

# Mining in Chrissiesmeer wetland and state custodianship

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## **Abstract**

A mining right was granted in 2006 to Black Gold Coal Estates (Pty) Ltd by the then Department of Minerals and Energy to conduct open cast coal mining activities in the middle of the ecologically sensitive Chrissiesmeer wetland in Mpumalanga. Notwithstanding vehement and continuous opposition by affected parties, information of inevitable pollution and destruction of a part of the wetland, the MEC of the Mpumalanga Provincial Government supported the mining by approving environmental authorisations. As the *National Water Act* 36 of 1998 and the *Mineral and Petroleum Resources Development Act* 28 of 2002 appointed the state as custodian of water and mineral resources in South Africa, the question arose if and how state organs should have complied with their fiduciary duty as state custodian in promoting conservation and protecting biodiversity. After analysing the guidelines contained in legislation and case law, the study concluded that the executives disregarded their duty as state custodian and failed to apply the prescribed national environmental management principles.

## **Keywords**

State custodianship, environment, fiduciary duty, stewardship, public trust, property regime, natural resources, mining, biodiversity, wetlands, water, environmental management principles, future generations, organs of state, administrative action.

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## Chapter 1

### 1 Introduction

#### 1.1 *Background to the study and the problem statement*

South Africa's National Development Plan 2030 (hereafter NDP)<sup>1</sup> acknowledged the importance of water conservation in the province of Mpumalanga as follows:

There is an urgent need for a coherent plan to ensure the protection of water resources and the environment in the Mpumalanga coalfields.<sup>2</sup>

While the objectives of the NDP are directed at the protection of natural resources for current and future generations and envisage that the executive will focus on protecting the interests of all the people of South Africa and the country's natural resources, the facts of the real-life case study of Black Coal Gold Estates (Pty) Ltd (hereafter Black Coal) reflect the opposite and necessitate further scrutiny with a specific focus on state custodianship.

On 22 June 2006 the then Department of Minerals and Energy, through its delegated Regional Manager for the Mpumalanga Region, granted a mining right to Black Coal on Portions 4 and 6 of the farm Lusthof 60 IT, Chief Albert Luthuli Municipality, district Carolina. The mining right was issued in respect of the establishment of an open cast coal strip mine on the escarpment area on the above-mentioned farms.<sup>3</sup>

Immediately adjacent to the mining site and to the west thereof, lies Tevrede Pan, measuring 347 hectares, the largest reed pan in the southern hemisphere and one of two permanent wetlands. The Mpumalanga Tourism and Parks Agency (hereafter MTPA) has described the terrestrial biodiversity of Tevrede Pan as 'irreplaceable' in its biodiversity conservation plan which was developed over twelve years.<sup>4</sup> The adjacent areas are known to have 250 wet lakes and pans, forming the habitat of 337 birds of

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<sup>1</sup> National Planning Commission *National Development Plan, 2030* (hereafter NDP 2030).

<sup>2</sup> NDP 2030 179.

<sup>3</sup> Black Coal Estate (Pty) Ltd – a case study regarding the granting of a mining right in the Chrissiesmeer wetland and the effect on biodiversity. Information on file with student.

<sup>4</sup> De Wet 2006 <http://www.mtpa.co.za>.

which 37 appear on the Red Data List of endangered species.<sup>5</sup> The farms surrounding Portions 4 and 6 of the farm Lusthof fall within the declared Chrissiesmeer Protected Area, which excludes the mining site.<sup>6</sup>

Initially the Chief Director: Environmental Services of the then provincial Department of Economic Development, Environment and Tourism refused the application for an environmental authorisation for the consequential listed activities, such as the construction of a pollution control dam and dirt water dam. In considering the environmental authorisation, the Mpumalanga Provincial Government relied in its Record of Decision *inter alia* on the principles contained in section 2 of the *National Environmental Management Act* 107 of 1998 (hereafter NEMA).

Black Coal then lodged an appeal to the Member of the Executive Council (hereafter MEC) of the provincial government of Mpumalanga. The MEC overturned the refusal of the environmental authorisation and allowed the mine to submit an amended Environmental Management Plan in terms of the 2010 Environmental Impact Assessment (hereafter EIA) Regulations.<sup>7</sup> The MEC approved the environmental authorisation to undertake the mining activities, notwithstanding the fact that the Chrissiesmeer wetland had been listed in 2011 as an endangered threatened ecosystem under section 52(1)(a) of the *National Environmental Management Biodiversity Act* 10 of 2004 (hereafter NEMBA).<sup>8</sup>

The approval of the environmental authorisation by the MEC, acting as representative of the state, raises serious questions about, *inter alia*, compliance with the duty contained in section 7 of the *Constitution of the Republic of South Africa*, 1996 (hereafter the *Constitution*)<sup>9</sup> to give effect to

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<sup>5</sup> De Wet 2006 <http://www.mtpa.co.za> 14.

<sup>6</sup> The MTPA is still in the process of having the entire Mpumalanga Lakes District (hereafter MLD) declared a protected environment under s 28 of the *National Environmental Management: Protected Areas Act* 57 of 2003 (hereafter NEMPAA), which would result in having prospecting and mining activities prohibited in an area declared as a protected area in terms of s 48(1)(b) of NEMPAA.

<sup>7</sup> GN 544 in GG 33306 of 18 June 2010.

<sup>8</sup> GN 1002 in GG 34809 of 9 December 2011.

<sup>9</sup> Section 7 of the *Constitution of the Republic of South Africa*, 1996 (hereafter the *Constitution*) provides: "This Bill of Rights is a cornerstone of democracy in South Africa. It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom. The state must respect, protect, promote and fulfil the rights in the Bill of Rights. The rights in the Bill of Rights are subject to the limitations contained or referred to in section 36, or elsewhere in the Bill."

the basic constitutional right to have the environment protected through measures to promote conservation<sup>10</sup> and to strive to attain the objectives of the NDP in the interests of current and future generations. Section 2(4)(o) of NEMA extends such right by providing:

The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.

## **1.2 Research question and objective of the study**

The question this dissertation sets out to answer is whether and to what extent the provincial department should have granted the application in view of its obligation relating to state custodianship<sup>11</sup> in terms of environmental protection when considering the relevant factors presented before it in the EIA process.

## **1.3 Methodology**

In order to arrive at an answer to this question, a critical analysis of the dualistic nature of the concept of state custodianship is necessary. The concept of state custodianship needs to be explicated by reference to the fiduciary nature of custodianship on the one hand, and also to the capacity of the state to manage and dispose of natural resources as part of a new statutory property rights regime on the other. This dualistic, albeit complementary, nature of the concept of state custodianship will be investigated with reference to the development thereof in international law, South African legislation and case law. Once the concept of state custodianship has been explored, the decisions by the provincial department of Mpumalanga to support mining in the Chrissiesmeer wetland, as described in the Black Coal case study, will be scrutinised in paragraph 5 hereof in relation to the duties inherent in state custodianship.

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<sup>10</sup> Section 24(1)(b)(ii) of the *Constitution*.

<sup>11</sup> See principle 15 of the *Rio Declaration on Environment and Development* (1992) 31 ILM 874; *Convention on Biological Diversity* (1992) 31 ILM 818 822; s 3(a) of NEMPAA; s 3 of the *National Water Act* 36 of 1998 (hereafter the NWA); s 3 of the *National Environmental Management: Biodiversity Act* 10 of 2004 (hereafter NEMBA).

## Chapter 2

### 2 State's duty in terms of the concept of state custodianship

#### 2.1 Introduction

We do not inherit the earth from our parents, we borrow it from our children.<sup>12</sup>

The above quote succinctly summarises the ethical scope of state custodianship, but in order to delineate the state's duty in terms of the concept of state custodianship, this chapter will firstly investigate what state custodianship actually is and how it has been developed in South African environmental law.

In order to understand the concept of state custodianship, cognisance should in the first instance be taken of the dualistic nature, as it consists not only of the state's duty to act as public trustee in its fiduciary capacity, but also of its entitlement to own, manage and dispose of natural resources. The entitlement or duty to manage resources has a direct legal impact on the property regime pertaining to water and mineral resources. This chapter therefore firstly deals with the state's stewardship as public trustee and then proceeds to discuss the legal consequences or impact of custodianship on the property law dispensation governing minerals and water as natural resources.

The *Mineral and Petroleum Resources Development Act 28 of 2002* (hereafter MPRDA) created a novel statutory property rights regime infused with stewardship responsibilities,<sup>13</sup> which differs vastly from the common law and statutory regimes which were applicable to mineral rights and landownership prior to the introduction of the concept of state custodianship by the MPRDA. This chapter will investigate the legal impact of state custodianship on the property law regime of minerals. Subsequently the duties of the state created by the aims and regime introduced by the MPRDA, as well as its practical consequences in the mining context, will be analysed. State custodianship has also impacted on the governance of other natural resources as is evident from the South African legislation that regulates water and biodiversity resources. The duties of the state emanating from such legislation influence the interpretation of the extent of state custodianship in environmental law. As international law provides a

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<sup>12</sup> Ratcliffe *Sayings and Quotations* 133.

<sup>13</sup> Van der Schyff *Property in Minerals and Petroleum* 617.

mandatory guide to our domestic laws, the influence of state custodianship in international environmental law will also be discussed.<sup>14</sup> This chapter will conclude with a critical analysis of the duties of the state as custodian, focusing on administrative action impacting on biodiversity.

## **2.2 What is state custodianship?**

The Constitutional Court described the principle of custodianship as a novel concept with no historical roots in the South African legal system.<sup>15</sup> Froneman J confirmed the need to thoroughly examine what this entirely new concept of state custodianship means for our law.<sup>16</sup> The concept of state custodianship or public trusteeship has been described as a stewardship, providing a legal mechanism to ensure that the rights of the nation are protected by vesting such rights in the state as trustee.<sup>17</sup> As it has no roots in the South African legal system, brief reference should be made to the legal history of the analogous public trust doctrine.

The public trust doctrine has its roots in the ancient Roman common law, originating from the practice by fishermen using the communal seashore to dry their nets. The shores, rivers and sea were common to all, to be used by all.<sup>18</sup> The doctrine was later incorporated into the *Magna Carta* and the English common law, with the Crown holding property for the benefit of its subjects.<sup>19</sup> The role of the public trust doctrine in environmental law was proposed by Sax,<sup>20</sup> who introduced the notion of using the public trust doctrine as a tool for judicial protection of natural resources.<sup>21</sup> Redmond<sup>22</sup> describes it as a principle that defines the purpose of government to promote the interests of the general public rather than to redistribute public

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<sup>14</sup> Chapter 6 of the *National Environmental Management Act* 107 of 1998 (hereafter NEMA). The binding effect of international environmental law will be discussed in para 2.10 hereof which defines an international environmental instrument as any international agreement, declaration, resolution, convention or protocol which relates to the management of the environment.

<sup>15</sup> *Agri SA v Minister for Minerals and Energy* 2013 4 SA 1 (CC) (hereafter *Agri SA*) para 105.

<sup>16</sup> *Agri SA* para 105.

<sup>17</sup> Van der Schyff *Property in Minerals and Petroleum* 237.

<sup>18</sup> Blecher and La Tourette 2012 *New Jersey LJ* 1.

<sup>19</sup> Conway 1984 *Envtl L* 622-623.

<sup>20</sup> Sax 1970 *Mich L Rev* 471.

<sup>21</sup> Blackmore 2014 *LEAD* 1

<sup>22</sup> Redmond 2009 *Nat Resour J* 250; Sax *Defending the Environment* 165.

goods from broad public use to restricted private benefit. Barnes<sup>23</sup> describes it as:

a stewardship which encompasses an approach towards problem-solving that includes a long-term perspective, a focus on sustainability and a deliberate attempt to understand and respect the delicate balance of the earth's ecosystem.<sup>24</sup>

Such stewardship has a number of features. First, there is the responsibility towards the environment, secondly the duty to conserve the resource, thirdly the duty to protect resources and lastly the duty towards people in respect of natural resources which may extend to future generations.<sup>25</sup> The concept thus encompasses the notion that natural resources - irrespective of their ownership - form part of an inalienable public trust where the government is the public trustee with a fiduciary responsibility towards every citizen to protect their interests in the environment. In order to establish what it means in South African law, the development of such custodianship in our law needs to be unpacked.

### **2.3 Development of state custodianship in South African environmental law**

The fiduciary context of state custodianship is primarily incorporated in South Africa's jurisprudence by way of section 24 of the Bill of Rights of the *Constitution* which provides:<sup>26</sup>

- (1) Everyone has the right:
- (a) to an environment that is not harmful to their health or well-being; and
  - (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
    - (i) prevent pollution and ecological degradation;
    - (ii) promote conservation; and
    - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

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<sup>23</sup> Barnes *Property Rights and Natural Resources* 104-106.

<sup>24</sup> Barnes *Property Rights and Natural Resources* 105.

<sup>25</sup> Barnes *Property Rights and Natural Resources* 106.

<sup>26</sup> Van der Schyff *Property in Minerals and Petroleum* 233 describes section 24 as a conduit through which the ethical norm of stewardship has found its way into South African law.

The *White Paper on Environmental Management Policy for South Africa*,<sup>27</sup> which formulated the policy on the management of the environment, explicates this right as duties binding the government to its public trust and environmental custodianship obligation.<sup>28</sup> This policy formed the foundation on which NEMA was drafted.<sup>29</sup> The re-codification of the 'environmental right' into the preamble of NEMA, is confirmation that it provides the key framework conduit to fulfil such right.<sup>30</sup> NEMA aims to achieve the protection of the environmental right through the application of a series of fundamental principles which must govern all decisions taken on the environment by an organ of state.<sup>31</sup> One of these principles is that the environment is held in public trust for the people.<sup>32</sup> The state must consider the impact on sensitive ecosystems, such as wetlands, especially where they are subject to developmental pressure.<sup>33</sup> As part of the principle that development must be socially, environmentally and economically sustainable,<sup>34</sup> the precautionary principle requires that negative impacts on the environment and on people's environmental rights must be anticipated and prevented.<sup>35</sup> As will be discussed below, these principles are important factors to be considered when the state's duty as custodian is assessed. Apart from NEMA, other statutes also provide that the state is the custodian of the nation's natural resources. In interpreting these other statutes, every court must promote the spirit and objects of the Bill of Rights.<sup>36</sup>

#### **2.4 Legal impact of state custodianship on the property regime**

The creation of the state's duty to act as custodian of the environment resulted not only in an obligation for the state to act as public trustee in its fiduciary capacity, but also had legal consequences on the property regime of resources. Since the enactment of the *Constitution*,<sup>37</sup> a different approach to the disposal, management and utilisation of the country's

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<sup>27</sup> GN 749 in GG 18894 of 15 May 1998 18.

<sup>28</sup> Blackmore 2015 SAJELP 88.

<sup>29</sup> Blackmore 2015 SAJELP 88.

<sup>30</sup> Kidd *Environmental Law* 32.

<sup>31</sup> Kidd *Environmental Law* 32; s 2(4)(c) of NEMA.

<sup>32</sup> Section 2(4)(o) of NEMA, quoted in ch 1.

<sup>33</sup> Section 2(4)(v) of NEMA.

<sup>34</sup> Section 3 of NEMA.

<sup>35</sup> Section 4(a)(viii) of NEMA; Cooney *Precautionary Principle in Biodiversity Conservation* explains that precaution shifts the balance in decision-making towards 'prudent foresight', in favour of monitoring, preventing or mitigating uncertain potential threats.

<sup>36</sup> Section 39(2) of the *Constitution*.

<sup>37</sup> Promulgated on 18 December 1996 and came into effect on 4 February 1997.

natural resources has found application, as section 24 of the *Constitution* includes the right to have the environment protected for the benefit of present and future generations as a basic human right of the people of South Africa.<sup>38</sup> The primary question to be answered is who 'owns' the natural resources and what form such ownership takes.

The first indication of a new dispensation regarding ownership came with the promulgation of the *National Water Act 36 of 1998* (hereafter NWA), which paved the way for the introduction of this new legal concept of state custodianship by stating:

As the public trustee of the nation's water resources, the National Government, ... must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate.<sup>39</sup>

Viljoen<sup>40</sup> argues that water as natural resource fits the concept of public property or the common law concept of *res publicae*, which includes things that belong to the state, but which are nevertheless dedicated to the use of the general public.<sup>41</sup> With the introduction of the NWA in the post-constitutional era, the changed system implied a reallocation of property rights to natural resources,<sup>42</sup> as the stewardship ethic of public trusteeship was introduced.<sup>43</sup> Viljoen concludes that the concept of public trusteeship referred to in the NWA not merely re-introduces *res publicae* into the South African water realm, but introduces a novel concept where ownership of water resources vests in the national government to be administered on behalf of generations to come.<sup>44</sup> Viljoen also submits that the nation's water resources are publicly regulated by National Government as public trustee and are not privately owned nor regulated in a private property regime.<sup>45</sup> The legal impact of state custodianship on the property regime of water resources is therefore a transfer of ownership in water resources to the state, holding it in a fiduciary capacity.

The *White Paper on a Minerals and Mining Policy for South Africa*<sup>46</sup> declared that the long-term objective is for all mineral rights to vest in the

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<sup>38</sup> Section 24(1)(a) and (b) of the *Constitution*.

<sup>39</sup> Section 3(1) of the NWA.

<sup>40</sup> Viljoen *Water as Public Property* (i).

<sup>41</sup> Viljoen *Water as Public Property* 147 fn 433.

<sup>42</sup> Van der Schyff 2013 *SALJ* 371.

<sup>43</sup> Van der Schyff 2013 *SALJ* 371.

<sup>44</sup> Viljoen *Water as Public Property* 206.

<sup>45</sup> Viljoen *Water as Public Property* 197 - 198.

