MPUMALANGA DEPARTMENT OF ECONOMIC DEVELOPMENT,

ENVIRONMENT AND TOURISM

Appeal instituted by:

EARTHLIFE AFRICA JOHANNESBURG	**FIRST APPELLANT**
BIRDLIFE SOUTH AFRICA	**SECOND APPELLANT**
MINING AND ENVIRONMENTAL JUSTICE NETWORK OF SOUTH AFRICA	**THIRD APPELLANT**
ENDANGERED WILDLIFE TRUST	**FOURTH APPELLANT**
FEDERATION FOR A SUSTAINABLE ENVIRONMENT	**FIFTH APPELLANT**
GROUNDWORK	**SIXTH APPELLANT**
ASSOCIATION FOR WATER AND RURAL DEVELOPMENT	**SEVENTH APPELLANT**
BENCH MARKS FOUNDATION	**EIGHTH APPELLANT**

Directed to:

MEMBER OF THE EXECUTIVE COUNCIL: ECONOMIC DEVELOPMENT, ENVIRONMENT AND TOURISM, MPUMALANGA

Copied to:

MINISTER OF ENVIRONMENTAL AFFAIRS

APPELLANTS' ANSWERING STATEMENT IN TERMS OF REGULATION 63(2)(b) OF THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2010

---

1. The purpose of this answering statement is twofold. It is first to deal with certain aspects raised by Atha's responding statement of 3 October 2016, in particular:

    1.1. The standing of the appellants;

    1.2. The electrical power requirements of the project and the correct competent authority;

    1.3. Atha's denial of any material gaps in information;

    1.4. Atha's contention that the appellants have relied on outdated specialist studies; and

    1.5. Aspects pertaining to individual specialists relied upon by Atha and the appellants respectively.

2. The second purpose of this answering statement is to place before the MEC a specialist review of the water use licence application which Atha has made in terms of the National Water Act 36 of 1998 ('the WULA'), and the specialist reports upon which it is based.

3. The specialist review, which was prepared by GCS (Pty) Ltd on 18 November 2016, is attached marked '**J**' ('the GCS review'). All of the water related specialist studies which formed part of the Environmental Impact Assessment Report ('EIAR') also formed part of the WULA. The GCS review findings are therefore pertinent to this appeal.

4. The GCS review was only completed a day before the deadline for submission of this answering statement and the appellants have not been in a position to place it before the decision maker before now. Given the time constraints, the appellants do not purport in this answer to summarise the pertinent parts of the GCS review, but attach it in its entirety as an annexure to this appeal. The appellants rely on the GCS review as an integral part of their appeal.

5. The appellants are advised that the GCS review ought properly to be taken into account by the MEC in this appeal. The reasons for that are that an appeal to the MEC under section 43 of National Environmental Management Act 107 of 1998 ('NEMA') against the Chief Director's decision is an appeal in the wide sense[1]. Consequently when the MEC determines this appeal under section 43(6) his decision will supersede that of the Chief Director and his decision on appeal (should the appeal be dismissed) will in essence be a decision in terms of section 24 of NEMA to grant an authorisation subject to the conditions specified by him.

6. The GCS review is quite clearly relevant to the determination of groundwater and other water related issues raised in the appeal.

PART A: STANDING

7. In its responding statement dated 3 October 2016 (at paragraph 4.2.2) Atha contends that the first, third, sixth and eighth appellants do not have standing

[1] *Tikly and Others v Johannes NO and Others* 1963 (2) SA 588 (T) 590F-G; *Hangklip/Kleinmond Federation of Ratepayers Associations v Minister for Environmental Planning and Economic Development: Western Cape and Others* (4009/2008) [2009] ZAWCHC 151 (1 October 2009) paras 42-44; *Sea Front For All and Another v MEC, Environmental and Development Planning, Western Cape and Others* 2011 (3) SA 55 (WCC) paras 21-28

to appeal to the MEC against the environmental authorisation granted by the Chief Director: Environmental Affairs, Mpumalanga on 7 June 2016 ('the EA') in terms of section 43(2) of NEMA because they were not registered as interested and affected parties in terms of regulation 55 of the Environmental Impact Assessment Regulations, 2010.

8. Section 43(2) of NEMA provides that '*Any person may appeal to an MEC against a decision taken by any person acting under a power delegated by that MEC under this Act or a specific environmental management Act*'.

9. Section 1 of the NEMA makes it clear that '*person*' includes a juristic person.

10. There is nothing in NEMA to suggest that only interested and affected parties registered in terms of regulation 55 of the Environmental Impact Assessment Regulations, 2010 may bring an appeal in terms of section 43(2) of NEMA.

