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Synopsis

The distinction between real estate ownership and that of interests in the property is fundamental to the appraisal of mineral properties. This distinction affects the nature and understanding of security of tenure and, consequently, the perception of what constitutes fair value. Legal matters are a particular concern because of their influence on security of tenure, ownership definition and use restrictions. The dynamics of the market and the complex interrelationships between the factors of production define value at a specific point in time for the bundle of rights, interests and assets that constitute a mineral property. Because each mineral property is unique, physically immobile and of a wasting nature, its usefulness to its owner and society must be optimized. The US Appraisal Institute (2001) classified the forces that affect land use as the cultural, political and economic attitudes of society. These forces culminate in laws that often dictate the purposes for doing appraisals. Once the legal definition of the asset is understood, valuers can decide on the valuation process that will support the final valuation approach.

Introduction

One of the consequences of globalizing mine finance is the necessity to apply uniform mineral property valuation standards that are clearly understood and consistently implemented by the global investment community. This paper expounds on the basket of assets and legal rights to consider when valuing mineral properties in South Africa. It starts with a description of how mineral properties and legal rights are classified in South Africa, followed by the reasons why they are valued. The author questions the appropriateness of attaching significantly different values for different purposes of valuation over the same property, which not only discredits the valuation profession, but also the methods chosen for determining such values.

The unique characteristics of the South African mineral property market must be taken into account with the valuation of these assets. These distinct features were identified by Cawood (2004) as: first, the specific constituents of value that distinguish one mineral property from another; second, the impact of state policies and politics on the minerals sector; third, societal values and attitudes to mining; and fourth, the supply and demand dynamics of the mineral property market.

Classification of mineral properties

As with other forms of real estate, the valuation of mineral properties not only involves the analysis of tangible assets, but also a variety of legal rights and restrictions affecting value. In South Africa mineral rights evolved as real property that could be severed and registered separately from land or freehold rights. In addition to this, the State had the right to intervene in the development of strategic minerals by reserving the right to mine certain minerals for itself. This intervention restricted the rights of mineral owners and, by default, decreased their property values. Cawood and Minnitt (1998) summarized these issues and concluded that the complexity of the South African mineral rights ownership regime called for an alternative solution. The unique South African mineral rights regime is poised to change with the new Mineral and Petroleum Resources Development Bill (MPRDB, 2002), which intends to transform the current situation to a regime where private ownership of mineral rights will be replaced with a situation where all mineral rights are owned exclusively by the State. This significant shift in mineral rights ownership is fundamental for valuing mineral properties. Public ownership is generated in response to public demand and effectively replaces real (absolute) mineral ownership with a mineral interest or lease. In future, the

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status of the mineral interest granted by the State as lessor will determine the value to the holder thereof (lessee). Such classification will depend on the legal status of the property.

The Australasian and Canadian definitions for mineral assets can be related to the South African situation, as Table I illustrates. South African mineral properties can be divided into six categories depending on information available, legal status and stage of development. The six categories are as follows:

- ➤ Pre-exploration properties covering mineral rights that have no history of prospecting. This category includes properties that have yielded negative results during earlier exploration programmes. This is not an internationally recognized category, but South Africa's unique system of mixed state- and privately-owned mineral rights requires it. In South Africa a mineral right has always been regarded as an immovable property, which resulted in a need for these rights to be considered in addition to prospecting rights, mining rights or any other agreements over mineral properties
- ➤ Exploration properties are those over which legal rights have been issued in the past. Initial results have proved encouraging but a discovery has not yet been recorded
- ➤ Advanced exploration or pre-development properties are those with a secure tenure in the form of prospecting rights, a discovery recorded, and a preliminary feasibility study that yielded positive results
- ➤ Development properties are those where all legal rights have been secured, a bankable feasibility study completed, and finance for development approved

- ➤ Operating mines are those which have completed their initial development programme and are close to, or have already reached full production
- ➤ Decommissioned mines and properties on care and maintenance have reached the end of their economic or physical lives. This category also includes properties waiting for new technology or improved market conditions to convert current resources into reserves.