<sup>46</sup> GN 2359 in GG 19344 of 20 October 1998 para 1.3.6.1.(ii).

state for the benefit of and on behalf of all the people of South Africa. The concept of state custodianship was duly confirmed in the MPRDA which provides in section 3(1) that:

Mineral and petroleum resources are the common heritage of all the people of South Africa and the State is the custodian thereof for the benefit of all South Africans.

For the purposes of this study, the focus will be on the property regime which governs minerals in view of its direct relevance to mining in a wetland, but it is clear from the discussion of water above that the state carries a similar custodianship where water is concerned. In order to understand the impact of the concept of state custodianship on the property rights regime of mineral rights which existed prior to the MPRDA, cognisance must be taken of the pre-existing rights of landowners to the minerals embedded in the soil owned by them.

## **2.5 Property rights regime in minerals prior to the introduction of state custodianship**

In terms of the common law, full ownership of minerals and all entitlements thereto, was granted to the *dominus* or owner of the land. This included ownership of the minerals embedded therein.<sup>47</sup> The entitlement to mine and dispose of minerals could be awarded to the entity that discovered the minerals or reached an agreement with the landowner. Notably, under the pre-1991 mineral law regime, landowners who wanted to mine on their own property, were restricted by statutes regulating the right to mine, such as the *Precious Metals Act* and the two *Precious Stones Acts*.<sup>48</sup> In these instances, landowners were deprived of the entitlement to benefit from the ownership or 'beneficial ownership'<sup>49</sup> subject to compensation in many instances.<sup>50</sup> In *Nolte v Johannesburg Consolidated Investment Co Ltd*<sup>51</sup> the Appellate Division stated:

It is hardly necessary to mention that the severance of the rights to minerals in respect of land from the title of the land is a procedure which has long been recognised in the law of Transvaal.

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<sup>47</sup> Franklin and Kaplan *Mining and Mineral laws* 4.

<sup>48</sup> *Precious Metals Act* 37 of 2005; *Precious Stones Act* 73 of 1964; *Precious Stones Act* 44 of 1924; *Mines and Works Act* 12 of 1911 as amended.

<sup>49</sup> Van der Schyff *Property in Minerals and Petroleum* 42; Badenhorst, Mostert and Pienaar *Silberberg and Schoeman's Law of Property* 23.

<sup>50</sup> Franklin and Kaplan *Mining and Mineral Laws* 2.

<sup>51</sup> *Nolte v Johannesburg Consolidated Investment Co Ltd* 1943 (AD) 295 415.

The *Minerals Act* 50 of 1991 (hereafter the MA), which came into force on 1 January 1992, introduced a new foundation for South African mineral legislation.<sup>52</sup> Section 5(1) thereof reaffirmed the entitlement of the holder of a mineral right, either as landowner or person who has acquired the mineral rights after severance, to dispose of minerals within a statutory framework.<sup>53</sup>

Mineral rights could be separated from the ownership of the land in respect of the whole or a portion of the land, or in respect of a specific mineral or a particular activity, such as the right to prospect. Ownership of mineral rights could separately vest in the state by statute. Mineral rights were classified as real rights *sui generis*,<sup>54</sup> which were binding on all third parties once registered against a title to land in a deeds registry. A landowner could hold the *dominium* in the land under one title and the right to minerals in such land under a separate title, for example by way of a certificate of rights to minerals.<sup>55</sup> The extent of the rights acquired by the holder of a mining right was determined by agreement between the parties. In *Trojan Exploration Co (Pty) Ltd v Rustenburg Platinum Mines Ltd*<sup>56</sup> (hereafter *Trojan*) the court found that vesting of ownership in severed minerals occurred automatically, by operation of law and by virtue of the act of severance.<sup>57</sup>

This private property rights regime did not provide for any custodianship in respect of the mineral resources or a public trusteeship towards the environment. However, when the MPRDA came into effect on 1 May 2004, it introduced a mineral law regime which differs completely from any preceding regime and supersedes the private property regime.<sup>58</sup> The MPRDA and MA have been described as "mutually exclusive".<sup>59</sup>

## **2.6 State's duties created by the aims of the MPRDA**

In 1998, the *White Paper on a Minerals and Mining Policy for South Africa*,<sup>60</sup> which preceded the MPRDA, declared that the long-term objective was for all mineral rights to vest in the state for the benefit of and on behalf of all the

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<sup>52</sup> Van der Schyff *Property in Minerals and Petroleum* 132.

<sup>53</sup> Kaplan and Dale *Guide to the Minerals Act* 5-6, 42.

<sup>54</sup> *Ex parte Pierce* 1950 3 SA 628 (O) para 634C.

<sup>55</sup> Issued in terms of s 70(5) of the *Deeds Registries Act* 47 of 1937.

<sup>56</sup> *Trojan Exploration Co (Pty) Ltd v Rustenburg Platinum Mines Ltd* 1996 4 SA 499 (SCA) (hereafter *Trojan*).

<sup>57</sup> *Trojan* para 543H.

<sup>58</sup> Van der Schyff *Property in Minerals and Petroleum* 175.

<sup>59</sup> *Holcim (South Africa) (Pty) Ltd v Prudent Investors (Pty) Ltd* 2011 1 All SA 364 (SCA) para 23.

<sup>60</sup> GN 2359 in GG 19344 of 20 October 1998.

people of South Africa, thereby giving effect to the aim expressed in the *Constitution* to allow for reform to bring about equitable access to natural resources.<sup>61</sup>

The preamble of the MPRDA gives direction to this transformation by stating:

Acknowledging that South Africa's mineral and petroleum resources belong to the nation and that the state is the custodian thereof

The objects of the Act as set out in section 2 under the heading of Fundamental Principles indicate that those sections form the backbone of the MPRDA and determine the true character and nature of the current regime.<sup>62</sup> The first object<sup>63</sup> is to recognise the principle of state sovereignty over mineral resources as an internationally accepted right and principle of international law, as will be referred to in paragraph 2.7 hereof. The MPRDA should explicitly give effect to the principle of state custodianship<sup>64</sup> and promote equitable access to mineral resources to all the people of South Africa.<sup>65</sup> The expansion of opportunities for historically disadvantaged persons to participate in the mineral industry is also stated as an aim. While promoting economic growth, mineral resource development and the mining industries<sup>66</sup> on the one hand, the Act must also ensure that the resources are developed in an ecologically sustainable manner while promoting social and economic development.<sup>67</sup> Lastly, the MPRDA should promote employment and advance social and economic welfare.<sup>68</sup> Moseneke DCJ described the aim of the MPRDA as to fundamentally transform the mineral and petroleum industry which brought intrinsic changes to the law regulating mining resources.<sup>69</sup>

## **2.7 Property rights regime introduced by the MPRDA**

Section 3(1) of the MPRDA provides as follows:

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<sup>61</sup> Sections 25(3) and (4)(a) and (b) of the *Constitution*.

<sup>62</sup> Van der Schyff *Property in Minerals and Petroleum* 158 fn 88.

<sup>63</sup> Section 2(a) MPRDA.

<sup>64</sup> Section 2(b) of the MPRDA.

<sup>65</sup> Section 2(c) of the MPRDA.

<sup>66</sup> Section 2(e) of the MPRDA.

<sup>67</sup> Section 2(h) of the MPRDA.

<sup>68</sup> Section 2(f) of the MPRDA.

<sup>69</sup> *Minister of Mineral Resources v Sishen Iron Ore Co (Pty) Ltd* 2014 2 SA 603 (CC) paras 82-86.

Mineral and petroleum resources are the common heritage of all the people of South Africa and the State is the custodian thereof for the benefit of all South Africans.

A landowner does not have a claim to the minerals found on his property, as was the case under the common law, because such minerals are regarded as a national asset, which the state regulates and manages it in its capacity as custodian. The common law basis of land ownership is therefore no longer the source of the entitlement acquired by holders of rights in minerals but has been substituted by legislation. The MPRDA extinguished and superseded the private law basis of the mineral law regime.

The property law regime created by the MPRDA has given rise to opposing views from scholars. Van den Berg states that section 3(1) of the MPRDA creates uncertainty regarding ownership of unsevered minerals.<sup>70</sup> Badenhorst and Mostert argue that mineral resources cannot be owned by the nation or the people of South Africa since they are not legal subjects in either public or private law.<sup>71</sup>

Van der Schyff writes that three guiding principles may assist in obtaining some clarity about the property rights regime introduced by the MPRDA.<sup>72</sup> The preamble states that South Africa's mineral resources belong to the nation and that the state is the custodian thereof, while state sovereignty is recognised over all mineral resources.<sup>73</sup> The fact that section 5(1) of the MPRDA declares a mining right to be a limited real right in respect of the mineral and land to which it relates, supports the notion that unsevered mineral resources are recognised as independent legal objects subject to ownership.<sup>74</sup> The MPRDA has abolished private ownership of minerals.<sup>75</sup> The fact that royalties for extracted minerals must be paid to the state,<sup>76</sup> supports the conclusion that the MPRDA vests ownership of unsevered

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<sup>70</sup> Van den Berg 2009 *Stell LR* 149. He opined that the state acquired public (but not private) ownership of the mineral resources, which enables the state to protect and regulate these resources.

<sup>71</sup> Badenhorst and Mostert 2007 *TSAR* 476-477; also Dale *et al South African Mineral and Petroleum Law* 13-3, 120-122.

<sup>72</sup> Van der Schyff 2008 *TSAR* 757-768.

<sup>73</sup> Section 2(a) of the MPRDA.

<sup>74</sup> The interconnectedness of land and minerals contained in the Roman Dutch maxim *cuius est solum* has thus been abolished. Badenhorst 2001 *Obiter* 127.

<sup>75</sup> *Agri SA* para 80.

<sup>76</sup> Section 2 of the MPRDA.

minerals in the state.<sup>77</sup> However, Glazewski proposes that the landowner remains the owner of the unsevered minerals, subject to the public trust doctrine.<sup>78</sup> Van der Schyff concludes that the country's mineral resources have been declared by statute to be 'the property of the people of the State', thereby creating statutory public property vesting in the state as representative of the nation.<sup>79</sup> The state acts through the Minister of Mineral and Petroleum Resources (hereafter the Minister) as its representative. This study supports the contention that private ownership of unsevered minerals had been abolished by the MPRDA and that mineral resources vest in the state as custodian thereof. The practical consequences and scope of the duties which follow from such custodianship should therefore be analysed.

## **2.8 Practical consequences of the duty of state custodianship in the mining context**

The principle of state custodianship is not defined or explained in the MPRDA, but it is elevated as a fundamental principle by section 3 thereof.

In its capacity as custodian, the state has the power to grant mining rights and levy fees and royalties, while ensuring sustainable development within the framework of the national environmental policy.<sup>80</sup> The transformed dispensation of the MPRDA provides that the state may grant a right to minerals, such as a mining permit or mining right, but subject to an environmental authorisation<sup>81</sup> and the giving of 21 days' notice to the landowner.<sup>82</sup> However, the powers are subject to the environmental management principles as set out in section 2 of NEMA which must serve as guidelines for the implementation of the environmental requirements.<sup>83</sup> The new dispensation contained in the MPRDA is subject at all times to the basic right entrenched in section 24 of the *Constitution* to have the environment protected.

The creation of the One Environmental System (hereafter OES) was directed at obtaining an uniform, co-operative and efficient system of

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<sup>77</sup> Badenhorst and Mostert 2007 *TSAR* 476 concluded that mineral resources became *res publicae*, but cannot vest in the state.

<sup>78</sup> Glazewski *Environmental Law* 17.5.2.2.

<sup>79</sup> Van der Schyff *Property in Minerals and Petroleum* 263.

<sup>80</sup> Section 3(3) of the MPRDA.

<sup>81</sup> Section 5A(a) of the MPRDA; ch 5 of NEMA.

<sup>82</sup> Section 5A(c) of the MPRDA.

<sup>83</sup> Section 37(1) of the MPRDA.

environmental governance and effective implementation of the wide array of environmental laws, but does not detract from the duty of government departments at national, provincial and local levels to adhere to their fiduciary duties as state custodian in the mining context.<sup>84</sup> A critical discussion of the success or failures of the OES falls outside the scope of this study.<sup>85</sup>

Van der Schyff proposes that state custodianship as fundamental principle should serve as a touchstone for all actions undertaken and decisions made in terms of the Act and underpin the interpretation of all the provisions of the Act.<sup>86</sup>

The concept thus encompasses a kind of trusteeship with a fiduciary responsibility to protect the interests of others and of the environment. Since the MPRDA provides that the state must act as custodian and identifies the South African nation as the beneficiary whose interests in the country's mineral resources need to be protected, it follows that the state through its delegated officials has the responsibility to protect the interests of the people of South Africa or the public interest.

All rights which stand to be acquired must therefore be subject to the public interest, as opposed to the individual interests of a company that might benefit from a mining right. This balancing of public interest *vis á vis* private interests is of crucial importance in the case study of mining in the Chrissiesmeer wetland and will be discussed in chapter four hereof. However, it is clear that where the MPRDA provides for the state to act as custodian, it includes the duty to ensure that mineral resources are exploited not only in compliance with the administrative provisions prescribed by the MPRDA, but also in accordance with its obligations as custodian. This obligation is expanded in other legislation, which should add impetus to the fulfilment of the state's role as custodian.

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<sup>84</sup> Glazewski *Environmental Law* 6-22, 6-23 explains that the OES entails (i) all environment related aspects would be regulated through NEMA as principal system, (ii) that all environmental provisions would be repealed from MPRDA, (iii) that the Minister responsible for mineral resources would implement NEMA in mining operations, including the issue of environmental authorisations with the Minister responsible for environmental affairs being the appeal authority, (iv) that fixed timeframes be agreed upon between departments for the issue of authorisations.

<sup>85</sup> For further discussion of the OES, see Van der Schyff *Property in Minerals and Petroleum* 558-559,617; Du Plessis 2015 volume 18 (5) *PELJ* 1446.

<sup>86</sup> Van der Schyff *Property in Minerals and Petroleum* 166.

## **2.9 Concept of state custodianship in other South African legislation**

Apart from NEMA, other statutes, such as the NWA, the *National Environmental Management Protected Areas Act 57 of 2003* (hereafter NEMPAA) and the *National Environmental Management Biodiversity Act 10 of 2004* (hereafter NEMBA) also provide that the state is the custodian of the nation's natural resources. Unfortunately, these statutes differ in some respects where they refer to the capacity of the state as custodian and follow an *ad hoc* approach in referring to the state's responsibility to act as public trustee. But the *Constitution* provides that where they have to be interpreted, of a statute, every court must promote the spirit and objects of the Bill of Rights, of which the environmental right described in section 24, forms part.<sup>87</sup>

In order to reflect on the development of the fiduciary concept of state custodianship, the relevant legislation will be discussed chronologically. As discussed above<sup>88</sup> section 3 of the NWA was the first reference in a statute to state custodianship and paved the way for the introduction of this novel legal concept where it referred to the national government as public trustee of the nations' water resources.

It is the responsibility of the Minister responsible for water affairs to ensure that water is used beneficially in the public interest, while promoting environmental values.<sup>89</sup> Kidd<sup>90</sup> states that the management of water under the NWA is a complex task that involves substantial administration on the part of the state. Since one of the purposes of the Act is to ensure that the nation's water resources are controlled by taking into account the protection of aquatic ecosystems and their biological diversity,<sup>91</sup> the state in its fiduciary capacity as public trustee will have to ensure that its administration and management complies with this objective. Wetlands, such as Chrissiesmeer wetland which forms the focus of this study, are also part of the aquatic ecosystems.<sup>92</sup> If the description by Barnes<sup>93</sup> is applied to the

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<sup>87</sup> Section 39(2) of the *Constitution*.

<sup>88</sup> See para 2.4 of this dissertation.

<sup>89</sup> Section 3(2) of the NWA.

<sup>90</sup> Kidd *Environmental Law* 79.

<sup>91</sup> Section 2(g) of the NWA.

<sup>92</sup> Section 1 of the NWA defines a wetland as "land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil".

<sup>93</sup> See Barnes' description in para 2.2 hereof.

public trusteeship of the state provided for in the NWA, the state has a responsibility towards the environment itself and towards the people who are the beneficiaries of the resources to protect and conserve such resources. The crucial importance of wetlands for the environment and the reasons for their protection in the interests of present and future generations will become clear in the discussion of the case study.<sup>94</sup>

The NWA explicitly provides that as part of the control of aquatic systems, the prevention of pollution and degradation of water resources are also factors which must be taken into account in the management of water resources.<sup>95</sup> Part four of the NWA deals with occasions where pollution of a water resource might occur as a result of activities on land, such as mining. A person in control of land must take all reasonable measures to prevent pollution from occurring.<sup>96</sup> The Department responsible for water affairs regulates water uses, such as the disposal of underground water, through a system of application for water use licences.<sup>97</sup> As mining activities inherently carry a risk of pollution of aquatic systems,<sup>98</sup> the adherence to the concept of state custodianship over both minerals and water resources becomes of paramount importance, as will be discussed in para 2.11 hereof.

The promulgation of NEMPAA further expanded the fiduciary responsibility of the state where it aimed to consolidate all the legislation regarding protected areas in South Africa. NEMPAA does not mention the state as custodian, but provides in section 3 that the state must act as trustee of South Africa's protected areas and implement the provisions in partnership with the people. Protected areas include protected environments such as wetlands. If an area has significant biodiversity, or provides nature-based recreation and tourism opportunities, such area may be declared a protected area. Commercial prospecting or mining in a protected environment is prohibited without the permission of the Minister of Environmental Affairs and the Minister for Minerals and Energy.<sup>99</sup> Unfortunately NEMPAA does not expressly mention wetlands, which fall under the provisions relating to conservation of ecosystems by inclusive

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<sup>94</sup> See ch 4 hereof.

<sup>95</sup> Section 2(h) of the NWA.

<sup>96</sup> Section 19(1) of the NWA.

<sup>97</sup> Sections 21 and 22 of the NWA.

<sup>98</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf>.

