the area of interest. It may also be appropriate, where reserves are so large as to approach an infinite life, to adopt some arbitrary time limit for the purposes of amortisation. However, in most cases, use of the production output basis is most appropriate, because it takes into account variations in the production rate.

35 Whichever basis of amortisation is used, it is necessary to review regularly the latest estimate of economically recoverable reserves. In determining such reserves, due regard needs to be given to:

(a) security of tenure of the area of interest (including special conditions attaching to leases or permits);

(b) the possibility that technological developments or discoveries may make the product obsolete or uneconomical at some future time;

(c) changes in technology, market or economic conditions affecting either sales prices or production costs, with a consequent impact on cut-off grades; and

(d) likely future changes in factors such as recovery rate, dilution rate, and production efficiencies during extraction, processing and transportation of products.

Because some of the factors set out above may act as future constraints, it will often be advisable to put an arbitrary limit on the economically recoverable reserves used in amortisation calculations.

36 The amount of development costs on which amortisation calculations are based, may need to include the estimated future development costs expected to be incurred in respect of the area of interest to which the development costs relate.

Restoration Costs

STANDARDS

37 **Where there is an expectation that an area of interest will be restored:**

(a) the cost of restoration work necessitated by exploration, evaluation or development activities prior to commencement of production shall be provided for at the time of such activities and shall form part of the cost of the respective phase(s) of operations;

(b) the cost of restoration work necessitated by any activities after the commencement of production shall be provided for during production and shall be treated as a cost of production; and

(c) in determining the amount to be provided in any one reporting period, the balance of the provision for restoration costs, after charging against it actual costs incurred to date, shall be reassessed in the light of expected further costs.

COMMENTARY

38 It is frequently a condition of a permit to engage in extractive operations, that the area covered by the permit be restored after the cessation of operations. In any case, it may be policy of the reporting entity involved in the operations to carry out such restoration even if there is no legal obligation to do so. Restoration costs that it is expected will be incurred are provided for as part of the cost of the exploration, evaluation, development, construction or production phases that give rise to the need for restoration.

Inventories

STANDARDS

39 **Inventories shall be recognised at the earliest stage at which materials representing, or expected to be converted by further processing to, saleable product can be measured with reliability and the quantities of such materials can be determined by physical measurement or reliable estimate.**

COMMENTARY

40 In the production phase of extractive operations, materials representing or expected to be converted by further processing to saleable product can accumulate at various stages, and it must be decided if and when such materials ought to be recognised as inventories. For example, in mining, broken ore can collect at the point where ore-breaking first occurs (underground or in the open-cut pit) and on the surface prior to further processing or dispatch; partly-processed product exists during processing (crushing, screening, concentration, beneficiating, smelting or refining); saleable product may exist after processing, but before ultimate sale. Similarly, oil and natural gas may be present in bulk storage at or adjacent to the well-head, and/or in pipelines en route to storage, treatment, or refining facilities.

41 Some reporting entities adopt the practice of recognising, as inventories, only product in a saleable form. This practice has its origin in difficulties in establishing accurate inventory quantities during the early stages of production. Such difficulties can arise: because not all the physical dimensions are accessible, thus making precise calculation or measurement impossible; from inaccuracies inherent in assay, moisture or specific gravity samples; or in continuous process operations, where quantities in circuit cannot be properly determined.

Sales Revenue

STANDARDS

42 **Sales revenue shall not be recognised until the product is in the form in which it is to be sold (that is, no further processing needs to be carried out by, or on behalf of, the vendor) and:**

(a) **the property in the product has passed to the purchaser; or**

(b) **without such passing of property, the product has moved finally from the physical control of the vendor pursuant to an enforceable sales contract; it can be established that the product is for the purchaser's account pursuant to the sales contract; and the vendor, in the event of loss or damage, would have a claim for the sale proceeds against a third party such as a carrier or insurer.**

43 **Where it is probable that the proceeds from the sale of product will vary because the determination of final quantities and/or sales prices is dependent upon assays or other tests after delivery, such proceeds shall be recognised using the most reliable available estimates of quantities and sales prices.**

44 **Proceeds from the sale of product obtained from activities in the exploration, evaluation or development phases shall be accounted for in the same manner as sales of product obtained during the production phase. The estimated cost of producing the quantities concerned shall be deducted from the accumulated costs of such activities and be treated as the cost of product sold.**

Disclosures in the Financial Report

STANDARDS

45 **The following shall be separately disclosed in the profit and loss or other operating statement by way of note or otherwise:**

(a) **the aggregate amount of exploration, evaluation or development costs incurred and written off in the reporting period other than by way of amortisation;**

(b) **the amount charged in the reporting period for amortisation of exploration, evaluation or development costs carried forward, irrespective of how such costs are classified or described in the balance sheet or statement of financial position; and**

(c) **government royalties paid and payable on sales or production for the reporting period.**

46 **The following shall be separately disclosed in the balance sheet or statement of financial position by way of note or otherwise:**

(a) **costs carried forward in respect of areas of interest still in the exploration or evaluation phases, with an explanation that ultimate recoupment of such costs is dependent on successful development and commercial exploitation, or alternatively, sale of the respective areas;**

(b) **costs carried forward in respect of areas of interest in the development phase in which production has not yet commenced, with an explanation that amortisation is not being charged pending the commencement of production; and**

(c) **costs carried forward in respect of areas of interest in which production has commenced, with accumulated amortisation charges being shown separately as a deduction.**

47 **Government subsidies (received and receivable) recognised in the reporting period shall be separately disclosed in the financial report with details, where applicable, of the circumstances in which any such subsidies may become repayable.**

Transitional Provision

STANDARDS

48 **Where the accounting treatments required by this Standard are not already being applied at the date this Standard is first applied they shall be applied retrospectively. Where this gives rise to initial adjustments, the net amount of these adjustments shall, in accordance with paragraph 10 of Australian Accounting Standard AAS 1 "Profit and Loss or other Operating Statements", be adjusted against retained profits or accumulated losses at the beginning of the reporting period in which this Standard is first applied.**