Purpose of valuation

Generally, the purposes of mineral property valuations in South Africa can be grouped under two main headings, namely those required by industry and those dictated by government policies, as illustrated in Table II. Industry requires valuations for balance sheets, replacement cost estimates, investment purposes or the definition of existing use value. Governments also have property portfolios to manage, but will mostly require values for taxation or expropriation purposes. These valuation purposes receive attention in this section, followed by a short discussion of government's role in the valuation of mineral properties.

In an efficient market the values for comparable mineral properties would be similar, irrespective of the purpose of the valuations. This is not the situation in South Africa, and Table III illustrates the variation in value for comparable mineral properties where valuations were performed for different purposes.

Tables II and III clearly illustrate that estate duty values are often at the lower end of the range of values for mineral right transactions. These are significantly lower than other values, mainly because change of ownership occurs through

Table I				
Classification of mineral properties in South Africa				
Asset	Description	Remarks		
Pre-exploration	Include the following: Virgin territory Nominal value areas Prospective geology with no history of prospecting Explored areas but negative results	Privately-owned mineral rights and registered as property in the South African Deeds Office		
Exploration	Above category, plus Positive exploration results but insufficient information for a resource statement	In line with VALMIN and CIMVAL definitions		
Advanced exploration/ pre-development	Sufficient information for a resource statement Pre-feasibility stage Bankable feasibility study indicating negative results (retention phase) Properties on care and maintenance Properties subject to advanced exploration	In line with VALMIN definition for pre-development properties and CIMVAL definition for mineral resource property		
Development	 Project finance secured Positive development but project not yet operating at design levels 	In line with VALMIN and CIMVAL definitions		
Operating Mine	Fully commissioned and in production	In line with VALMIN definition for an operating mine and CIMVAL definition for production property		
Decommissioned Mine	Reached the end of its life under current market conditions and technology Properties on care and maintenance Physically closed			

Sources: VALMIN (1998) and CIMVAL (2002)

Table II

South African (mineral right) values from 1990
onwards

onwards				
Purpose	Average value	Remarks		
Sales transactions	R4 237/ha	Mineral rights only (full share)		
Transfer duty value	R4 641/ha	Mineral rights only (full share)		
Expropriation	R3 401/ha	Include land restitution claims		
Mineral lease value (all minerals)	R14 948/ha	Lease value replaces mineral right value, which is incorporated in lease		
Estate duty value	R11/ha	Mineral rights only (full share)		
Land development over state mineral rights	R1/ha	Not to purchase mineral rights, only to compensate state for its permission		

Sources: Personal database, Deeds Office, and Department of Minerals and Energy

Table III Discrepancy in valuations done for different purposes

Farm no.	District	Date	R/Ha	Purpose
408JR	Pretoria	1998	0.89	Estate duty
408JR	Pretoria	1996	41.37	Transfer duty
522IQ	Potchefstroom	1996	10.00	Estate duty
522IQ	Potchefstroom	1998	2599.09	Transfer duty
416IP	Potchefstroom	1986	1800.00	Transfer duty
315JS	Middelburg	1997	0.99	Estate duty
315JS	Middelburg	1998	1556.31	Sales transaction

Source: Personal database

inheritance and the 'transaction' is therefore not market-related. In many cases these mineral rights do not host established mines and are declared nominal for taxation purposes. The nominal value (often R1/ha) does not adequately take into account the future economic potential of the property, but it does assist in reducing the tax liability to an absolute minimum. It will be interesting to analyse future values over the same properties for Capital Gains Tax purposes, because it will no longer be in the taxpayer's long-term interest to undervalue mineral rights in order to minimize short-term taxes.

Industry purposes

Industry requires valuations for ensuring that acquisition, disposal and restructuring strategies add value to the company and to its shareholders. Industry value-adding purposes often overlap government policies. For example, when neighbouring mines are not economic as stand-alone businesses and are separately ring fenced for income tax purposes, the 'fence' could be removed in terms of section 36(7F) of the Income Tax Act No. 58 of 1962. Such removal is particularly relevant when the mines are owned by the same corporate structure, which means that they can share infrastructure and management, thereby reducing costs and consequently operate at a lower pay limit.

State policies

Government policies deal with taxation, expropriation and the granting of legal rights over mineral properties. The Impact of State policies is significant and because of their magnitude and collective burden, they need to be carefully analysed. This section summarizes the impact of the various policy instruments affecting mineral properties.