<sup>99</sup> Sections 9 and 48 of NEMPAA.

interpretation thereof.<sup>100</sup> In the case study, the surrounding farms fall within the declared Chrissiesmeer Protected area, but the mining site itself is excluded, which adds impetus to the stewardship required of the state and its delegated officials when considering the impact of mining in such a sensitive environment.

Another example of environmental legislation in which the state is referred to as trustee is NEMBA,<sup>101</sup> which also provides in section 3 under the heading 'State trusteeship of biological diversity' that the state must manage and conserve South African biodiversity.<sup>102</sup> Again the Act does not define or explain the trusteeship, but the courts have confirmed and interpreted it as a fiduciary responsibility conferred upon the manager of the resources where the present generation holds the earth in trust for the next generation.<sup>103</sup> Kidd<sup>104</sup> criticises the fact that the text of NEMBA does not expressly mention wetlands, and argues that the symbolic importance of omitting to explicitly single out wetlands for conservation is a missed opportunity,<sup>105</sup> especially for wetlands on privately owned land falling outside protected areas.

The latest in the series of environmental legislation referring to the state as trustee, was the *National Environmental Management Integrated Coastal Management Act 24 of 2008* (hereafter NEMICMA) which provides that the state, through its functionaries and institutions, must act as trustee of the coastal zone.<sup>106</sup>

NEMBA also gives effect to the international agreements affecting biodiversity which South Africa has ratified<sup>107</sup> and which are binding on South Africa. The implication of such ratification is that domestic effect is supposed to be given to the conventions so ratified. The development of

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<sup>100</sup> Section 2(4)(v) of NEMA.

<sup>101</sup> NEMBA came into force on 1 September 2004, except for ss 49, 57, 65, 66, 71 and ch 7, which came into effect on 1 April 2005. Proc R47 in GG 26887 of 8 October 2004.

<sup>102</sup> Sections 3(1)(b) and (5) of NEMBA.

<sup>103</sup> *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* 2007 6 SA 4 (CC) (hereafter *Fuel Retailers*) para 102.

<sup>104</sup> Kidd *Environmental Law* 137.

<sup>105</sup> Kidd *Environmental Law* 137.

<sup>106</sup> Section 3(a) of the *National Environmental Management: Integrated Coastal Management Act 24 of 2008* (hereafter NEMICMA) and s 12(a) which provide that the state, in its capacity as public trustee of all coastal public property, must protect and manage it in the interests of the whole community.

<sup>107</sup> Van der Schyff 2010 *PELJ* 122.

the duty of state custodianship in these conventions as instruments of international environmental law, therefore has to be investigated as well.<sup>108</sup>

### **2.10 State custodianship in international environmental law (with specific reference to biodiversity)**

When interpreting the environmental right contained in section 24 of our Bill of Rights, interpretation consistent with international law should be preferred by the courts.<sup>109</sup> International law therefore provides a mandatory guide to the interpretation of our domestic laws.<sup>110</sup> As the concept of state custodianship has also been developed in instruments of international environmental law, it is important to take cognisance of how it and concepts akin to it are viewed in international law.

As early as 1962, UN Resolution 1803 of 1962<sup>111</sup> stated that the state must regulate the exploitation of natural resources, but that such sovereign powers ought to be exercised in the interests of the state's national development and the well-being of its people.<sup>112</sup> Principle 1 of the 1972 *Stockholm Declaration of the United Nations Conference on the Human Environment*<sup>113</sup> declares:

Man has the fundamental right to freedom and equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears solemn responsibility to protect and improve the environment for present and future generations.

Principle 3 of the 1992 *Rio Declaration on the Environment and Development* (hereafter the *Rio Declaration*) demonstrates the challenge posed to the state as custodian by providing that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.<sup>114</sup> Principle 15 of the *Rio Declaration*<sup>115</sup> forms the basis of the precautionary approach in that it

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<sup>108</sup> Sections 2(b) and 5 of NEMBA.

<sup>109</sup> Section 233 of the *Constitution*; *Glenister v President of the Republic of South Africa* 2011 3 SA 347 (CC) para189; Dugard *International Law* 67.

<sup>110</sup> Section 39 of the *Constitution*.

<sup>111</sup> *Permanent Sovereignty over Natural Resources* GA Res 1803 (XVII) of 14 December 1962.

<sup>112</sup> Section 2(a) of the MPRDA incorporated this principle.

<sup>113</sup> *Stockholm Declaration of the United Nations Conference on the Human Environment* (1972) 11 ILM 1416.

<sup>114</sup> *Rio Declaration on Environment and Development* (1992) 31 ILM 874 (hereafter the *Rio Declaration*).

<sup>115</sup> Principle 15 of the *Rio Declaration* 894.

provides that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The concept of state custodianship in South African law should also be viewed against the traditional Anglo-American public trust doctrine. The core of that doctrine is the principle that state ownership of property is held by a title different in character. American case law<sup>116</sup> describes it as a fiduciary ownership where the *dominium* of the property vests in the sovereign as a representative of the nation. Van der Schyff<sup>117</sup> argues that the Anglo-American public trust doctrine has not been directly incorporated into South African law, but provides a comparable foreign legal institution. The California Court of Appeal recently ruled that the public trust doctrine applies to groundwater resources where local farmers have drilled numerous groundwater wells and pumped ever-increasing quantities of groundwater from aquifers, with devastating effects on the recreational use of the Scott river.<sup>118</sup> The court confirmed the state's duty to take administrative action under the public trust doctrine to prevent environmental damage.

As international agreements become law in South Africa when enacted into law by legislation,<sup>119</sup> the content of certain treaties have to be considered by the state when it acts in its fiduciary capacity. The *Convention on Biological Diversity*<sup>120</sup> which entered into force internationally on 29 December 1993 - and to which South Africa is a party - declares the conservation of biological diversity as a common concern of humankind.

The *Ramsar Convention on Wetlands of International Importance* (hereafter the *Ramsar Convention*)<sup>121</sup> is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.<sup>122</sup> Wise use of wetlands is defined as the maintenance of their ecological character,

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<sup>116</sup> *Shively v Bowlby* 152 US 1 (1894) 32.

<sup>117</sup> Van der Schyff *Property in Minerals and Petroleum* 261.

<sup>118</sup> Frank 2018 <http://legal-planet.org/2018/08/29/california-court-finds-public-trust-doctrine-applies-to-state-groundwater-resources/>.

<sup>119</sup> Section 231(4) of the *Constitution*; *Progress Office Machines CC v SARS* 2008 2 SA 13 (SCA) para 6.

<sup>120</sup> *Convention on Biological Diversity* (1992) 31 ILM 818.

<sup>121</sup> *Ramsar Convention of Wetlands of International Importance* (1972) 11 ILM 963 (hereafter the *Ramsar Convention*).

<sup>122</sup> Mitsch and Gosselink *Wetlands* 43-45.

achieved through the implementation of ecosystem approaches, within the context of sustainable development.<sup>123</sup> Article 3(2) of the *Ramsar Convention* provides that all member countries must include wetland conservation in their natural resource planning, as wetlands make ecological contributions to the global environment by improving water quality, recharging aquifers and functioning as storm buffers. Wetlands also provide food and a habitat for a diversity of local and migratory animals and provide global stability by maintaining acceptable levels of available atmospheric nitrogen, sulphur and carbon dioxide.<sup>124</sup> Article 4(1) of the *Ramsar Convention* states that because wetlands are among the world's most productive environments and are cradles of biological diversity, member countries must establish nature reserves on wetlands within a country's boundaries.<sup>125</sup> States must designate wetlands suitable for listing based on their significance in terms of ecology, botany, zoology or hydrology.<sup>126</sup>

Although South Africa is a party to the *Ramsar Convention*, it has not yet been incorporated in national legislation. A treaty which has been ratified, but not enacted into local law, is binding on South Africa in the international sphere and results in incurring responsibility towards other signatory states. When the President as head of the national executive enters into such an international agreement, formal aspects relating to accession to the treaty are conferred on other members of the national executive.<sup>127</sup> The Minister responsible for environmental affairs is expected to publish the provisions of the international instrument in the *Gazette* and introduce legislation to give effect to such international instrument,<sup>128</sup> pending which the contents

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<sup>123</sup> Beyerlin and Marauhn *International Environmental Law* 182. Article 1(1) of the *Ramsar Convention* defines a wetland as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.

<sup>124</sup> Ramsar Convention Secretariat Date Unknown <https://www.ramsar.org/sites/default/filesdocuments/library/info2007-02-e.pdf>.

<sup>125</sup> Section 26(1)(a)(b) of NEMA explicitly provides that the Minister must report to Parliament annually regarding participation and progress in implementing international environmental instruments to which the Republic is a party.

<sup>126</sup> Dugard *International Law* 60; Article 2(2) of the *Ramsar Convention*: The Conference of the Parties adopted certain criteria from 1980 onwards, which criteria have been revised in 1987, 1996, 1999 and 2005 with Resolution ix.1 Annex B: Revised Strategic Framework and Guidelines for the future development of the List of Wetlands of International importance. Some 1900 wetlands are on the list. Ramsar Convention Secretariat 2018 <https://www.ramsar.org/document/the-list-of-wetlands-of-international-importance-the-ramsar-list>.

<sup>127</sup> *President of the RSA v Quagliani* 2009 4 BCLR 345 (CC) 355C.

<sup>128</sup> Sections 25(2) and (3) of NEMA.

of the treaty may be used to interpret national legislation where it deals with a subject such as the protection of wetlands. As explained in paragraph 2.11 below, it follows that the delegated officials should keep these international guidelines in mind in taking administrative decisions where they act as representatives of the state as custodian – on the one hand holding resources such as water and minerals as custodian, while on the other hand exercising stewardship or trusteeship responsibilities to protect the environment for the benefit of present and future generations.

The question that arises is how the state should fulfil its role as custodian in practical terms, which requires a critical analysis of the role of the state in administrative action under the *Constitution*.

### **2.11 Critical analysis of the duties of the state as custodian**

The *Constitution* provides that the state must respect, protect, promote and fulfil the rights in the Bill of Rights.<sup>129</sup> The right to have the environment protected for the benefit of present and future generations through measures that promote conservation<sup>130</sup> must therefore be promoted by all organs of state.<sup>131</sup> But the state has to act through its bureaucracy to carry out the daily functions of the state. In *Grey's Marine Hout Bay (Pty) Ltd v Minister of Public Works*<sup>132</sup> (hereafter *Grey's Marine*) such daily functions are described as administrative action:

...which necessarily involves the application of policy, usually after its translation into law, with direct and immediate consequences for individuals or groups of individuals.

Administrative action by a state functionary is decided upon by enquiring into the nature of the power such an official is exercising.<sup>133</sup> Administrative action taken by an official - such as a MEC - by virtue of a discretionary power conferred by statute or delegation, must be lawful and reasonable.<sup>134</sup>

NEMA provides for a set of guiding principles which are to be applied consistently when undertaking administrative decisions regarding the use of

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<sup>129</sup> Section 7(2) of the *Constitution*.

<sup>130</sup> Section 24(1)(b)(ii) of the *Constitution*.

<sup>131</sup> Section 2 of NEMA, referred to as administrative action.

<sup>132</sup> *Greys Marine Hout Bay (Pty) Ltd v Minister of Public Works* 2005 6 SA 313 (SCA) para 24.

<sup>133</sup> *President of the RSA v South African Rugby Football Union* 2000 1 SA 1 (CC) para 141.

<sup>134</sup> Section 33(1) of the *Constitution*; Hoexter *Administrative Law* 177.

the environment.<sup>135</sup> A risk-averse approach and anticipation of negative impacts on the environment will be relevant factors to be considered. According to Blackmore,<sup>136</sup> NEMA requires an organ of state to consider four founding conditions when applying its mind to matters concerning the environment. First, it is the role of the state to protect the rights in Chapter 2 of the *Constitution*, reinforcing achievement of the environmental right.<sup>137</sup> Secondly, environmental management<sup>138</sup> includes the compiling of plans and operational frameworks, such as the declaration of protected areas. In these frameworks, the prediction of the consequences and impact of land use changes on biodiversity requires an understanding that environmental impacts manifest differently at different unique locations, such as wetlands.<sup>139</sup> The third condition is that the decision-making process itself requires the safeguarding and application of the principles. The fourth condition ensures that the public trust duties<sup>140</sup> are applied uniformly and without limitation by organs of state, so that the use of environmental resources serves the public interest. Blackmore<sup>141</sup> concludes that any organ of state that is contemplating a decision which may result in the degradation of biodiversity must, as public trust entity, apply all environmental principles, both individually and collectively. He also argues that government is expressly obligated to prevent any individual, such as a mining company, from unsustainably exploiting the environment for private profit or exclusive benefit.<sup>142</sup> Sax<sup>143</sup> argues that the public trust doctrine requires that it be a principal duty of government to rather promote the interests of the general public rather than to redistribute public goods from broad public use to restricted private benefit. Precautionary or preventative measures are therefore required to protect biodiversity and to ensure on behalf of current and future generations that natural resources which are subject to the trust, are not degraded.<sup>144</sup>

In terms of the common law trust principles, the government has a fiduciary duty as trustee and must act in the best interests of the public as

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<sup>135</sup> Section 2(1) of NEMA.

<sup>136</sup> *Blackmore* 2015 *SAJELP* 91.

<sup>137</sup> Section 24 of the *Constitution*.

<sup>138</sup> Section 2(1)(b) of NEMA.

<sup>139</sup> Levin 1992 *Ecology* 1943.

<sup>140</sup> Section 2(4)(o) of NEMA as discussed in para 2.2 above; also supported by Van der Schyff 2013 *SALJ* 385.

<sup>141</sup> *Blackmore* 2015 *SAJELP* 93.

<sup>142</sup> *Blackmore* 2015 *SAJELP* 95.

<sup>143</sup> Sax 1970 *Mich L Rev* 471.

<sup>144</sup> Sax 1970 *Mich L Rev* 477.

beneficiaries to ensure that the environment remains protected over space and time.<sup>145</sup> The government is obligated to compare environmental conditions before and after any decision relating to the environment is taken to ensure that there is no net loss to the integrity of biodiversity.<sup>146</sup> It is for this reason that permissions, such as environmental authorisations required in terms of Chapter 5 of NEMA and permit requirements in terms of NEMBA, are required from government, thereby giving the state as custodian the opportunity to exercise its fiduciary duty of safeguarding biodiversity. A developing economy and the need for economic sustainability inevitably place increasing pressure on the country's natural resources and ecosystems. The competition for physical space required for development - such as mining - on the one hand and the requirement for conservation of biodiversity on the other, have an undeniable impact on biodiversity. According to Malherbe and Van Eck<sup>147</sup> the fundamental guiding principles prescribed by the NEMA,<sup>148</sup> as reinforced by other legislation, direct that government is not merely supposed to observe it in general terms, but rather to comply meticulously with every legal duty imposed on it while performing administrative actions.<sup>149</sup>

Where the government has to make a decision, it must strive to achieve a reasonable balance between satisfying a private entity's needs and ensuring that biodiversity resources remain to provide for potentially greater future needs.<sup>150</sup> Environmental management<sup>151</sup> therefore purposefully places a constraint on an individual's perceived right to development if it might compromise current and future needs of the people of South Africa.

The *Constitution* gives every citizen the right to have the environment protected through measures which secure ecologically sustainable development.<sup>152</sup> This principle of sustainable development, as expanded upon in NEMA,<sup>153</sup> provides another challenge to the role of the state as custodian. Social, environmental and economic sustainability, aptly referred to as the three pillars of sustainable development, are to be treated equally and require that the environment cannot be significantly

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<sup>145</sup> Blumm and Wood *Public Trust Doctrine* 3.

<sup>146</sup> *Blackmore* 2015 *SAJELP* 96.

<sup>147</sup> Malherbe and Van Eck 2009 *TSAR* 210.

<sup>148</sup> Section 2(1) of NEMA.

<sup>149</sup> Malherbe and Van Eck 2009 *TSAR* 221.

<sup>150</sup> Brown Weiss 1992 *Am U Int'l L Rev* 19.

<sup>151</sup> Section 2(2) of NEMA.

<sup>152</sup> Section 24(1)(b)(iii) of the *Constitution*.

<sup>153</sup> Sections 2(3) and 2(4) of NEMA.

compromised in favour of economic interests.<sup>154</sup> Feris<sup>155</sup> states that section 24(b) of the *Constitution* imposes a positive obligation on the state to make decisions or execute its governance function in a manner that will ensure sustainable development. Where development or land transformation involves significant impacts on species, habitats or ecosystems, the overriding considerations of public interest should count in favour of the environment.<sup>156</sup>

The principle that disturbance of ecosystems and loss of biological diversity should be avoided, minimised and remedied,<sup>157</sup> requires that the government should actively engage in anticipating potential disturbance of biodiversity. Section 2(4)(r) of NEMA recognises that certain ecological systems, such as wetlands, may have elevated sensitivity, which requires government to be pro-active in avoiding impacts within such areas. Blackmore submits that the incorporation of the public trust doctrine into South African law, has imposed new and renewed responsibilities on the government to safeguard the country's natural environment.<sup>158</sup> The environmental principles compel government in its capacity as custodian to refrain from decisions of convenience which are in favour of social, political or economic gains, but prejudicial to biodiversity.

Feris and Kotze<sup>159</sup> argue that the *Constitution* and the constitutionally entrenched principle of sustainable development demand a more integrated approach to governance and require that environmental issues should be considered alongside aspects of the development process that traditionally have had more influence on economic and political decision-making, without neglecting the important economic contribution of mining to the economy. The decisions made should always reflect the best practicable environmental option, which is the one that provides the greatest benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term.<sup>160</sup> The long-term socio-economic and environmental harm caused by acid mine

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<sup>154</sup> Blackmore 2015 *SAJELP* 98.

<sup>155</sup> Feris 2010 *PELJ* 77.

<sup>156</sup> Blackmore 2015 *SAJELP* 99.

<sup>157</sup> Section 2(4)(a) of NEMA.

<sup>158</sup> Blackmore 2015 *SAJELP* 100.

<sup>159</sup> Feris and Kotze 2014 *PELJ* 2117.

<sup>160</sup> Section 1 of NEMA.

drainage (hereafter AMD) and the ever-increasing number of mining sites, may easily outweigh the short-term economic benefits of mining.<sup>161</sup>

Blackmore<sup>162</sup> states that the principle that disturbance of ecosystems and loss of biological diversity should be avoided, or at least minimised if they cannot be avoided completely,<sup>163</sup> means that the government is precluded from applying a *laissez faire* approach to biodiversity, but requires government to actively anticipate any potential disturbance thereof. As a general rule, the more serious the impact on biodiversity, and in consequence the people's right to have it protected, the more persuasive the justification by the proponent of the damage must be.<sup>164</sup> This general rule is of the utmost importance in an ecologically sensitive area such as a wetland, where any disturbance has a serious impact as previously alluded to.<sup>165</sup>

The principle that exploitation of renewable resources and the surrounding ecosystems should not exceed the level beyond which their integrity is jeopardised,<sup>166</sup> challenges government to identify the tipping points in a natural environment to determine whether exploitation will cumulatively will exceed the tipping point between sustainable and unsustainable use.<sup>167</sup> Blackmore is adamant that as custodian, government is required to do everything reasonably necessary to conserve and protect biodiversity, as opposed to simply avoiding significant threats by stopping short of species extinction. The Limit of Acceptable Change (hereafter LAC) is a fundamental consideration which must be decided upon by the state acting as custodian.

Cooney<sup>168</sup> states that the onus is on the proponents of an activity that could potentially destroy the resources of the people to prove that it is safe. The state as trustee is empowered by this principle to ensure that the biodiversity trust entity is safeguarded and that its fiduciary duty is not weakened by a lack of understanding of the consequences of the decision taken. The state

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<sup>161</sup> Feris and Kotze 2014 *PELJ* 2110.

<sup>162</sup> Blackmore 2015 *SAJELP* 100.

<sup>163</sup> Section 2(4)(a)(i) of NEMA.

<sup>164</sup> *S v Manamela* 2000 3 SA 1 (CC) para 33.

<sup>165</sup> See para 2.10 above on the *Ramsar Convention*. Wise use equates to maintaining the ecological character.

<sup>166</sup> Section 2(4)(a)(vi) of NEMA.

<sup>167</sup> Blackmore 2015 *SAJELP* 103.

<sup>168</sup> Cooney *Precautionary Principle in Biodiversity Conservation* (ix).

is required to exercise an affirmative duty in respect of harm in general, and not be limited to considering serious or irreversible harm.<sup>169</sup>

The principle that negative impacts on the environment should be prevented, or where not possible, minimised and remedied,<sup>170</sup> mandates the state to ensure that there should be a 'no-net loss' in the integrity of biodiversity. Blackmore states:

Should this not be possible, or where there is a reasonable risk that this outcome would not be achieved within a reasonable timeframe or in the foreseeable future, the disturbance should be considered unsustainable and the application to damage the environment should be declined.<sup>171</sup>

Mostert<sup>172</sup> argues that the state, by acting as custodian, is expected to demonstrate an ever-higher responsibility and duty of care that what is expected of an owner.

## **2.12 Conclusion**

This chapter explored the state's duty in terms of the concept of state custodianship. The investigation resulted in the conclusion that the state's delegated executives should carefully consider all the environmental management principles contained in NEMA when exercising their discretion regarding applications for development.<sup>173</sup> Decision-makers should keep in mind that their decisions should not only be accountable, but should reflect their stewardship in protecting the interests of present and future generations. Where mining activities and potential negative consequences thereof fall under the jurisdiction of more than one state department, coordination and cooperation between organs of state will be a crucial component of the custodial duties. This conclusion is supported by the viewpoints of scholars referred to in paragraph 2.11 above. A failure to adhere to the duties inherent in state custodianship, will provide strong grounds for public intervention and judicial review of such decisions,<sup>174</sup> as relied upon by the applicants in the case study of Black Coal which will be

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<sup>169</sup> Cooney *Precautionary Principle in Biodiversity Conservation* 8. Also Van der Schyff 2010 *PELJ* 144.

<sup>170</sup> Section 2(4)(viii) of NEMA.

<sup>171</sup> Blackmore 2015 *SAJELP* 109.

<sup>172</sup> Mostert *Mineral Law* 135.

<sup>173</sup> Sections 2 and 24 NEMA; section 37 MPRDA provides that every mining production operation must be conducted in accordance with these principles.

<sup>174</sup> Feris 2010 *PELJ* 74 states that these challenges highlight the value choices employed by officials in making decisions, as the choice often seem to elevate economic considerations at the expense of the environment.

discussed in Chapter 4 hereof. Since our courts have also contributed to the development of the concept of state custodianship in the post-*Constitutional* era, case law has to be studied to further explain the impact of the concept of state custodianship on administrative decisions.

## Chapter 3

### 3 Evaluation of the approach followed by the courts regarding the state's duty as custodian towards the environment

#### 3.1 Introduction

Chapter 2 above unpacked the introduction and effect of the state's duty as custodian towards the environment. It is evident that various statutes acknowledge the nation's collective interest in natural resources and appoint the state as custodian of these natural resources. The statutes affirm the fiduciary responsibility of the state to protect and manage these resources, incorporating and supporting the fundamental right to a safe and healthy environment contained in section 24 of the *Constitution*. Although the courts have held the state accountable in various ground-breaking cases over the past decade, the concept of state custodianship has not been extensively dealt with by the courts. It is therefore imperative to investigate both how the courts have interpreted the fiduciary capacity of the state as public trustee, and how state custodianship in the property law regime has been implemented. The development of legal precedent will be discussed chronologically.

#### 3.2 Case law

As early as 1999, the Supreme Court of Appeal (hereafter SCA) stated in *Director: Mineral Development Gauteng Region v Save the Vaal Environment*<sup>175</sup> (hereafter *Save the Vaal*) that:

Our Constitution, by including environmental rights as fundamental justifiable human rights, by necessary implication requires that environmental considerations be accorded appropriate recognition and respect in the administrative processes in our country. Together with the change in the ideological climate must also come a change in our legal and administrative approach to environmental concerns.<sup>176</sup>

Judge of Appeal Olivier referred to the duty of the state when considering an application for a mining license where the mining might be potentially damaging to the environment in the following statement:

The application of the (*audi alteram partem*) rule is indicated by virtue of the enormous damage mining can do to the environment and ecological systems. What has to be ensured when application is made for the issuing of a mining

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<sup>175</sup> *Mineral Development Gauteng Region v Save the Vaal Environment* 1999 2 SA 709 (SCA) (hereafter *Save the Vaal*).

<sup>176</sup> *Save the Vaal* 719C-D.

license, is that development which meets present needs will take place without compromising the ability of future generations to meet their own needs.

In 2004 in *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products*<sup>177</sup> (hereafter *Hichange Investments*) the court was requested to decide *inter alia* if the Department of Economic Affairs and Tourism of the Eastern Cape had failed to take reasonable steps to put a stop to pollution at a leather tannery.

The court emphasised that when an application under section 28(12) of NEMA is to be considered, the court is obliged to have regard to the desirability of the state's fulfilling its obligation as custodian to hold the environment in public trust for the people as prescribed in section 28(5) of NEMA. The state's functionary has to do all he reasonably can be expected to do in order to discharge the state's obligation in that regard.<sup>178</sup>

In 2004 in *BP Southern Africa v MEC Agriculture, Conservation and Land Affairs* (hereafter *BP Southern Africa*)<sup>179</sup> the applicant (BP) sought the review and setting aside of a decision by the Gauteng Department of Agriculture, Conservation, Environment and Land Affairs to refuse its application in terms of section 22(1) of the *Environment Conservation Act* 73 of 1989 (hereafter ECA) for authorisation to develop a filling station. The refusal was based *inter alia* on environmental concerns.<sup>180</sup> The Department as respondent contended that it derived its mandate from the *Constitution* and NEMA and that by extension environmental and socio-economic issues were covered. The court stated that the Department's task was to determine whether the proposed development would have an actual or potential detrimental impact on the environment. As part of the Department's reasons, it stated that the geological report reflected a significant perched water table on the site and indicated that water seepage was encountered at approximately 0.8m from the surface.<sup>181</sup> The potential existed for the proposed filling station to result in land contamination through the seepage.<sup>182</sup> The Department reasoned that it did not consider it feasible to

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<sup>177</sup> *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products* 2004 2 SA 393 (E) (hereafter *Hichange Investments*).

<sup>178</sup> *Hichange Investments* 418.

<sup>179</sup> *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* 2004 5 SA 124 (W) (hereafter *BP Southern Africa*).

<sup>180</sup> *BP Southern Africa* 126.

<sup>181</sup> *BP Southern Africa* 132.

<sup>182</sup> *BP Southern Africa* 135.

place underground water resources at risk of possible pollution in view of the precautionary principle set out in section 4(a)(vii) of NEMA.

In discussing the Department's mandate, the court ruled that it could not avoid its constitutional duty<sup>183</sup> to give effect to section 24 of the *Constitution* and that it required a balancing of rights where competing interests and norms were concerned.<sup>184</sup> The balancing of environmental interests against justifiable economic and social development had to be conceptualised well beyond the interests of the present living generation. The court stated:

Pure economic principles will no longer determine, in an unbridled fashion, whether a development is acceptable. Development, which may be regarded as economically and financially sound, will, in future, be balanced by its environmental impact, taking coherent cognisance of the principle of intergenerational equity and sustainable use of resources in order to arrive at an integrated management of the environment, sustainable development and socio-economic concerns.<sup>185</sup>

In 2006, in *HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism*<sup>186</sup> (hereafter referred to as *HTF Developers*) the applicant was the registered owner of an erf in Riviera, Pretoria, which fell within an established township under the jurisdiction of the Tshwane Metropolitan Municipality. An application to subdivide the property into 12 residential stands was granted by the Department of Housing, City Planning and Environmental Management of the municipality. After approval the applicant started preparatory earthworks for the installation of pipelines, electrical infrastructure and began site clearance.<sup>187</sup>

Due to complaints from the public, the Department of Agriculture, Conservation and Environment of the Gauteng Province issued a letter containing the submission that the site clearing was an illegal activity in terms of section 31A of ECA, as prior authorisation had not been obtained from the Department for the use of virgin soil.<sup>188</sup> The letter also stated that the site was located on an untransformed ridge, considered to be a sensitive environment, characterised by high biodiversity with red data species of

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<sup>183</sup> *BP Southern Africa* 142.

<sup>184</sup> *BP Southern Africa* 143.

<sup>185</sup> *BP Southern Africa* 144.

<sup>186</sup> *HTF Developers v Minister of Environmental Affairs and Tourism* 2006 5 SA 512 (T) (hereafter *HTF Developers*) para 5.

<sup>187</sup> *HTF Developers* para 5.

<sup>188</sup> Reg 1182 in GN R670 in GG 23401 of 10 May 2002 (prior to repeal by GN R615 in GG 28938 of 23 June 2006).

plants and animals inhabiting the ridge.<sup>189</sup> In view of its status as threatened, it required priority conservation efforts in order to ensure the future survival of these species. The Department concluded with its view that HTF had not complied with the key national environmental management principles of NEMA,<sup>190</sup> namely:

the disturbance of ecosystems and loss of biological diversity should be avoided, minimized or remedied;

a risk-averse and cautious approach be applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

environmental management must be integrated, acknowledging that all elements of the environment are linked and interlaced, taking into account the effects of decisions and actions by pursuing the selection of the best practicable environmental option.<sup>191</sup>

The Department issued a directive in terms of section 31A of ECA directing HTF to cease with construction activities *inter alia* on the basis that they would result in serious damage to the environment.<sup>192</sup> On review to have the directive set aside, Murphy J ruled that the fundamental right to an environment that is not harmful to health and well-being,<sup>193</sup> imposes programmatic and positive obligations on the state to protect the environment through reasonable legislative and other measures that prevent ecological degradation and promote conservation, while promoting justifiable economic development.<sup>194</sup>

Murphy J stated that the need to preserve natural systems for the benefit of future generations makes it obligatory for environmental considerations to be incorporated into economic and development projects. He ruled that section 24(b) of the *Constitution* is more in the nature of a directive principle, having the character of a second generation right imposing a constitutional imperative on the state to secure the environmental rights, the scope of which is extensive.<sup>195</sup> The promotion of conservation must ensure an environment beneficial to our "well-being". In refusing the review, the court stated:

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<sup>189</sup> *HTF Developers* para 8.

<sup>190</sup> *HTF Developers* para 10.

<sup>191</sup> *HTF Developers* para 10.

<sup>192</sup> *HTF Developers* para 13.

<sup>193</sup> Section 24(b) of the *Constitution*.

<sup>194</sup> *HTF Developers* para 16.

<sup>195</sup> *HTF Developers* para 18.

The attainment of this objective 'confers' upon the authorities a stewardship, whereby the present generation is constituted as the custodian or trustee of the environment for future generations.

HTF Developers appealed against the decision, but the SCA stated unambiguously in *HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism*<sup>196</sup> (hereafter the *HTF SCA* case) that section 24 of the Constitution

confers upon the authorities a stewardship whereby present generations are constituted as the custodian or trustee of the environment for future generations ... An owner may not use his or her land in a way which may prejudice the community in which he or she lives because to a degree he or she holds the land in trust for future generations.<sup>197</sup>

Unfortunately the SCA did not define the notion of stewardship, but Van der Schyff proposes that in the context of the case, stewardship is the "careful and responsible management of something entrusted to one's care."<sup>198</sup> The implication is that although the fiduciary responsibility is conferred upon the holder or manager of the resources, all stakeholders that interact with the resources should respect the fiduciary relationship existing between current and future generations and the resources.<sup>199</sup>

On appeal to the Constitutional Court,<sup>200</sup> Ngcobo J in a minority decision and upholding the section 31A directive, stated that:

authorities that are charged with the protection of the environment are required to consider a diverse range of factors, including taking action to avoid, remedy and minimise the disturbance of the ecosystem and loss of biological diversity, as well as the disturbance of landscapes.<sup>201</sup>

He continued:

In addition, they must ensure that negative impact on the environment and on people's environmental rights are anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.<sup>202</sup>

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<sup>196</sup> *HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism* 2007 4 All SA 1108 (SCA) (hereafter *HTF SCA*) para 19.

<sup>197</sup> *HTF SCA* para 19.

<sup>198</sup> Van der Schyff *Property in Minerals and Petroleum* 232.

<sup>199</sup> Van der Schyff 2013 *SALJ* 369-389.

<sup>200</sup> *MEC: Department of Agriculture, Conservation and Environment v HTF Developers (Pty) Ltd* 2008 2 SA 319 (CC) (hereafter *HTF CC*).

<sup>201</sup> *HTF CC* para 63.

<sup>202</sup> *HTF CC* para 53.

The Constitutional Court did not mention the concept of state custodianship, but stated that one of the declared purposes of NEMA is to establish principles that will guide organs of state in making decisions that may affect the environment, which principles are set out in section 2 of NEMA.<sup>203</sup>

The ground-breaking decision in 2007 by the Constitutional Court in *Fuel Retailers* gave clear direction to state organs regarding their duty when balancing competing interests. The applicant applied in the High Court for the review and the setting aside of a decision by the Department to grant authorisation for the construction of a filling station on a property in White River, Mpumalanga in terms of the provisions of section 22(1) of ECA. The applicant alleged that the Department had failed to consider the socio-economic impact of the proposed filling station, but the provincial department stated that the local authority had already assessed the need and desirability and that it was therefore unnecessary to re-assess them. The Constitutional Court discussed the obligations of environmental authorities at length and held that NEMA made it clear that the obligation of the environmental authorities included the consideration of socio-economic factors as an initial part of their environmental responsibility.<sup>204</sup>

Ngcobo J in a majority decision stated that NEMA had established principles to guide organs of State in making decisions that might affect the environment. One of these principles requires the consideration of the social, economic and environmental impact of a proposed activity,<sup>205</sup> which includes its disadvantages and benefits.<sup>206</sup>

One of the issues identified in the scoping report lodged by the environmental consultants, was the protection of an existing aquifer, a significant clean groundwater resource below the surface of the property, which was being used to augment the water supply to the town of White River.<sup>207</sup> The aquifer needed protection from pollution by contaminants emanating from petrol tanks. The consulting engineering geologists expressed the opinion that it was highly probable that the residual granitic material at the level of the fuel tanks could be conducive to the spread of petrol-chemical pollution into the underlying major aquifer should a leak

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<sup>203</sup> *HTF CC* para 62.

<sup>204</sup> *Fuel Retailers* para 82.

<sup>205</sup> Section 2(4)(1) of NEMA.

<sup>206</sup> *Fuel Retailers* para 4.

<sup>207</sup> *Fuel Retailers* para 10.

occur in the fuel tanks, and that this might then contaminate the aquifer system beyond further utilisation.<sup>208</sup>

In considering the constitutional and legislative frameworks for the protection of the environment, the court confirmed that economic and social development is essential to the well-being of humans.<sup>209</sup> Ngcobo J stated:

But development cannot subsist upon a deteriorating environmental base. Unlimited development is detrimental to the environment and the destruction of the environment is detrimental to development. Promotion of development requires the protection of the environment. Yet the environment cannot be protected if development does not pay attention to the costs of environmental destruction. The environment and development are thus inexorably linked.<sup>210</sup>

The court also quoted from the *Brundtland Report*:<sup>211</sup>

Thus, economics and ecology must be completely integrated in decision-making and law-making processes, not just to protect the environment, but also to protect and promote development. Economy is not just about the production of wealth, and ecology is not just about the protection of nature, they are both equally relevant for improving the lots of humankind.<sup>212</sup>

The conclusion reached was that sustainable development and sustainable use and exploitation of natural resources are at the core of the protection of the environment. The court further ruled that sustainable development envisages that decision-makers should ensure that socio-economic developments remain firmly attached to their ecological roles.<sup>213</sup> People and their needs must be placed at the forefront of environmental management, which means that decisions must take into account the interest, needs and values of all interested and affected parties.<sup>214</sup> It therefore requires that the interests of the environment should be balanced against socio-economic interests. It is envisaged that whenever a development which may have a significant impact on the environment is planned, there will be a need to weigh considerations of development against environmental considerations.<sup>215</sup>

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<sup>208</sup> *Fuel Retailers* para 18.