There is little doubt that the State's policies and laws impact on mineral property value. Besides the legal interests that need to be taken into account, mine development is also constrained by government statutes. The government can intervene in the identification of leaseholders, the way the minerals are produced, security of tenure, health and safety, and the split of rents among non-government stakeholders (Cawood, 2001). The government also intervenes through its fiscal policy by taxing income and capital gains generated by mineral development. From a minerals' perspective, the two foremost state departments are the Departments of Minerals and Energy and of Finance. Other state departments, for example Water Affairs, Tourism and Environmental Affairs, also have a role to play, especially when deciding on environmental costs and valuing projects in the event of more than one land use competing for the same property.

The Department of Finance is responsible for tax policy (National Treasury Division) and, administration (South African Revenue Services Division-SARS) of the Income Tax Act. A continuous problem experienced by SARS involves valuation aspects, ranging from declared values for import/export duty and Value-Added Tax (VAT) purposes to derived mineral property values for estate/transfer duty and CGT purposes. All mineral property valuation issues are referred to the Department of Minerals and Energy for scrutiny before SARS apply the required rate of tax to the taxable amount. Despite the information in the CGT Act on valuation issues, a policy on the valuation of mineral properties for capital gains tax purposes has not yet been effected.

The Directorate: Mine Economics of the Department of Minerals and Energy is responsible for valuing mineral assets and legal rights in terms of:

- ➤ The Expropriation Act No. 63 of 1975
- ➤ Mineral or land development over state mineral rights
- ➤ The Transfer Duty Act No. 40 of 1949
- ➤ The Estate Duty Act No. 45 of 1955
- ➤ With the introduction of capital gains tax, DME officials also audit valuations prepared by owners of these properties before SARS decide on the taxable gain.

Effective values in terms of Income Tax Act

'Effective values' are required in terms of section 37(4) of the Income Tax Act No. 58 of 1962 and refer to 'an effective value in the hands of the purchaser', when transfer of ownership occurs. In theory the effective value should correspond with the sales price and the value declared for income tax purposes. However, complications arise when transactions are not impartially implemented (usually expressed in terms of 'arm's-length'), during asset swaps, and when shares of a company are traded. The Department of Minerals and Energy determines effective values for assets that change ownership and make recommendations to the

Commissioner of the South African Revenue Services in respect of the amount subject to taxation. The assets that need valuation for determining the effective value are listed in Table IV and are discussed later. In addition to the effective value, the total value for redeemable and non-redeemable assets is calculated, as well as the declared historic capital expenditure on these assets.

Expropriation

The Expropriation Act No. 63 of 1975 requires a valuation when any property or legal right is expropriated by the state. In order to prevent unrealistic claims caused by unreasonably high mineral reserve estimates and profit forecasts, the courts favour the market value of mineral rights. In other words, the amount for which mineral rights of similar value could be purchased elsewhere. This preference for defining value resulted in valuers applying the market approach for valuation before considering the potential income to the owner derived from future mineral sales.

Land claims

Chapter 2 of the Constitution (1996) deals with Restitution of Land Rights Claims. Persons or a community can claim restitution of a right in land when they were dispossessed of their rights on the basis of racial discrimination after 19 June 1913. These provisions do not apply to any rights in land expropriated, if just and equitable compensation was paid at the time of expropriation. Subsequent events led to the establishment of a Commission on Restitution of Land Rights, which is responsible for investigating the merits of claims, mediation, settlement of disputes arising from claims, and administering the Restitution of Land Rights Act No. 22 of 1994.

Land claims over mineralized land are complex, especially when current (or future) mining or prospecting activities are in conflict with surface land use. This is illustrated by means of a hypothetical case study of a claim to land on which a surface mine is located. In the event of a valid claim there are two possible solutions, namely the property is transferred to the community who lodged the claim or compensation is paid to them. Should the community prefer compensation, a value for the land is required. In such a case the mineral rights are separated from land rights and do not influence the compensation value. However, things are not so clear-cut because traditional valuations for surface mines indicate that the mineral rights value has a definite impact on land value and vice versa. In extreme cases a nominal value is sometimes assigned to either mineral rights or land, while an inflated value is assigned to the other. The problem is exacerbated when there is one owner for both land and mineral rights, in which case there is no clear split in the value.