<sup>209</sup> *Fuel Retailers* para 44.

<sup>210</sup> *Fuel Retailers* para 44.

<sup>211</sup> Brundtland *Our Common Future*.

<sup>212</sup> Brundtland *Our Common Future* ch 1 para 42.

<sup>213</sup> *Fuel Retailers* para 58.

<sup>214</sup> *Fuel Retailers* para 60.

<sup>215</sup> *Fuel Retailers* para 61.

The court repeated that the NEMA principles provide guidelines to direct state organs not only in the exercise of functions which may affect the environment, but also in the implementation of other legislation concerned with the management of the environment.<sup>216</sup> The purpose of the general objectives of section 23 of NEMA is to minimise the negative impact on the environment.<sup>217</sup>

The court ruled that it is not sufficient to focus on the needs of the developer while the needs of society are neglected<sup>218</sup> and that pure economic factors are no longer decisive.<sup>219</sup> In the words of Ngcobo J:

The need for development must now be determined by its impact on the environment, sustainable development and social and economic interests. The duty of environmental authorities is to integrate these factors into decision-making and make decisions that are informed by these considerations.<sup>220</sup>

NEMA<sup>221</sup> also requires that a risk-averse and cautious approach be applied by decision-makers, which requires that the cumulative impact of a development on environmental and socio-economic conditions should be investigated and addressed.<sup>222</sup> The court stated that the precautionary principle required the authorities to insist on adequate precautionary measures to safeguard against the contamination of underground water, as water is a precious commodity which must be protected for the benefit of present and future generations.<sup>223</sup> Feris and Kotze<sup>224</sup> stated that these constitutional imperatives, as exemplified by the *Fuel Retailers* case, make it incumbent on government as public trustee of natural resources to ensure that resources are not polluted, despite the important economic contribution of mining to the economy.

The majority decision further stated that an environmental authority whose duty it is to protect the environment, should welcome every opportunity to consider and assess issues that may adversely affect the environment.<sup>225</sup> The duty of a court of law when the decision of an environmental authority

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<sup>216</sup> *Fuel Retailers* para 67.

<sup>217</sup> *Fuel Retailers* para 67.

<sup>218</sup> *Fuel Retailers* para 68.

<sup>219</sup> *Fuel Retailers* para 76.

<sup>220</sup> *Fuel Retailers* para 79.

<sup>221</sup> Section 24(7)(b) of NEMA.

<sup>222</sup> *Fuel Retailers* para 98.

<sup>223</sup> *Fuel Retailers* para 98.

<sup>224</sup> Feris and Kotze 2014 *PELJ* 2117.

<sup>225</sup> *Fuel Retailers* para 100.

is brought on review, is to evaluate the soundness of the objections raised. If upon a proper application of the legal principles the objections are found to be valid, the court has no option but to uphold the objections.<sup>226</sup>

The court concluded by stating that:

the importance of the protection of the environment cannot be gainsaid, as its protection is vital to life itself. As the present generation holds the earth in trust for the next generation, this trusteeship position carries with it the responsibility to look after the environment. When the need arises to intervene in order to protect the environment, courts should not hesitate to do so.<sup>227</sup>

In a minority decision, Sachs J differed on the facts and stated:

An enterprise that promised long-term employment and major social upliftment at a relatively small cost to the environment, with damage reduced to the minimum could well be compatible with NEMA. On the other hand, to allow a fly-by-night undertaking either to spoil a pristine environment... or to introduce undue health hazards, will probably be in conflict with NEMA.<sup>228</sup>

In 2010, the Constitutional Court had to decide on the obligations of the City of Johannesburg – as an organ of state – to provide every person with sufficient water in the case of *Mazibuko v City of Johannesburg*.<sup>229</sup> (hereafter *Mazibuko*) O' Regan J commented that due to the fact that our country is largely arid, the need to preserve water is a responsibility that affects all spheres of government.<sup>230</sup>

In 2011, the Constitutional Court again commented on the duties of state organs in *Bengwenyama Minerals v Genorah Resources* (hereafter *Bengwenyama Minerals*)<sup>231</sup> by repeating that it is one of the objects of the MPRDA to give effect to the environmental rights protected in section 24 of the *Constitution*. The state must ensure that the nation's mineral resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development.<sup>232</sup> Any prospecting should not result in unacceptable pollution, ecological degradation or damage to the environment.<sup>233</sup>

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<sup>226</sup> *Fuel Retailers* para 101.

<sup>227</sup> *Fuel Retailers* para 102.

<sup>228</sup> *Fuel Retailers* para 117.

<sup>229</sup> *Mazibuko v City of Johannesburg* 2010 4 SA 1 (CC) (hereafter *Mazibuko*).

<sup>230</sup> *Mazibuko* para 3.

<sup>231</sup> *Bengwenyama Minerals (Pty) Ltd v Genorah Resources (Pty) Ltd* 2011 4 SA 113 (CC).

<sup>232</sup> *Bengwenyama Minerals* para 75.

<sup>233</sup> *Bengwenyama Minerals* para 75.

On 26 July 2012, Mavundla J commented in the matter of *Federation for Sustainable Environment and Silobela Concerned Community v The Minister of Water Affairs*<sup>234</sup> (hereafter *Silobela*) that section 27(1)(b) of the *Constitution* places an obligation on all spheres of governance to ensure a healthy environment to the communities.<sup>235</sup>

In 2013, the important judgment in the case of *Agri SA v Minister for Minerals and Energy*<sup>236</sup> (hereafter *Agri SA*) was delivered by the Constitutional Court. The Constitutional Court examined the historical legal position in relation to mining rights<sup>237</sup> and investigated the question whether the commencement of the MPRDA had the immediate effect of expropriating mineral rights.<sup>238</sup> Mogoeng CJ stated:

On behalf of all the people of South Africa, the state is now the custodian of the mineral and petroleum resources of this country which is their common heritage. One of the objects of the MPRDA is to give effect to this principle by granting various kinds of rights to successful applicants.<sup>239</sup>

The state does not acquire ownership of mineral rights, but is a facilitator or conduit through which broader and equitable access to mineral resources can be realised.<sup>240</sup> The court decided that it was not necessary to define the word 'custodian', but declared that it does not mean that the state has acquired and become the owner of the mineral rights concerned.<sup>241</sup> In a minority judgment Froneman J added that the MPRDA has abolished private ownership of minerals which existed under the mining law dispensation enacted prior to the *Constitution*. The state has become the custodian with the power to allow exploitative access to mineral resources to all the people of South Africa. The state now has the power to allocate and dispose of exploitation rights.<sup>242</sup> This institutional change of legal regime is regarded as just and equitable in view of our history.<sup>243</sup> It is clear

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<sup>234</sup> *Federation for Sustainable Environment v Minister of Water Affairs* 2012 ZAGPPHC 128 (10 July 2012) (hereafter *Silobela*).

<sup>235</sup> *Silobela* para 13.

<sup>236</sup> *Agri SA v Minister for Minerals and Energy* 2013 (4) SA 1 (CC).

<sup>237</sup> *Agri SA* para 7. The historical position under common law was that the landowner owns everything above and below the land, including minerals; The court relied on Mostert *Mineral Law* 7; Badenhorst 2010 *SALJ* 649.

<sup>238</sup> *Agri SA* para 3.

<sup>239</sup> *Agri SA* para 25.

<sup>240</sup> *Agri SA* para 68.

<sup>241</sup> *Agri SA* para 71.

<sup>242</sup> *Agri SA* para 80; Mostert *Mineral Law* 129.

<sup>243</sup> Van der Walt *Constitutional Property Law* 410; *Agri SA* para 80.

that the court was concentrating on the property law regime of state custodianship without exploring the fiduciary dimension.

In 2016, the SCA provided important directions in *Mpumalanga Tourism and Parks Agency v Barberton Mines (Pty) Ltd*<sup>244</sup> (hereafter *Barberton Mines*). In this matter a prospecting right had been granted in terms of section 17(1) of the MPRDA to Barberton Mines to conduct prospecting operations for gold and silver on certain properties which are situated in the Barberton Greenstone Belt.<sup>245</sup> This land - home to some 2 200 plant and 300 bird species-, has been placed on the national list of terrestrial ecosystems that are threatened and under protection.<sup>246</sup> It is also world renowned for its unique geology and was listed on South Africa's tentative list of world heritage sites in 2008.<sup>247</sup> Following objections from the MTPA and other community organisations, Barberton Mines lodged an application in the High Court for a declaratory order that it was entitled to commence with prospecting activities.<sup>248</sup> The respondents lodged a counter-application for a review of the decision to grant the prospecting rights.<sup>249</sup>

The High Court found in favour of Barberton mines that the prospecting area did not constitute part of a nature reserve or protected environment.<sup>250</sup> On appeal the SCA referred to the initiatives by the provincial government to conserve the area, which initiatives have been in progress for 30 years.<sup>251</sup> Ponnau J referred to one of the objects of the MPRDA<sup>252</sup> which is to give effect to section 24 of the *Constitution* by ensuring that mineral resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development.<sup>253</sup> He stated:

The granting of prospecting rights under the MPRDA is thus made subject to environmental protection and constraints.<sup>254</sup>

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<sup>244</sup> *Mpumalanga Tourism and Parks Agency v Barberton Mines (Pty) Ltd* 2017 5 SA 62 (SCA) (hereafter *Barberton Mines*).

<sup>245</sup> *Barberton Mines* para 1.

<sup>246</sup> GN 1002 in GG 34809 of 9 December 2011, published in terms of NEMBA.

<sup>247</sup> *Barberton Mines* para 1.

<sup>248</sup> *Barberton Mines* para 3.

<sup>249</sup> *Barberton Mines* para 4.

<sup>250</sup> *Barberton Mines* para 6. The court found that the prospecting area was not subject to the prohibition against prospecting under s 48(1) of the NEMPAA as discussed in para 2.9 above.

<sup>251</sup> *Barberton Mines* paras 7 and 8.

<sup>252</sup> Section 2(h) of the MPRDA.

<sup>253</sup> *Barberton Mines* para 11.

<sup>254</sup> *Barberton Mines* para 11.

The SCA unfortunately did not expand on the duty of the state with reference to the biodiversity of the sensitive area.

In 2017, Murphy J commented on the duty of state organs in *Earthlife Africa Johannesburg v Minister of Environmental Affairs*<sup>255</sup> (hereafter *Earthlife*) as follows:

Section 2 of NEMA sets out binding directive principles that must inform all decisions taken under the Act, including decisions on environmental authorisations. The directive principles serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of NEMA or any statutory provision concerning the protection of the environment ... Competent authorities must take into account the directive principle when considering applications for environmental authorisation. The directive principles promote sustainable development and the mitigation principle that environmental harms must be avoided, minimised and remedied. The environmental impact assessment is a key means of promoting sustainable development, by ensuring that the need for the development is sufficiently balanced with full consideration of the environmental impacts of a project with environmental impacts. The directive principles caution decision-makers to adopt a risk-averse and careful approach especially in the face of incomplete information.<sup>256</sup>

In this matter, all parties accepted in argument that the emission of greenhouse gasses (hereafter GHGs) from a coal-fired power station constitutes pollution that causes environmental change with adverse effects and will extend into the future.<sup>257</sup> The authorities are therefore obliged to consider how to prevent, mitigate or remedy the environmental impacts and the impact on climate change. Short-term needs must be evaluated and weighed up against long-term consequences.

In the recent case of *Mining and Environmental Justice Community Network of South Africa v Minister of Environmental Affairs* (hereafter *Atha-Africa*),<sup>258</sup> Davis J set aside the decisions of the Minister of Environmental Affairs and the Minister of Mineral Resources to grant permission to Atha-Africa Ventures (Pty) Ltd to conduct coal mining in the Mabola Protected Environment in Mpumalanga. In the remittance for reconsideration to the Ministers, Davis J ordered the Ministers to take into account the interests of

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<sup>255</sup> *Earthlife Africa Johannesburg v Minister of Environmental Affairs* 2017 2 All SA 519 (GP) (hereafter *Earthlife*).

<sup>256</sup> *Earthlife* para 80; *Cool Ideas 1186CC v Hubbard* 2014 4 SA 474 (CC) para 28.

<sup>257</sup> *Earthlife* para 80.

<sup>258</sup> *Mining and Environmental Justice Community Network of South Africa v Minister of Environmental Affairs* (G) (unreported) case number 50779/2017 of 6 November 2018 (hereafter *Atha-Africa*).

local communities and the environmental principles of NEMA.<sup>259</sup> He stated as follows:

In considering a request for such permission, the ministers shall act as custodians of such protected environment and with a strict measure of scrutiny take into account the interests of local communities and the environmental principles referred to in Section 2 of NEMA.<sup>260</sup>

He criticised the decisions taken by the Ministers as follows:

...a failure to take South Africa's international responsibilities relating to the environment into account and a failure to take into account that the use and exploitation of non-renewable natural resources must take place in a responsible and equitable manner would not satisfy the "higher level of scrutiny" necessary when considering whether mining activities should be permitted in a protected environment or not. Such failures would constitute a failure by the state of its duties as trustees of vulnerable environments, particularly where it has been stated that "most people would agree, when thinking of the tomorrows of unborn people that it is a present moral duty to avoid causing harm to the environment."<sup>261</sup>

### **3.3 Concluding remarks**

The decisions and guidelines issued by the Courts clearly reflect that it is the duty of all organs of state to consider the environmental impact when administrative decisions are being made. The Courts have repeatedly ruled that such duty includes consideration of the environmental impact not only for the present, but also with the future in mind. It is important to note that the Courts confirmed that where decisions on environmental authorisations have to be taken, section 2 of NEMA provides binding and directive principles. This study contends that the concept of state custodianship was applied where the Constitutional Court in *Fuel Retailers* ruled that the authorities must ensure that water as precious commodity must be protected for the benefit of present and future generations.<sup>262</sup> With these guidelines in mind, this study set out to determine whether the directives in legislation and case law, as discussed in Chapters 2 and 3 above, were in fact complied with in the Black Coal case study by the delegated state officials who should have exercised their discretion while bearing in mind their custodial duties in the interests of current and future generations.

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<sup>259</sup> *Atha-Africa* para 14.

<sup>260</sup> *Atha-Africa* para 10.7.

<sup>261</sup> *Atha-Africa* para 11.11.

<sup>262</sup> *Fuel Retailers* paras 98 and 102.

## Chapter 4

### 4 Mining in the Chrissiesmeer wetland: A case study

#### 4.1 Introduction

In order to explain the context in which the delegated officials of the state had to consider the competing interests of mining and the conservation of biodiversity through the lens of state custodianship, this chapter will firstly set out the facts and legal processes which form the background to and basis for an application lodged by Mr Davel in the High Court North Gauteng Division, for which matter the review application is still pending.<sup>263</sup> The decisions and reasons for such decisions by various delegated officials in consecutive administrative applications and appeals will be discussed to enable to arrive at an answer to the research question of whether and how the concept of state custodianship should have been applied to this factual matrix.<sup>264</sup>

In order to demonstrate the challenges posed in achieving the balance envisaged by the concept of sustainable development as required by the *Constitution* and NEMA,<sup>265</sup> the extent of and motivation for the mining activities envisaged by Black Coal need to be discussed.

The economic advantages of the mining operations as well as the impact of the mining were disclosed in the relevant applications for environmental authorisations at the time. Black Coal also lodged a comprehensive integrated water use licence application (hereafter IWULA),<sup>266</sup> which application is still pending and still has to be decided upon by the Department of Water and Sanitation.

On the other hand, the environmental significance of the Chrissiesmeer wetland and its importance in sustaining biodiversity will be discussed, together with the objections and responses by affected and interested parties. In conclusion, the last chapter of this study will comment on the way the concept of state custodianship should help to determine the value and essence of these competing considerations.

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<sup>263</sup> *Davel v MEC Environmental Affairs, Department of Agriculture, Rural Development, Land and Environmental Affairs, Mpumalanga Province* (NG) (unreported) case number 82731/17 of 6 December 2017 (hereafter *Davel*).

<sup>264</sup> See ch 1 hereof.

<sup>265</sup> Section 24(1)(iii) of the *Constitution*; ss 2(3) and 2(4) of NEMA; Feris 2010 *PELJ* 92.

<sup>266</sup> Section 21 of the NWA.

#### **4.2 Procedure which lead to the review pending in the High Court (North Gauteng Division)**

On 26 June 2006, Black Coal was granted a mining right to mine coal on Portions 4 and 6 of the farm Lusthof 60 IT, Chief Albert Luthuli Municipality, Mpumalanga. The application for a mining right was accompanied by an environmental management programme (hereafter EMPr). Numerous objections were lodged by interested and affected parties. After an urgent application had been lodged by the landowners and Mpumalanga Lakes District Protection Group, the NGO acting for the community against the Minister of Minerals and Energy, to set aside the granting of the mining right, a settlement was reached.<sup>267</sup> In terms of the settlement, which was made an order of court, Black Coal undertook not to proceed with the mining activities and to prepare a further and amended EMPr. Black Coal submitted the amended EMPr to the provincial Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) of Mpumalanga along with an application to undertake listed activities described in GN R544, 545 and 546 of the Environmental Impact Assessment Regulations, 2010.<sup>268</sup> Extensive opposition was again encountered, including opposition from the MTPA which regarded the mining as being directly in conflict with the Mining and Biodiversity Guideline of the province.

On 25 February 2014 the Department of Economic Development, Environment and Tourism of Mpumalanga refused to grant the environmental authorisation and provided the following as findings and reasons:

After consideration of the information and factors listed above, the Department made the following findings –

The need with regard to the implementation of activities is clearly manifested but the associated impacts on biodiversity and wetland distinguish the proposed site undesirable for sustainability of ecological systems. The site comprises mainly hill slope wetlands which are characterized by conditions that support and facilitate the reduction of sulphate and nitrate, thus contributing to water quality improvement.

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<sup>267</sup> *Mpumalanga Lakes District Protection Group v Minister of Minerals and Energy and Black Gold Coal Estate (Pty) Ltd* (unreported) case number 24836/2006 of 4 August 2008.

<sup>268</sup> GN R543 in GG 33306 of 18 June 2010. The listed activities NEMA identified included *inter alia* the pollution control dam, dirty water dam, mining of the marsh area in the centre of the open pit, road diversions and the construction of the water treatment plant.

Various alternatives were considered but the site alternatives preferred is not desirable in the context of ecological sustainability. Granting authorization to implement the activities will potentially decrease the physic-chemical habitat, the pans, and wetlands and limit the aquatic biodiversity of the systems. The location of the open cast pit within the wetlands will have devastating environmental consequences. The sustainability mine infrastructure within wetland areas will also have fatal flaws.

The specialists report in respect of wetlands, vegetation and geohydrology, aquatic biodiversity etc. conclude that the mining activities are likely to result in adverse environmental impacts on wetlands and biodiversity. There is also potential pollution and depletion of ground water resources with huge negative impacts on the environment. The adverse impacts anticipated are the following:

Loss of ecosystems and habitats for biodiversity protection;

Loss of rare and endangered species;

Potential risk of ground and surface water contamination;

Increase ambient particulates, sulphate and heavy metals.

Mining activities will result in fragmentation of habitats. Noise and movements associated with mining will result in increased traffic and human presence which can potentially enhance the challenge on endangered species through hunting for instance.

The site falls on the boundary of two river systems which passes through two provinces as well as through three countries.

The interested and affected parties as well as state organs who commented, raised issues related to the viability of the mining activities in such a sensitive environment.

In view of the above, the Department is not satisfied that the proposed activity will not conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), nor that any potentially detrimental environmental impacts resulting from the proposed activities can be mitigated to acceptable levels. The application is accordingly refused.<sup>269</sup>

On 16 April 2014 Black Coal lodged an appeal against the decision to the MEC Mpumalanga. After various submissions, the MEC upheld the appeal,<sup>270</sup> and subsequently, on 22 September 2015, the Chief Director of Environmental Affairs granted the environmental authorisation.<sup>271</sup> On 12

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<sup>269</sup> *Dave/ Review Application Annexure B.*

<sup>270</sup> The MEC based his decision on the fact that Black Coal had already secured an existing mining right on properties which fall outside the protected environment and that sustainable development requires that one right should not overshadow the other. He also referred to the settlement agreement which provided for specialist studies. *Dave/ Review Application Annexure C1.*

<sup>271</sup> His reasons were:

October 2015, Davel, an adjacent landowner, lodged an appeal with the Minister, as he believed that the MEC was *functus officio*. However, the Minister refused to consider the appeal and maintained that the MEC should adjudicate on the appeal. In order to ensure that all domestic remedies had been exhausted, the appeal was lodged with the MEC. On 31 May 2017 the MEC rejected the appeal lodged by Davel.<sup>272</sup>

On 2 December 2017 an application for review<sup>273</sup> was issued in the North Gauteng High Court in terms of section 6 of the *Promotion of Administrative Justice Act 3 of 2000* (hereafter PAJA) which review is still pending.

### **4.3 Granting of a mining right and the extent of mining activities**

Black Coal's mining right includes the establishment of an open-cast coal strip mine on a reserve area of 82 hectares, which is situated right in the middle of the Chrissiesmeer wetlands. The envisaged life of the mine is eight years. It will produce A-grade export quality, high quality and Eskom quality coal, according to the final scoping report.<sup>274</sup> The mining will encompass the removal of approximately 11 million m<sup>2</sup> of top soil in order to obtain access to approximately 3.78 million tons of run of mine (hereafter ROM) coal. Mining will take place in the form of a standard open cast roll over method, starting in the south and progressing in a northerly direction.<sup>275</sup> The depth of mining will vary, but most mining will take place 30 m below the surface. The planned average production rate is in the order of 60,000 tons per month, but production could reach 120,000 ton per

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- (a) "The activity has the potential to pollute soil and water resources.
  - (b) The site does not fall within the proclaimed protected area within Chrissiesmeer Protected Area.
  - (c) The proposed development will provide job opportunities for local residents and that it will not conflict with the general objectives of integrated environmental management, referring to Chapter 5 of the NEMA and that any potential detrimental environmental impacts can be mitigated to acceptable levels."

<sup>272</sup> The MEC based the refusal *inter alia* on the following:

"If the interested and affected parties failed to address and interrogate the matters during the mining right application, ... they should have lodged an appeal when the mining right was granted" and "The Applicant (Black Coal) is legally obliged to comply with the conditions of the environmental authorisation which is subject to compliance monitoring by the Department. In the event that non-compliance is identified, enforcement action is guaranteed to ensure compliance."

<sup>273</sup> *Davel* Review Application.

<sup>274</sup> JMA Consulting 2013a <http://www.jmaconsult.co.za/reports.php> (hereafter Scoping Report) 311.

<sup>275</sup> JMA Consulting 2013b <http://www.jmaconsult.co.za/reports.php> (hereafter IWULA Report) 68.

month.<sup>276</sup> No beneficiation will occur on site, but coal will be loaded onto 30-ton transport trucks.<sup>277</sup>

The following activities are required as part of the operational phase of the mining process:

- construction of a storm water management system around the marsh area immediately south of the open pit;
- construction of a clean water diversion pond, pollution control dam and dirty water dam;
- mining of the marsh area in the centre of the open pit;
- construction of an internal mine access road and all the roads required to transport the coal seam;
- construction of a run-of-mine stockpile and overburden stockpiles;
- road diversion of the provincial road to the north of the mine;
- construction of a new form road to the northern surface water dam;
- construction of diesel storage tanks;
- clearance of an area of 300 m<sup>2</sup> of indigenous vegetation for construction of the clean water diversion pond;
- clearance of 6 ha of vegetation where more than 75% of the vegetation is indigenous;
- hard overburden and coal drill and blast;
- coal transportation.<sup>278</sup>

At that time<sup>279</sup> these listed activities required applications for an Environmental Management Programme in terms of the MPRDA,<sup>280</sup> and an EIA in terms of NEMA and an IWULA in terms of the NWA.<sup>281</sup>

In the IWULA lodged by Black Coal,<sup>282</sup> provision has been made to separate clean and dirty water areas from one another by implementing numerous

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<sup>276</sup> Scoping Report 311.

<sup>277</sup> IWULA Report Project Background 2.

<sup>278</sup> *Dave/* Review Application ROD Mpumalanga Provincial Government (25/02/2014) 3.

<sup>279</sup> Presently the approvals have been integrated and must be applied for in terms of NEMA; s 38(A)(1) provides that the Minister of Minerals and Energy is the responsible authority for implementing environmental provisions in terms of NEMA as it relates to mining on a mining area. S 38(A) was inserted by s 32 of Act 49 of 2008 with effect from 8 December 2014.

<sup>280</sup> Sections 38 and 39 of the MPRDA which has since been repealed by s 33 of Act 49 of 2008 with effect from 8 December 2014.

<sup>281</sup> Section 21 of the NWA.

<sup>282</sup> Although the IWULA had been lodged on 12 November 2013, no decision has been made until date of this study.

storm water management infrastructures. Because the mining area straddles a watershed, a number of localised berms at selected areas close to the mining perimeter should ensure that water outside of the berms can be diverted as clean water run-off around the mine. All water falling into the open pit and in the sub-catchment areas between the pit perimeter and the berms and along the external haul roads will be considered to be dirty water.<sup>283</sup>

Dirty water isolating berms will be constructed along the southern and eastern perimeter of the mining area to intercept and discharge contaminated surface water via a silt trap into the pollution control dam.<sup>284</sup> In addition, a water treatment plant (WTP) will be developed for commissioning at the beginning of the seventh year of mining. The dirty water dam and water treatment plant will remain into the proposed post-closure phase of five years so that adequate after-care and monitoring can be conducted. Two critical activities that will remain post-closure, are the abstraction of mine water from within the rehabilitated pit for treatment in the WTP and the abstraction of potential contaminated groundwater seepage from the pit for recirculation into the rehabilitated pit.<sup>285</sup>

Several of the mining activities fall within the delineated wetlands and therefore Black Coal also had to apply for exemption from the requirements of regulations<sup>286</sup> which place restrictions on specific activities. Regulation 4(a) of GN R704 prohibits the location of a residue deposit or dam within a horizontal distance of a hundred metres of a watercourse or estuary. In this instance the location of the storm water berms, ROM coal stockpile, contractors' yard, pollution control dam, dirty water dam, hard overburden stockpiles, soft overburden stockpiles, topsoil stockpiles, mine access road and road diversions all fall within the delineated wetlands. Regulation 4(b) of GN R704 also prohibits open cast mining within a horizontal distance of a watercourse or estuary, but the open-cast mining operations at Lusthof are located in the proximity of the wetland areas adjacent to the pit. Regulation 4(c) of GN R 704 prohibits the disposal of any residue which is likely to cause pollution of a water resource in a pit, but the spoils will be

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<sup>283</sup> IWULA Report 5.

<sup>284</sup> IWULA Report 5.

<sup>285</sup> IWULA Report 6.

<sup>286</sup> Reg 3 in GN R704 in GG 20119 of 4 June 1999.

continuously placed in the open pit during mining and during the rehabilitation and closure phases.<sup>287</sup>

Black Coal estimated that the water use consumption for five years will be 631 375 cubic metres, while the dust suppressant demand alone will be 16 755 cubic metres per year.<sup>288</sup>

The IWULA indicated that eight proposed activities qualify as water uses in terms of section 21(g) of the NWA which regulates disposal of waste in a manner that may detrimentally impact on a water resource, as indicated in Table 1.

Description	Number on Map	Coordinates	Property
Lusthof Colliery Dirty Water Dam	21G-DWD	26° 11' 14.4" S 30° 13' 51.5" E	Lusthof 60 IT, Portion 6
Lusthof Colliery Pollution Control Dam	21G-PCD	26° 11' 58.8" S 30° 14' 01.1" E	Lusthof 60 IT, Portion 4
Lusthof Colliery Northern Hard Overburden Stockpiles (1)	21G-NHO1	26° 11' 03.1" S 30° 13' 58.8" E	Lusthof 60 IT, Portion 6
Lusthof Colliery Northern Hard Overburden Stockpiles (2)	21G-NHO2	26° 11' 13.3" S 30° 13' 55.3" E	Lusthof 60 IT, Portion 6
Lusthof Colliery Run of Mine Coal Stockpile	21G-ROM	26° 11' 51.9" S 30° 13' 40.9" E	Lusthof 60 IT, Portion 4
Dust Suppression of the Haul Roads and Gravel Roads within the Mining Area	21G-DSMR	26° 11' 40.1" S 30° 13' 32.1" E	Lusthof 60 IT, Portion 4
Dust Suppression of Gravel Roads used for Coal Transportation	21G-DSPR	26° 11' 21.5" S 30° 13' 06.7" E	Servitude (D239 Road)
Storage of Contaminated Mine Water within the Rehabilitated Pit Spoils	21G-RPS	26° 11' 40.0" S 30° 13' 54.5" E	Lusthof 60 IT, Portion 4

**Table 1: Water use activities in terms of section 21(g) NWA**

#### ***4.4 Black Coal's motivation for the need, desirability and scope of mining***

Black Coal submits that the strategic importance of a continuous supply of steam coal to South Africa's coal fired power stations for electricity

<sup>287</sup> IWULA Report 19-21.

<sup>288</sup> IWULA Report 39.

production cannot be over-emphasised.<sup>289</sup> In 2013 the contribution to the gross domestic product (GDP) was calculated as follows:

- Total reserve: 3,78 million tonnes;
- Total export earnings: approximately R1.3 billion based on an export price of eight dollars per tonne and ZAR exchange rate of R7.30 per dollar;
- Total domestic earning: approximately R800 million, based on a domestic rate of R515 per tonne;
- Total earnings: approximately R2.3 billion.<sup>290</sup>

The socio-economic benefits include a social and labour plan which includes a 51% Broad Based Black Economic Empowerment (hereafter BBBEE) shareholding, as well as infrastructure development and poverty eradication projects in line with the integrated development plans (hereafter IDP's) of the local municipalities.<sup>291</sup> As part of the infrastructure development - which will contribute to job creation for locals -, original gravel roads will be diverted around the mining activities, resulting in diversions of approximately 2.2 km. The existing farm road will be upgraded for approximately 1.6 km. A further internal access road will be developed to carry all traffic entering and leaving the mine, including the coal transport trucks to and from the ROM stockpiles as well as all mine personnel and visitors to the contractor's yard. A five-strand barbed wire fence will be erected around the entire perimeter of the mining operations. Mobile pre-fabricated park homes will serve as a site office for a maximum of 42 personnel. Parking will also be required for delivery vehicles, cars and heavy machinery.<sup>292</sup> A toilet unit, store room, changing rooms, workshops and a diesel fuel storage facility will be erected. A wash bay which includes oil and silt traps to intercept any potential spillages, waste skips and storage facility for explosives will be needed.<sup>293</sup>

The mining operations will run 24 hours a day for a 5,5-day week for the eight-year lifespan of the mine. No crushing, screening or washing will take place on Lusthof itself, but the coal that is mined from the pit will be removed

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<sup>289</sup> Scoping Report 312.

<sup>290</sup> Scoping Report 312.

<sup>291</sup> The municipalities are Gert Sibande District Municipality and Albert Luthuli Local Municipality.

<sup>292</sup> Scoping Report 313.

<sup>293</sup> Scoping Report 320.

by means of haul trucks. Once loaded and fitted with tarpaulins, it will be transported to the East Side Colliery just outside of Carolina.<sup>294</sup>

Potable water demand is estimated at 10,000 litres per day for the contractor's yard, offices, wash bay and toilet unit. The water will be obtained from a new bore-hole. Provision will be made for continuous daily dust suppression with the aid of two browsers with a 12,000 litres water capacity each. Each truck will do three trips per day. The maximum number of coal trucks along the access route will be four per hour. The water will be sourced from a new dam, an existing dam, boreholes and later from the mine water treatment plant.<sup>295</sup>

#### **4.5 Impact of mining according to Black Coal and its advisers**

##### *4.5.1 Impact on water resources and water management*

Black Coal stated that during the planning of the mining lay-out and its water management component, environmental factors were considered, such as sensitive landscapes (wetland type soils), seep-zone landscapes, drainage lines and the establishment of an environmentally safe water level (hereafter ESWL) for the mine and sub-catchment.<sup>296</sup>

As part of water management, a mobile water treatment plant is envisaged with the object of achieving zero waste discharge. The plant will have to treat superfluous mine water from seven years onwards and beyond closure. All final waste must be treated to ensure that the product water will be of the same order as the surrounding natural water sources. As a result of the character of the natural surroundings and the wetlands, the tests which were conducted classified the water as being of exceptionally good quality, even of a considerably higher standard than SANS 241 Class 1 drinking water.<sup>297</sup> After closure groundwater management will focus on the management of seepage of contaminated groundwater from the pit.<sup>298</sup>

In addressing the impact of dirty water, Black Coal alleged that the area which might be contaminated by dirty water resulting from the mining operations, has been minimised by implementing surface water control. This control consists of the surface water control infrastructure at three

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<sup>294</sup> Scoping Report 322. No EIA was done before the mining right was issued.

<sup>295</sup> Scoping Report 330.

<sup>296</sup> Scoping Report 397.

<sup>297</sup> Scoping Report 403.

<sup>298</sup> Scoping Report 401, but see objection by Davel in para 4.8 *Davel* Objection.

stages of mining development and the placement of potential pollution sources in the area south of the open cast mine.<sup>299</sup> A pollution control dam (hereafter PCD) will be built for the control of contaminated surface and mine water during the operation of the mine. The dam wall will be lined for optimal storage and evaporation of dirty water. Dirty water from the wall road and/or in stockpile will first flow through a salt trap before being discharged into the PCD. A minimum storage volume of 23,800 m<sup>2</sup> of water is required during the six months construction phase and 34,600 m<sup>2</sup> six months later during the operational phase. No water will be allowed to overflow from the PCD into the environment, except in the cases of extreme events.<sup>300</sup>

The IWULA included specialist study reports on aquatic ecosystems, groundwater and surface water, which explained the impact of mining on the ecosystems. In addition to its report on the impact on water systems, Black Coal also provided its conclusions regarding the impact of mining on the environment and the wetlands.

#### *4.5.2 Impact of mining on the environment and the wetlands*

Black Coal submitted that design features relating to mining, transport, water management and rehabilitation had been selected and designed to provide a very high level of environmental acceptability and if those were implemented, they would result in a coal mine with a very low to insignificant environmental impact.<sup>301</sup> The outcome is therefore deemed to represent the best practicable environmental option (hereafter BPEO) from an environmental management perspective.<sup>302</sup>

JMA Consulting, the environmental consultants who compiled the IWULA in November 2013, conceded in the IWULA report that the wetland located in the centre of the mining area will be totally destroyed and removed by the open cast mining operations.<sup>303</sup> It stated:

The Wetland cannot be recovered or replaced. The wetlands located adjacent to the mining operations can each serve as off take wetland areas for this wetland.<sup>304</sup>

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<sup>299</sup> Scoping Report 331.

<sup>300</sup> Scoping Report 334.

<sup>301</sup> Scoping Report 307.