Township development

The permission of the mineral rights owner is required when developing a township on any land. Whenever such permission is obtained on privately-owned mineral rights, a sale's price is negotiated and a transaction recorded. Although a letter of permission allowing township development is the only requirement, the land development effectively rules out mine development, which makes disposal of the mineral rights more feasible for the owner.

However, when the State is the owner of the mineral rights, permission for development is the preferred option. In return for this permission, the State normally expects compensation, which amount is determined by the DME valuation section.

Transfer duty

In terms of the Transfer Duty Act No. 40 of 1949, a tax on the transaction amount is payable when properties change ownership. Depending on the nature of the property, it may change hands for several reasons. For example, freehold ownership may change for land development, while mineral rights, leases or prospecting rights may change ownership for mine development.

Estate duty

The Estate Duty Act No. 45 of 1955 governs taxes on inherited mineral rights, properties, servitude rights and mineral leases. The experience is that these values are significantly different from those recorded during sales transactions, as illustrated in Table III.

Capital Gains Tax (CGT)

The introduction of CGT in terms of Schedule Eight of the Income Tax Act started a new era as far as the valuation of mineral properties is concerned, because it is no longer in the taxpayer's best interest to undervalue legal rights to limit short-term taxes. CGT and the issues governing the valuation of assets for CGT purposes were promulgated by the Eighth Schedule to the Income Tax Act No. 58 of 1962, introduced by the Taxation Laws Amendment Act No. 5 of 2001, the amendments effected by the Revenue Laws Amendment Act No. 19 of 2001, and the amendments effected by the Second Revenue Laws Amendment Act No. 60 of 2001.

The Eighth Schedule defines assets as follows: 'asset' includes-

- ➤ property of whatever nature, whether movable or immovable, corporeal or incorporeal
- ➤ a right or interest of whatever nature to or in such property

Any of three methods may be used to determine the 'base cost' for CGT purposes. The three methods are:

- ➤ Market value of the property as at the valuation date of 1 October 2001
- Time apportionment base cost (base cost is then considered as the original purchase price plus all capital expenses before 1 October 2001) and
- ➤ 20 per cent of the proceeds.

Market Value

The open market value of an asset is the best price at which an interest in the asset would have been sold unconditionally for a cash consideration on the date of value assuming:

- ➤ 'A willing buyer
- ➤ 'Prior to the date of valuation, there had been a reasonable period for the proper marketing
- ➤ 'No account is taken of any additional bid by a prospective purchaser with a special interest
- ➤ 'Both parties to the transaction had acted knowledgeably, prudently and without compulsion

Eight Schedule to the Income Tax Act No. 58 of 1962

When a market value is elected, the owner has until 30 September 2003 to supply the Commissioner of Revenue with a valuation. The Act does not specify who will be considered competent for valuing properties for CGT purposes, but makes provision for an adjustment of the valuation should the Commissioner not be satisfied with the valuation. There are special requirements for mineral rights, for which the Commissioner requires the following information:

- ➤ The valuation report, with supporting information and calculations
- Description of the mineral right and its registration details at the Deeds Office
- ➤ Location and extent of mineral right
- ➤ Original costs for the mineral right
- Prospecting results, mineral(s) of economic interest, reserve and resource statement, and a life of mine (where applicable).

Transfer pricing

The international expansion of activities by South African mining companies since democracy in 1994, led not only to increased volumes of international trade for multinationals, but also increased complexity in the range of producer products, beneficiated products and services rendered by connected parties. As the globalization of business activity continued to accelerate, SARS recognized the need to protect the South African tax base against harmful transfer pricing practices. Prior to the amendment to the Income Tax Act of 1962 in 1995, the South African income tax legislation never contained any specific provisions aimed at countering transfer price manipulations, mainly because exchange controls have historically provided protection against manipulation of prices. Section 31 of the 1995 Amendment Act empowers the Commissioner to 'adjust' prices (to arm'slength) where necessary. SARS also issued a guide document setting out the procedure and considerations for establishing transfer prices in South Africa. The guide document (Practice Note No. 7 of 1999) favours the arm's-length principle, which it is argued, will minimize the potential for double taxation and the distortion caused by exchange rates and other governmental regulations.