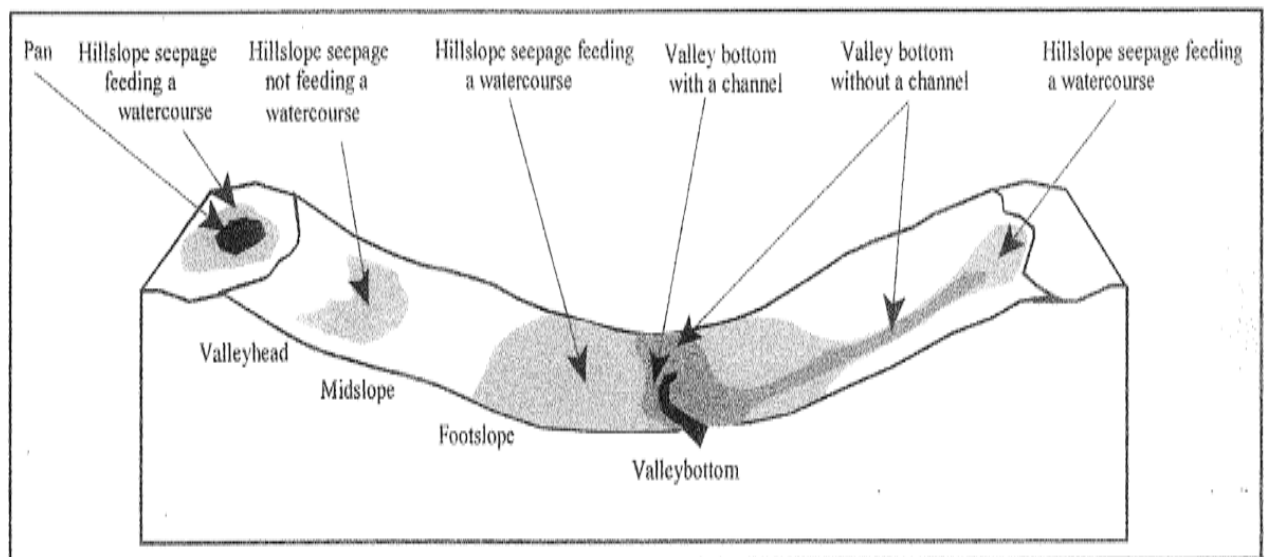
<sup>302</sup> Scoping Report 307.

<sup>303</sup> IWULA Report 93.

<sup>304</sup> IWULA Report 93.

It also stated that activities developed within a distance of 500 m from the delineated wetland to the south of the proposed mining area, include a surface water management infrastructure of berms and canals which will be implemented in three phases to keep dirty water areas as small as possible, and clean water areas as large as possible, for as long as possible. However, the critical activity that will remain indefinitely from an environmental perspective relating to the wetland to the south of the mining area, will be the extraction of mine water from the rehabilitated pit for treatment in the WTP.<sup>305</sup>

Wetland Consulting Services (Pty) Ltd, a firm of specialist wetland's consultants instructed by Black Coal, conducted specialist wetland assessments in support of the IWULA. They reported that two main wetland complexes were found in the study area, both forming part of the upper catchment of the Mpuluzi River. Because they are at the source of the river system, these wetlands complexes are likely to play an important role in the overall hydrology of the upper Mpuluzi River, as they are also linked to the expression of both perched groundwater and surface water.<sup>306</sup> Two pans which occur within a two km radius of the mining application area, also contain a perched groundwater compound. A schematic diagram of how these systems are positioned is provided in Figure 1 below.



**Figure 1: Schematic layout of wetlands in the landscape**

<sup>305</sup> IWULA Report 97.

<sup>306</sup> IWULA Report 62.

When the ecological importance and sensitivity (EIS) of the wetlands in the study area were assessed, the wetland specialists reported that the Tevreden Pan system had a high diversity and was considered to be Natural or Unmodified in terms of habitat integrity and aquatic macro-invertebrates. But Black Coal submits that recommended mitigation and management measures are provided as far as practically possible for each identified impact.<sup>307</sup>

#### **4.6 Chrissiesmeer wetland and its importance for biodiversity**

As stated in chapter one of the study, the NDP 2030 emphasised the urgent need for the protection of water resources and the environment in the Mpumalanga coalfields.<sup>308</sup> The state as custodian of both minerals and water resources is obliged by the NDP to acknowledge this urgent need for protection.

Mpumalanga has over 4 000 wetlands and five major catchment areas and is therefore of critical strategic importance for regional and international water security.<sup>309</sup> Chrissiesmeer, situated in Mpumalanga, is South Africa's largest freshwater lake. It consists of an intricate network of hundreds of wetlands and pristine pans, all lying within a 20 km radius, and feeding into the Vaal, Olifants and Komati Rivers. Tevreden Pan, the biggest reed pan in the southern hemisphere forms part of these wetlands. Pans are endothermic features in the landscape that entails an internal drainage system. The pans in Mpumalanga are more perennial, less saline and are concentrated around the town of Chrissiesmeer. The area is unique on account of due the high density of pans, several of which are permanently saturated. The 320 pans range in size from less than a hectare to the largest, Lake Chrissie, which is bigger than 1000 ha. Collectively the pans inside the pan field are known as the Mpumalanga Lakes District (hereafter MLD) Tevreden Pan is covered by a dense growth of reeds with a narrow outer ring of open water. Figure 2 below provides a panoramic view of Tevreden Pan.<sup>310</sup>

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<sup>307</sup> IWULA Report 64.

<sup>308</sup> NDP 2030. See fn 1 and 2.

<sup>309</sup> McCarthy *Conservation of the Mpumalanga Lakes District*.

<sup>310</sup> Grundlingh *et al* Date Unknown <http://www.chrissiesmeer.co.za/p/718989/tevredden-pan-peatland-complex>.



**Figure 2: Panoramic view of Tevreden Pan**

Tevreden Pan is home to diverse flora consisting of the reed bed, submerging species and shoreline species. The NWA defines a wetland, such as Tevreden Pan, as:

Land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.<sup>311</sup>

Given its geomorphological and hydrological uniqueness, the MTPA has proposed that it receive the required status under the *Ramsar Convention*.<sup>312</sup> The Chrissiesmeer panveld, which incorporates the wetlands and surrounding vegetation, has been declared an endangered threatened ecosystem under NEMBA,<sup>313</sup> identified as a national freshwater ecosystem priority area (hereafter FEPA) and classified as an irreplaceable critical biodiversity area (hereafter CBA).<sup>314</sup> A CBA is described in the Mpumalanga Biodiversity Sector Plan (hereafter MBSP) of 2013 as an area of high biodiversity value that should be maintained in a natural or near-natural state.<sup>315</sup> In 2014 certain areas<sup>316</sup> were declared a protected

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<sup>311</sup> Section 1 of the NWA.

<sup>312</sup> *Ramsar Convention*. See fn 12. If such proposal is accepted in terms of the requirements of the *Ramsar Convention*, it would be incorporated on the list of Wetlands of International Importance.

<sup>313</sup> Section 52(1)(a) of NEMBA in GN 1002 in GG 34809 of 9 December 2011.

<sup>314</sup> SANBI 2018 <http://biodiversityadvisor.sanbi.org/industry-and-conservation/conservation-and-mining/connect-2/> explains a CBA as an area identified in a systematic biodiversity plan which meets biodiversity targets for ecosystems, species and ecological processes. The purpose is to guide decision-making about where best to locate development. It is the biodiversity sector's input into multi-sectoral planning and decision-making process. The South African Mining and Biodiversity Forum (hereafter SAMBF) participates in such planning to allow for different actors to connect.

<sup>315</sup> MTPA *Mpumalanga Biodiversity Sector Plan Handbook*.

<sup>316</sup> Portions 4 and 6 of the farm Lusthof are located in the middle of these areas, but are not on the list of farms incorporated in the declared protected area due to the fact that a prior mining right was granted. See fn 259.

environment in terms of NEMPAA.<sup>317</sup> The purpose of the declaration was *inter alia* to enable the owners of the land to conserve biodiversity and to seek legal recognition therefor, as well as to protect a specific ecosystem.<sup>318</sup>

Chrissiesmeer panveld is globally recognised as one of the 122 important bird and biodiversity areas (hereafter IBA). Birdlife International designated it as an IBA due to its importance in the conservation of threatened endemic and congregatory bird species. The Chrissiesmeer IBA supports over 220 species of birds, of which 83 species are water birds. Sixteen globally and regionally threatened bird species have been regularly recorded in the Chrissiesmeer IBA.<sup>319</sup>

In order to give effect to all these protection declarations, an application in terms of section 49 of the MPRDA was lodged by the MTPA.<sup>320</sup> Section 49 provides that the Minister of Mineral Resources may, after inviting representations from relevant stakeholders, prohibit the granting of a mining right in respect of land so determined.<sup>321</sup> It is in this environmentally sensitive and unique biodiversity site that environmental authorisation for open cast coal mining was granted.

#### **4.7 Extent of existing mining activities in Mpumalanga province**

According to the Zero Hour Report compiled by the Centre for Environmental Studies (hereafter CES)<sup>322</sup> in 2016, 61,3% of the surface area of Mpumalanga had already fallen under prospecting and mining rights applications by 2014, with cultivation representing, mere 0,7%.<sup>323</sup>

As Mpumalanga also produces a significant proportion of South Africa's staple foods, such as soya beans, maize and dry beans, agriculture makes a significant contribution to the economy and is a key job creator in the province. Unfortunately, the unbridled expansion of mining is eroding arable land. Water, soil and air pollution due to mining affects agricultural yields and pose a threat to food security. The report concluded that the lauded

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<sup>317</sup> Section 48(1)(b) of NEMPAA.

<sup>318</sup> Gen N 19 in PG 2251 of 22 January 2014.

<sup>319</sup> BirdLife International 2018 <http://datazone.birdlife.org/site/ibacriteria> reflected Chrissiesmeer as an approved IBA under number SA 019.

<sup>320</sup> GN 169 in GG 34051 of 4 March 2011. The MTPA initiative was to obtain the umbrella protection which s 49 of the MPRDA can provide.

<sup>321</sup> Section 49(1)(a) of the MPRDA.

<sup>322</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf>.

<sup>323</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf> Executive Summary VII and X.

economic development and job creation mining supposedly brings to local people, do not result in development capabilities for communities affected by mining. The economic advantages are outweighed by the negative impact on the environment, water security and human health and well-being. To prioritise profit from short-term financial gains to the detriment of water resources, does not make environmental, economic or social sense. But poor governance has achieved just that in Mpumalanga.<sup>324</sup>

The report claims to provide evidence that the DMR and DWS are violating constitutional rights in Mpumalanga by ignoring spatial planning and the designation of sensitive areas which have placed "water factories" or strategic water source areas (such as wetlands) at risk.<sup>325</sup> The inevitable conclusion is that the provincial department is simply ignoring its stewardship obligation to act as public trustee in the best interest of the people.

#### **4.8 Response and objections by affected and interested parties**

Various interested and affected parties lodged objections which had to be considered by the provincial department in the process of considering the granting of the EIA and amended EMPr. The content of such responses and objections will be discussed hereafter.

The Endangered Wild Life Trust, a NGO, submitted that water, noise, light and air pollution from the mining activities will have a negative effect on local biodiversity, especially on the more sensitive red data list species.<sup>326</sup>

The types of wetlands which occur in the relevant area are hill slope seepage wetlands, valley bottom wetlands, floodplains and pans of a pristine nature.<sup>327</sup> Pans are the most important wetland type for the provision of a habitat for red data bird species, such as greater and lesser flamingos, painted snipe, owls and the critically endangered wattled crane.

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<sup>324</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf> Executive Summary VII and X.

<sup>325</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf> Executive Summary VII.

<sup>326</sup> Scoping Report 1269.

<sup>327</sup> The present ecological status (hereafter PES) of 52% of the wetlands and pans situated within the mining area is classified as natural with limited or no modifications and are therefore classified as PES A. A further 28% is classified as natural with few modifications, deserving a PES B classification according to the Scoping Report 212.

The trust further submitted that mining is an incompatible land use within this sensitive landscape as suitable ecotourism and agriculture will contribute far more value over the long term, especially to local communities. It also contended that the development of a mine is incompatible with the current environmental protected environment status<sup>328</sup> of the surrounding farms, as well as the pending initiative to receive *Ramsar* status and the pending section 49 MPRDA application to have the area declared a no-go zone for mining.<sup>329</sup>

An adjacent landowner, Mr Geldenhuys, objected to the proposed route for transporting the coal. He maintained that apart from the dust and noise caused, it will impact negatively on the existing roads, which were built many years ago and were not designed to carry heavy loads. As a game farmer, his visitors seek tranquillity away from noise, but the noise and movement of four trucks per hour throughout the day and night would impact negatively on his business.<sup>330</sup>

Another adjacent landowner (Portion 5 of the farm Lusthof), Ms De Jager, owns a dairy with 200 lactating cows. As dairy cows are extremely sensitive to noise and blasting, the mining will adversely impact on their milk production. Dust resulting from mining operations and road transport will negatively impact on the hygiene of the dairy and will cause dust residue on grazing pastures.<sup>331</sup> Polluted effluent from mining activities will negatively impact the sensitive ecosystems in the rivers and pans. Surface water runoff will be adversely affected and residue deposits will inevitably form on the soil.

Mr Davel, an adjacent landowner and businessman, raised concerns regarding the construction of the water treatment plant and disclosed that his concerns were not addressed in the scoping report.<sup>332</sup> He also stated that the fatal flaw in the EIA /EMP is that insufficient consideration is given to the fact that 15% of the water will seep out of the pit and into the environment, regardless of optimal functioning of the water treatment plant. The issue of seepage has therefore not been addressed. The fact that AMD material will occur in the sandstone in which the pit is excavated, is an unavoidable consequence which will lead to unavoidable pollution. The

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<sup>328</sup> See para 4.6 above.

<sup>329</sup> Scoping Report 1270 and fn 309.

<sup>330</sup> Scoping Report 1260.

<sup>331</sup> Scoping Report 1252.

<sup>332</sup> *Davel* Review Application; *Davel* Affidavit 32.

AMD-affected sandstone will create the perimeter of the pit and the water captured in the pit will remain in contact with the AMD soil and rock-bearing sides. This will result in the presence of AMD in the water, a situation that will persist for geological time. As the water from the surrounding environment will ultimately run through and come into contact with the AMD, the pollution and contamination will be exacerbated.<sup>333</sup>

Research done at other mining sites has concluded that AMD has been noted for its serious ecological impacts and its particular threat to water resources.<sup>334</sup> AMD also destroys aquatic life and has serious impacts on other forms of terrestrial life which are dependent on the water resource. Feris and Kotze<sup>335</sup> stated that while AMD carries a potential threat to the environment as a whole, it poses a particular threat to the country's water resources. This will in turn have severe consequences for the health and well-being of people.<sup>336</sup> They warned that it poses future challenges for law and governance due to its potential to occur in perpetuity, as its long term socio-economic and environmental impacts will continue long after the mining activities which led to its creation, have ceased.<sup>337</sup> They commented as follows:

The duty to safeguard water supply thus lies with government as a whole, with specific functions and tasks afforded to different line functions situated in different spheres. It is also a function which forms part of the custodial obligation on government as the public trustee of South Africa's water resources as constitutionally prescribed in sections 24 and 27 of the *Constitution* and the NWA.<sup>338</sup>

Mr Linstrom, a wetland specialist employed by Wet-Earth-Eco-Specs (Pty) Ltd commented as follows on the anticipated impact of the pollution plume from the proposed mine on Lusthof on the sensitive receiving environment in the Chrissiesmeer wetland:

Carbonaceous material used in the backfilling of opencast mines can fill water in a short period (5-10 years). Metal sulphides, especially iron sulphides, in the waste rock, oxidise to form acid-rendering hydrogen ions. The water could therefore become acidic. It is sure to be enriched in sulphates and numerous heavy metals. Once filled, the polluted water from the void begins to discharge and would therefore also be polluted. The fact that the pans are surrounded by their own watershed (of which the mining area will form part) makes them

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<sup>333</sup> *Davel* Review Application 32.

<sup>334</sup> Durand, Meeuwis and Fourie 2010 *TD* 79.

<sup>335</sup> Feris and Kotze 2014 *PELJ* 2106.

<sup>336</sup> Feris and Kotze 2014 *PELJ* 2106.

<sup>337</sup> Feris and Kotze 2014 *PELJ* 2110.

<sup>338</sup> Feris and Kotze 2014 *PELJ* 2115.

particularly vulnerable to this form of pollution, since there is no possibility of removal of the toxic materials by natural flushing. These toxic materials will, over time, accumulate and eventually destroy all aquatic life, transforming the pans into virtually sterile, toxic pools. In addition, the soils of the area will become dispersive and erode. They will be polluted with heavy metals and sulphates.... Although the process may be slowed down through mitigation measures, it will only defer the generation of acid and will not stop it. In the long term, destruction of Tevreden Pan Peatland system will be inevitable, if mining takes place.<sup>339</sup>

He concluded that proposed open-cast mining within the catchment of pans and associated wetlands thus presents a very severe threat to the unique and pristine wetland ecosystems.

The Scoping Report prepared by JMA Consulting conceded that the ecological importance and sensitivity of 60% of the wetlands in the mining application area are high to very high. It also stated that it is unlikely that the 60% which scored very high could be separated from the 40% that scored moderate to low, in view of the hydrological interdependence of the wetlands, particularly in terms of perched groundwater linkages which are controlled by the underlying stratigraphy.<sup>340</sup> The report concluded that the proposed open-cast mining area at Lusthof is likely to impact upon a number of wetlands of high ecological importance and sensitivity within the upper reaches of the Mpuluzi River.<sup>341</sup> As surface water is likely to become more acidic, saline, and rich in metals and sulphates as result of the mining activities, this may result in the loss of sensitive species and a decline in biodiversity value. Both the Tevreden Pan and Mpuluzi River systems are considered to be important for fish (with an absence of alien fish) but are at risk from mining impacts.<sup>342</sup>

The Lusthof mine will be the only mine in the area of its size and type in an area where agricultural land use and wetlands, which attract tourism, predominate. The proposed mine is situated on a local topographical high point and will therefore be visible from all directions over significant distances, especially from the De Jager and Hain's homesteads. Dust will be noticeable as it will be generated in the open pit and on access roads. Vegetation, black wattle plantations and topography will restrict its visibility. The visual impact of the site infrastructure against the natural character of the Chrissiesmeer complex as backdrop, can be described as relatively

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<sup>339</sup> *Davel* Review Application Linstrom Annexure X.