Mineral and Petroleum Resources Development Bill

The new Bill gives extensive definitions for old-order rights, which definitions are summarized for the reader's convenience in Table IV. Old order-legal rights can be classified under prospecting, mining or unused old-order

rights. The table shows that all privately-owned mineral rights and almost all consents, rights or permissions granted under current and previous legislation, whether used or not, are included in the 'old-order' category. As mentioned earlier, to date privately-owned mineral rights were registered property rights. These rights therefore enjoy constitutional protection. It is not yet clear how the DME will deal with this issue, which has the potential to spark significant conflict between the legal owners of mineral rights, the DME administering mining rights over these properties, and prospective mineral developers who want to gain access to mineralized land. The mineral right ownership issue will most probably be referred to the Constitutional Court for a judgement in this respect.

For active holders of old order rights who want to continue conducting business, conversion to the new order is the only sensible option. Failure to convert means automatic cession of the old order right. There is also the option of claiming compensation when rights are alienated from registered owners. Many of these rights are registered as immovable property at the South African Deeds Office and enjoy constitutional protection. Therefore, fair compensation can be claimed upon their expropriation. When claiming compensation, holders must submit the following information:

- Current market value, with sufficient information to defend the value
- ➤ Proof of actual loss because of the expropriation
- ➤ Description of the right or property, for example whether or not it is registered in the name of the claimant at the South African Deeds Office
- ➤ The current use of the property
- Any state assistance received during acquisition and ownership of the right or property
- ➤ The transaction amount for which the right or property was originally purchased
- ➤ Any benefits, for example prospecting fees, received for the duration of the right.

The State will use this information to base its decision on whether the claim is valid and on equitable compensation given the circumstances. In its decision, the state must consider:

- ➤ Its obligation to redress past racial discrimination in the allocation of rights
- ➤ Its obligation to effect equitable access to mineral resources

Table IV Classification of old order rights					
Old order mining rights	Old order prospecting rights	Old order unused rights			
Mining lease; Claim license; Mining authorization;	Prospecting permissions;	Any right, entitlement or permission granted; Private MR;			
Consent to mine from private MR owner; Diggers' rights;	Consent to prospect from private MR owner;	Any consent from private MR owner; Diggers' rights;			
Rights granted in former homelands. Valid on the day the new Bill is enacted	Rights granted in former homelands. Valid and active on the day the new Bill is enacted	Rights granted in former homelands. Valid but not active on the day the new Bill is enacted			

Source: MPRDB (2002)

- ➤ The spirit of the Constitution
- ➤ Whether the claimant will continue to benefit from the use of the property.

Assets requiring valuations

Having considered the purposes for which one may value a mineral asset in South Africa, one has to question the appropriateness of having different values for different purposes. The range in values for different purposes discussed earlier cast a doubt over the integrity of the methods used and the person performing the valuation. There is therefore a strong argument for applying the same criteria regardless of the purpose of the valuation and it seems that all valuations should adopt the concept of 'effective value' as entrenched in the Income Tax Act. Table V lists the typical range of mineral property assets that require valuation for the various purposes. Each of these assets is then independently discussed in this section.

Although the bundle of assets comprising a mineral property can each be valued independently, one must not forget that the chief asset, namely the mineral resource in the ground, influences the values for these individual assets. For this reason the total value of the property is seldom calculated as the sum of the individual assets. The key consideration during the valuation process is the potential value of the resource, as reflected by its likely income potential derived from the reserve statement. The stage of development and legal status is therefore very important because mineral properties are classified as wasting assets. The Royal Institution of Chartered Surveyors (RICS, 1995) defines wasting assets as 'fixed assets which, when consumed, cannot be renewed in the existing location.'

Real property

Freehold (land) rights

Freehold legal rights deal with land (farm) values only and exclude all land development, but include (surface)

agreements over the property. These rights do not warrant a detailed discussion for the purpose of this paper because their valuation requires specialist input from a valuer experienced in valuing land.

Mineral rights

The mineral right is one of the most important legal rights to value during mineral property valuations because it represents the economic potential of the geological orebody. The mineral reserve reporting and classification in terms of SAMREC (2000) are essential for determining this value. Whereas Australia and Canada have systems of public ownership of mineral rights, South African property laws have developed to the extent that the mineral rights can be separately registered as real property. This has a major impact on valuation practice, because the mineral right (property) value must be considered in addition to the project value. The mineral ownership situation is set to change with the government's new mineral policy, which seeks to transfer mineral right ownership to a system of exclusive state ownership, in line with international norms. This policy has an expropriation connotation because sections 2(1) and (2), read with section (25), of the Constitution clearly states that no one may be deprived of property and should expropriation occur, fair and just compensation will be payable.

Mining rights

The DME currently grants mining rights in terms of section 9

- ➤ Real estate: 'Physical land and appurtenances attached to the land, e.g. structures'
- ➤ Real property: 'All interests, benefits, and rights inherent in the ownershi of physical real eastate; the bundle of rights with which the ownership of real estate is endowed'
- ➤ Easements: 'An interest in real property that transfers use, but not ownership'

Table V Mineral asset valuation in South Africa			
Nature of value	Purpose of value	Assets to value	
Effective value	Industry requirements JSE listing/Financing Mergers Sales transactions Property swaps State policies Income tax Transfer duty Estate duty Expropriation Land claims	Legal rights in land Freehold (land) rights Surface right permitsa Contracts and agreements Legal rights for mine development Mineral rights Prospecting contracts Mining rights Tribute agreements Environmental rights and obligations Information Geological boreholes and records Survey plans, maps and records Technology on mine Mine infrastructure Mine development, including shafts Plant, machinery and equipment Surface mine dumps and tailings dams Stockpiles Vehicles, conveyors and transport routes Buildings and structures	

of the Minerals Act No. 50 of 1991. Holders of mining authorizations prefer to register these rights at the Deeds Office for greater security of tenure, hence explaining the classification as real property. The economic terms and conditions are contained in the mineral lease agreement, which is a separate agreement between the mining company and the owner of the mineral rights. An owner's permission is a compulsory requirement for a mining right and gives rise to the term Expected Value, as reflected in the terms of many agreements (lease monies, royalties, etc.) covered by the mineral property.

Mine development, including shafts

Shafts and orebody development in good operating condition are valuable real estate. Shaft values are affected by conditions of use, hoisting capacity, age, general condition (wear and tear), degree of obsolescence, standard of maintenance, condition of headgears and replacement costs. The value of development depends on how well the orebody is uncovered and is usually based on historical costs.

Plant, machinery and equipment

Issues that need to be considered in valuing the above are technology, age, general condition (wear and tear), standard of maintenance, state of obsolescence and replacement value. The standard practice is to divide them into working sections and then to value each section separately. For example, a typical gold plant can be divided into conveyors, crusher, mill, filter, leach, lime, thickeners, recovery and cyanide sections.

Surface rock dumps and tailings dams

Apart from the economic potential of the rock and mineral concentrations, they also have value in a sense that they are established designated areas for dumping (unwanted) material, and such areas may be extremely difficult to replace in the event of a shortage of available land. Like all other categories of mine property, the valuation must take into account the environmental and social risks when assigning values. Examples are air and water pollution originating from dumps and tailings dams in or near built-up areas, structural failure, acid mine drainage and spontaneous combustion of coal dumps.

Stockpiles

A stockpile of mineral production gives security of supply in times of labour unrest or when production targets are not met. They therefore have assurance value.

Vehicles, conveyors and transport routes

These are assets associated with the transport of men and material, but also include underground conveyor belts, scraper winches, locomotives and winder ropes.

Buildings and structures

This category includes the value of mine offices (including furniture), workshops (including tools and equipment), stores (including stock on hand), domestic housing facilities (including mine hostels), as well as fittings to buildings. These values are normally based on estimated replacement

costs less depreciation. For mine houses serviced by the local municipality, due consideration is given to municipal values, demand for housing, and prices.

Easements

Surface Right Permits (SRP)

Some mines are situated on what was previously known as Proclaimed Land, which in terms of previous legislation (Act No. 20 of 1967 and Transvaal Act No. 35 of 1908), the use of the surface was controlled through a system of Surface Right Permits (SRP). The permits were strong legal rights and were issued in perpetuity, which means that they are still valid today, despite the abolition of the laws that governed them. The consequence is that 'land' can trade today without a change in surface ownership because the surface area will fall inside the SRP area.