<sup>340</sup> Scoping Report 215.

<sup>341</sup> Scoping Report 233.

<sup>342</sup> Scoping Report 233.

significant<sup>343</sup> and presents a challenge if visual intrusion in a sensitive area is considered from an ecological viewpoint. Because of the high landscape quality, the visual intrusion of the proposed Lusthof colliery site in the regional setting will be high and the Scoping Report proposed that it will have to be carefully monitored to ensure that activities have the smallest possible negative influence on the visual quality of the landscape.<sup>344</sup>

The impact on the sense of place - which means that this site has a uniqueness which distinguishes it from other places - should also be considered.<sup>345</sup> The Matotoland Eco-Tourism Association stated that a mining development will drastically impact on the sense of place, which is the cornerstone of the local tourism sector. The visual disturbance, noise and light pollution from mining activities running right through the night, will severely and negatively impact on existing tourism and its development potential.<sup>346</sup> Matotoland Eco-Tourism Association proposes that the no-go option should be considered, which would be in line with the proposed *Ramsar* and protected environment status.

The MTPA stated that the locality and close proximity of important catchment and river sources, biodiversity richness and the risks involved with an open cast coal mine remain a real concern. The coal mine's locality is undesirable and inappropriate, as it will be within the 5 km buffer zone of the St Louis Private Reserve, surrounded by the proposed Chrissiesmeer Protected Area and in the middle of a proposed *Ramsar* site.<sup>347</sup> Several other coal-mining options exist, and the disturbance to important bird life, sense of place and ecological sensitivity should play an overriding role in terms of the precautionary principle of NEMA.<sup>348</sup> The senior scientist employed by the MTPA stated that the risks of failing to manage permanent environmental degradation in such a sensitive ecosystem are simply too big and the prevention of pollution of the catchment river source and pristine ecosystem should be the legacy.

The MTPA complained that to allow mining would undermine the MBCP arrived at after a systematic conservation planning process, which included

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<sup>343</sup> Scoping Report 543.

<sup>344</sup> Scoping Report 301.

<sup>345</sup> Liefferink 2016 <https://www.fse.org.za/Downloads/037DEA20EIA.pdf>; Glazewski *Environmental Law* 76-77; Kidd *Environmental Law* 23.

<sup>346</sup> Scoping Report 1270.

<sup>347</sup> See para 2.10 above.

<sup>348</sup> *Dave!* Review Application Letter from MTPA to Mpumalanga Provincial Government Annexure F.

both terrestrial and freshwater conservation assessments. The MBCP was endorsed by the provincial Mpumalanga Cabinet in August 2008<sup>349</sup> and allowing mining in the very same area covered under the MBCP, would not only render the MBCP worthless, but would expose the conflicting decisions taken within the provincial government. The MTPA alleged in the appeal against the decision to grant the amended application for environmental authorisation that mining is opposed to the province's own published conservation strategy of including the area as part of a surrounding protected environment, which had already been approved. In view of the precautionary principle prescribed by NEMA, the disturbance of the wetland must be prevented. The MTPA proceeded to argue that, based on the environmental significance of the MLD and the marginal mineral deposits, biodiversity conservation and compatible land-uses will be the most appropriate long-term investment for the MLD, whereas mining should be regarded as incompatible.<sup>350</sup> The wetland ecologist questioned the sensibility of the DEA in on the one hand introducing and running the Working for Wetlands programme, which involves the inclusion of significant numbers of unemployed people into the productive section of the local economy, while on the other hand allowing contamination of the very same peat land system in the wetlands.<sup>351</sup> One of the key recommendations in the Zero Hour Report is that priority should be given to protection of SA's "water factories" or wetlands.<sup>352</sup>

Mr Stark, the chief coordinator of the Highfield Tourism Mpumalanga Regional Tourism Association (hereafter HTM) declared in an affidavit that his organisation is also vehemently opposed to the mining. The HTM was incorporated in 2011 to promote and develop tourism and related investment. A further object is to assist previously disadvantaged individuals to become active in the tourist industry and to create employment. In 2017 17,000 people were in full-time tourism related

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<sup>349</sup> Coetzee and Biggs 2012 <http://www.kruger2canyons.org/01-21%20-%20Benefits%20of%20Biodiversity.pdf>. The MBCP resolved that no mining activities should be allowed in the MLD, which represents areas in which no other options are available to protect the biodiversity of the province. The conclusion is that the aquatic biodiversity significance of the MLD is 71% irreplaceable. The location of pristine pans and wetlands within the MLD contributes towards the aquatic irreplaceability. Water quality and quantity are of paramount importance in South Africa and the MLD provides both. The risk of losing threatened species, the likely pollution of critical water supply areas and the inevitable drainage of wetlands necessitates that no mining activities should occur within the proposed MLD area, according to the MBCP.

<sup>350</sup> *Dave!* Review Application Annexure K.

<sup>351</sup> *Dave!* Review Application Annexure X.

<sup>352</sup> CER 2016 <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf> Executive Summary IX para 2.

employment in the Gert Sibande district, proving that tourism has enormous long-term sustainable economic potential. The town and lakes of Chrissiesmeer are recognised as important heritage and biodiversity sites, being the largest fresh water lake in South Africa. The statistics show that for every tourist visiting the area, 10 employment positions are created in the tourism industry, which provide for more long-term employment opportunities than the mine with 32 employees on site for a limited period. The catchment area of the lakes attracts birdwatchers, nature lovers, scientists and tourists from all over the world. The effect of mining will have disastrous effects on birding, frogging, hiking, fishing and mountain bike activities. Tevreden Pan has a significant historic legacy, due to the floating mats or platforms of reeds which were built by the ancient Tlou E'tle Sun or Bushmen. Blasting can have a damaging effect on the natural rock cave with ancient San Rock Art and natural geographical features like the Giant Mushroom Rock in Butwa Valley. He concluded that it remains illogical why mining with such a short lifespan should be allowed, while potentially harming sustainable tourism, heritage sites and biodiversity.<sup>353</sup>

#### **4.9 Conclusion**

All of these competing and opposing arguments had to be considered by the provincial authorities in their decision-making which may significantly affect the environment. The Constitutional Court in *Fuel Retailers*<sup>354</sup> recognised that socio-economic development cannot be divorced from ecological considerations and relied on sustainable development as an approach to resolve the inevitable conflict which arises between competing social, economic and ecological considerations.<sup>355</sup> But the constitutional imperatives<sup>356</sup> make it incumbent on the state as public trustee of natural resources, such as minerals and water, to apply the concept of state custodianship in decision-making. The question remains if and to what extent the provincial department complied with its duty, which will be answered in the conclusion.

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<sup>353</sup> *Davel* Review Application Stark Affidavit.

<sup>354</sup> *Fuel Retailers* 25E-F.

<sup>355</sup> Feris and Kotze 2014 *PELJ* 2117; French *International Law* 54.

<sup>356</sup> As exemplified in s 2 of the NEMA.

## Chapter 5

### 5 Conclusion and recommendation

#### ***5.1 Revisiting the background to the study and problem statement***

Portion 4 and 6 of the Farms Lusthof 60 IT, district Carolina are situated in the middle of the ecologically sensitive Chrissiesmeer wetland in Mpumalanga. The surrounding farms host Tevreden Pan, the largest reed pan in the southern hemisphere and fall within the declared Chrissiesmeer Protected Area.<sup>357</sup> Notwithstanding the irreplaceable biodiversity status of the wetlands, a mining right was granted in 2006 to Black Coal to establish an open cast coal strip mine on the escarpment area of portions 4 and 6 of Lusthof, which were excluded from the protected area. The MEC of the provincial department of Economic Development, Environment and Tourism approved the environmental authorisation to undertake mining activities with full knowledge of the inevitable pollution and destruction of some of the wetlands<sup>358</sup> as result of coal mining. The decision to grant an authorisation was based on the envisaged job opportunities for local residents,<sup>359</sup> without even referring to the interests of future generations.

This approval by an executive of the state raises serious questions about compliance with the duties inherent in the concept of state custodianship as contained in and deducted from the Constitution, NEMA, NWA and the MPRDA. This legislation strives to protect the environment and water resources, such as wetlands, for the benefit of present and future generations by providing for guiding principles and the concept of public trusteeship.<sup>360</sup>

#### ***5.2 Research question and objectives of the study***

The primary objective of the study was to investigate whether and to what extent the provincial department should have considered its duties as state custodian when deciding the application for environmental authorisation for mining activities in the Chrissiesmeer wetland.<sup>361</sup>

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<sup>357</sup> See para 1.1 of the study.

<sup>358</sup> See paras 4.3 and 4.5.2 of the study

<sup>359</sup> See para 4.2 and footnote 264 of the study.

<sup>360</sup> See para 2.11 of the study.

<sup>361</sup> See para 1.2 above.

### **5.3 Secondary objectives as foundation for the realisation of the primary objective**

In order to answer the research question, the scope and content of the novel concept of state custodianship introduced by the NWA and MPRDA had to be investigated. The analysis revealed that state custodianship includes both the state's duty to act as public trustee in its fiduciary capacity, as well as a new property rights regime to own and manage water and mineral resources for the benefit of all the people of South Africa. The duties inherent in the concept of state custodianship have been developed by environmental legislation in South Africa as contained in the environmental management principles in section 2 of NEMA and by international environmental law. The study proposed that compliance with the fiduciary duty can only be obtained if all the environmental management principles contained in NEMA<sup>362</sup> are being adhered to. The approach followed by the courts in applying the concept of state custodianship supported the contention that the directive principles of NEMA should be guidelines in administrative decision-making.<sup>363</sup>

### **5.4 Answering the research question and obtaining the primary objective of the study**

The conclusion of this study is that although state custodianship as fundamental principle should be used as a matrix when opposing interests have to be assessed,<sup>364</sup> the decisions taken by the various state officials of the provincial government of Mpumalanga omitted to adhere to this duty. The reasons advanced for the granting of the rights and authorisation for mining in the Chrissiesmeer wetland clearly reflected a disregard of the fiduciary duties inherent in custodianship. The decisions of the executive decision-makers fly in the face of a risk averse and cautious approach in direct contravention of section 2(4)(a)(vi) of NEMA. The decisions are clearly in conflict with the requirements that sensitive or vulnerable ecosystems such as wetlands, must require specific attention in management procedures, especially where they are subject to development pressure as in this case study.

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<sup>362</sup> See para 2.11 above.

<sup>363</sup> See para 3.3 above.

<sup>364</sup> Section 2(b) of the MPRDA.

The *Constitution* imposed renewed responsibilities on government to safeguard the nation's natural environment for the benefit of current and future generations. It is clear that the state as custodian has a dual role: on the one hand, it holds mineral resources and water as custodian for the people of South Africa and can make decisions on who may exploit and manage such resources, while on the other, it has the duty to protect and conserve the environment, inclusive of biodiversity, in its fiduciary capacity as custodian. As the environment is held in public trust for the people, its use must serve the public interest and it must be protected as the people's common heritage.<sup>365</sup> Private rights can therefore not take precedence over public interests. State officials should consider which competing use is the most favourable in respect of benefits accruing to society and in the public interest. The state's duty in compliance with the Bill of Rights contained in the *Constitution*, is extended by the environmental principles in NEMA, to regulate the use of land, to conserve biodiversity and to prevent unsustainable exploitation thereof.

### **5.5 Conclusion and recommendations**

In view of the answer to the research question, the validity of the recommendations of how the concept of state custodianship should be applied when administrative decisions are taken, becomes even more pertinent. The recommendation is that objective criteria need to be applied consistently by all relevant departments.<sup>366</sup> The question whether state custodianship of mineral resources will be perceived as investor-friendly, depends on a large extent on the degree to which administrative discretion in the making of administrative decisions to grant rights, is circumscribed by reference to objective criteria. These objective criteria are to be found in the environmental management principles prescribed by NEMA.<sup>367</sup>

Although continuous balancing of interests remains a conundrum for state decision-makers, it is submitted that failure to apply the NEMA principles may constantly lead to challenges and judicial review applications by aggrieved members of the public and NGOs, as in this case study of coal mining in the middle of the Chrissiesmeer wetland. The proposed solution is vested in the pre-emptive application of the NEMA principles in

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<sup>365</sup> Section 2(4)(o) of NEMA.

<sup>366</sup> Envisaged by the OES. See para 2.8 above.

<sup>367</sup> Section 2 of NEMA.

environmental decision-making. The relevant government official should ask the following questions when biodiversity is threatened:

- Are the potential economic and social benefits so valuable and sustainable that the safeguarding of biodiversity should be compromised?
- What are the cumulative impacts of the mining on biodiversity and has it reached a sustainable-use threshold?
- Is the biodiversity easily replaceable or will it be lost for future generations?
- Does the biodiversity have rare, endangered or unique characteristics?
- Will the proposed action have a significant consequential effect on other conservation initiatives?
- Are the negative consequences of mining reasonably reversible?
- Can the impact of mining reasonably be remediated within a period which is a meaningful timeframe?
- Should the precautionary principle which provides for a risk-averse approach not be applied and thus should the no-destruction of biodiversity option be preferred?

The questions enumerated above in many instances involve mixed considerations of fact, expert opinions and even legal conclusions. Bearing in mind that in the vast majority of cases playing fields are not level, the protagonists invariably possess far greater monetary and other resources than the antagonists. It would surely be in keeping with the spirit of the panoply of legislation and decisions dealt with in this study to place the onus on those seeking to intrude on the environment rather than those seeking to protect it.

If delegated officials take into account that each decision must be taken in its capacity as custodians, it will discourage decisions of ignorance and convenience which are in favour of social, political or economic gains, but prejudicial to biodiversity. The following words of Yacoob J in *Government of Republic of SA v Grootboom*<sup>368</sup> in the Constitutional Court should provide clear guidance to administrative decision-makers:

The State is required to take reasonable legislative and other measures. Legislative measures by themselves are not likely to constitute constitutional compliance. *Mere legislation is not enough*. The state is obliged to act to

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<sup>368</sup> *Government of the Republic of South Africa v Grootboom* 2001 1 SA 46 (CC).

achieve the intended results, and the legislative measures will invariably have to be supported by appropriate, well-directed policies and programmes implemented by the Executive. These policies and programs must be reasonable both in their conception and their implementation.<sup>369</sup>

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<sup>369</sup> *Government of the Republic of South Africa v Grootboom* 2001 1 SA 46 (CC) para 42.

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## LIST OF ABBREVIATIONS

Am U Int'l L Rev	American University International Law Review
AMD	Acid Mine Drainage
BBBEE	Broad-Based Black Economic Empowerment
BPEO	Best Practicable Environmental Option
CBA	Critical Biodiversity Area
CCR	Constitutional Court Review
CES	Centre for Environmental Studies
CER	Centre for Environmental Rights
DARDLEA	Department of Agriculture, Rural Development, Land and Environmental Affairs
DMR	Department of Mineral Resources
DWS	Department of Water and Sanitation
ECA	Environment Conservation Act 73 of 1989
EIA	Environmental Impact Assessment
EIS	Ecological Importance and Sensitivity
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
Envtl L	Environmental Law

ESWL	Environmental Safe Water Level
FEPA	Freshwater Ecosystem Priority Area
GDP	Gross Domestic Product
GHGs	Green House Gases
HTM	Highveld Tourism Mpumalanga Regional Tourism Association
IBA	Important Bird Area
IDP	Integrated Development Plan
IWULA	Integrated Water Use Licence Application
LAC	Limit of Acceptable Charge
LEAD	Law, Environment and Development Journal
MA	Minerals Act 50 of 1991
MBCP	Mpumalanga Biodiversity Conservation Plan
MBSP	Mpumalanga Biodiversity Sector Plan
MEC	Member of Executive Council
Mich L Rev	Michigan Law Review
MLD	Mpumalanga Lakes District
MPRDA	Mineral and Petroleum Resources Development Act 28 of 2002
MTPA	Mpumalanga Tourism and Parks Agency

Nat Resour J	Natural Resources Journal
New Jersey LJ	New Jersey Law Journal
NWA	National Water Act 36 of 1998
NDP	National Development Plan
NEMA	National Environmental Management Act 107 of 1998
NEMBA	National Environmental Management: Biodiversity Act 10 of 2004
NEMICMA	National Environmental Management: Integrated Coastal Management Act 24 of 2008
NEMPAA	National Environmental Management: Protected Areas Act 57 of 2003
NWA	National Water Act
NGO	Non-Governmental Organisation
OES	One Environmental System
Ox Rev Econ Policy	Oxford Review of Economic Policy
PAJA	Promotion of Administrative Justice Act 3 of 2000
PCD	Pollution Control Dam
PELJ	Potchefstroom Electronic Law Journal
PES	Present Ecological Status

ROM	Run of Mine
SAJELP	South African Journal of Environmental Law and Policy
SAJHR	South African Journal on Human Rights
SALJ	South African Law Journal
SAMBF	South African Mining and Biodiversity Forum
SANBI	South African National Biodiversity Institute
SAPL	Southern African Public Law
SANS	South Africa National Standard
SCA	Supreme Court of Appeal
Stell LR	Stellenbosch Law Review
TD	Journal for Transdisciplinary Research in Southern Africa
TSAR	Tydskrif vir die Suid-Afrikaanse Reg
WTP	Water Treatment Plant

## **LIST OF TABLES AND FIGURES**

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