The split in land ownership and surface right use, together with the fact that SRPs are such strong legal rights, has resulted in surface right permits frequently being allocated the same value as the land value. A surface right permit should not be confused with a servitude right, which is a separate right of access granted to its holder by the owner of the freehold rights. Examples of the use of such surface right permits include electric power lines and their access roads, underground cables and pipelines, etc. No change in land ownership occurs, but the owner is restricted in what he or she may do within the servitude area. The strategic importance of the servitude to the mineral property owner decides whether these rights add value to the property or not.

Contracts and agreements

Contracts that allow for, among other things, greater security of tenure, unrestricted use of land, water, transport routes or electricity supply under favourable terms and conditions, production agreements, favourable outsourcing agreements, marketing arrangements and labour agreements, add value to the project and should be visible in the overall valuation. Contracts and agreements also include DME authorizations for the removal of boundary pillars, permission to undermine surface structures and participation rights for the use of existing (nearby) infrastructure, for example two mines sharing the same plant.

Prospecting contracts

The DME grants prospecting rights in terms of section 6 of the Minerals Act No. 50 of 1991. Mineral right owner's permission and prospecting rights granted by the DME are valuable legal rights because without these, exploration companies will not have access to the land and the mineral resource. One may also include mining claims issued in terms of previous laws (the now repealed Mining Rights Act No. 20 of 1967 and its predecessors) in this category. Although it is no longer possible to obtain mining claims, these legal rights were initially issued in perpetuity and can only expire in the event of non-payment of the annual claim fees. Claims were issued for precious stones, e.g. diamonds, precious metals, e.g. gold, base metals on crown land, e.g. manganese, other metals associated with precious metals, e.g. copper, and even sometimes for industrial minerals, e.g. clay.

Tribute agreements

Sometimes it may be more feasible for the owner of a mine to tribute a mine, a section of a mine or even a specific mineral zone to another party in exchange for some consideration, which compensation could be in equity, mineral royalty or any other arrangement mutually agreed upon.

Other assets

Environmental rights and obligations

Environmentally compliant mineral properties with approved and up to date environmental programmes and whose reclamation bonds are in good standing, trade at a premium in comparison to those that pose high environmental risks.

Geological boreholes and records

The costs of surface and underground geological boreholes that provide valuable knowledge about the resource normally feature in the overall value, especially for exploration properties.

Survey plans, maps and records

The costs for acquiring survey field data, processing such data and compiling plans, maps and sections of the property, can be considerable. Survey information therefore has considerable value because these records are accumulated over many years, are important when establishing the extent of orebody depletion and are required by the mineral laws.

Technology on mine

These technologies give mining companies an advantage over competitors. Examples are cooling plants (including ventilation shafts and fans), transport technologies, processing and refining technologies.

Conclusions

In this article we considered valuation issues for mineral properties in South Africa. The range of mineral properties were classified in six different groups, namely preexploration, exploration, advanced exploration, development, operating and decommissioned mines. The legal status of any property as fundamental to categorizing a property was argued. A mineral property in South Africa can be valued for many purposes, which can be grouped into valuations for industry purposes and those commanded by state policies. It was illustrated that traditionally a wide range in the values is assigned to mineral properties, with values assigned for tax purposes being significantly less than those for the market. However, this discrepancy is about to be corrected with the introduction of capital gains tax. In future it will no longer be in the taxpayer's long-term interest to undervalue properties for a short-term saving on the tax payment.

Finally, the author discussed the bundle of assets comprising a mineral property. Such assets are grouped under real property, easements and other assets. Legal status, ownership definition, restrictions in use and government interference in mineral properties are fundamental because these define the degree of security of tenure afforded to investors. It is difficult to attach a value to legal assets since historically such values have been overshadowed by the income potential of mineral properties. There is a concern that the current range of values for comparable mineral properties but valued for different purposes, is unacceptably wide. The wide range can be attributed mainly to a lack of reliable data pertaining to mineral property transactions, to the absence of a code for best valuation practice, and to insufficient guidelines on who is competent to value mineral properties in South Africa.

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