11. The appellants clearly have the requisite standing to bring this appeal.

12. Even if Atha were correct in its contention that certain of the appellants do not have standing, the appeal in any event falls to be decided by virtue of the standing of the appellants whose *locus standi* is not challenged.

PART B. LISTED ACTIVITY AS REGARDS ELECTRICITY REQUIREMENTS

13. Atha submits that the construction of facilities or infrastructure for the generation of electricity where electricity output is more than 10 megawatts but less than 20 megawatts (activity 1(i) in Listing Notice 1 of 2010), is not

triggered because the electricity required for the Best Environmental Option is less than 10 MVA. They say that this is explained on page 109 of the EIAR (p. 70 of Atha's responding statement)[2].

14. Page 109 of the EIAR however says only the following, '*[N]ote that with the Best Environmental Option (the new preferred alternative no Wash Plant will be required [sic], thus the power requirement would be less than 10 MVA*'.

15. This revised power requirement does not appear from any of the specialist reports attached to the EIAR. There is in other words no specialist study which assesses and reports on what the power requirements of the Best Environmental Option are likely to be.

16. What is more is that a Pre-Feasibility Study which was conducted by Mindset Mining Consultants to determine the power requirements of the earlier version of the project (which still included the discard pile) has also not been included among the annexures to the EIAR[3]. It is therefore impossible for the decision maker or the appellants to assess whether the statement as to the current power requirements is likely to be correct.

17. Of particular concern is whether the power requirements of the water treatment plant proposed as part of the Best Environmental Option (EIAR p.

---

[2] They also say that the appellants are wrong that 12 MVA comprises 12MW because for this to hold true, there must be a Power Factor of 1, and '*[t]he report though indicates the PF is 0.8 and so 12 MVA has a rating of 9.6 MW*' (p. 71). There is however no reference to the power factor in the EIAR or "Appendix C 4 Mindset Power Generation Assessment". Presumably 'the report' that Atha is referring to is therefore the Pre-Feasibility Study, but the difficulty with this is that this report does not form part of the EIAR

[3] This Pre-Feasibility Study is referred to in an extract of that study dated 25 July 2014 which is Appendix C4 to the EIAR

812) have been taken into account. It is clear from several parts of Atha's responding statement that the water treatment plant is envisaged for the construction phase as well as the post-closure phase (see, for example, p. 90 of Atha's responding statement).

18. As noted in paragraph 35.11 of the statement of appeal dated 19 August 2016 ('the statement of appeal'), the DEA on 16 May 2014 specifically required assurances about the power requirements of the project. A copy of this letter is, for ease of reference, attached marked '**K**'.

19. It is simply not possible for the competent authority to satisfy itself that the power requirements of the project as presently conceived will in fact be less than 10 MVA.

20. This is a key consideration for the reasons outlined in the statement of appeal.

PART C. COMPETENT AUTHORITY

21. The appellants reiterate under this head that section 24C(2)(a) of NEMA provided at the time that Atha's application was made to the DEA on 8 June 2013 that the Minister must be identified as the competent authority in terms of subsection (1) if the activity '*has implications for international environmental commitments or relations*'. This iteration of section 24C(2)(a) was not qualified in the way suggested by Atha or in any other way.

22. Atha, in its responding statement requests 'proof' that the activities do in fact have implications for international environmental commitments or relations. This is set out in the sections which follow.

C.1 The Convention on Wetlands of International Importance

23. The Convention on Wetlands of International Importance came into force in South Africa on 21 December 1975 ('the Ramsar Convention').

24. The Ramsar Convention places a general obligation on South Africa to protect and promote the conservation of wetlands in its territory (see articles 3(1) and 4(1) and 4(4)). This is regardless of whether or not such wetlands are listed in terms of the Convention.

25. The appellants are advised that an activity which will, by the account of several specialists, negatively affect wetlands of the quality and ecological importance of the wetlands here in issue, would have implications for South Africa's international environmental obligations in terms of the Ramsar Convention.

C.2 The Convention on the Conservation of Migratory Species of Wild Animals

26. South Africa acceded to the Convention on the Conservation of Migratory Species of Wild Animals ('the Migratory Species Convention') in 1991.

27. In terms of the Migratory Species Convention, South Africa undertook, among other things, to endeavour to conclude agreements covering the conservation and management of migratory species included in Appendix II (Article II(3)(c)).

28. Four of the species which are included in Appendix II to the Migratory Species Convention are the *Ciconia ciconia* (White Stork); the *Threskiornis*

aethiopicus (Sub-Saharan Africa and Southwest Asia (Iran/Iraq) populations) (African Sacred Ibis); the *Platalea alba* (excluding Malagasy [i.e. Madagascar] population) (African Spoonbill); and the *Coturnix coturnix coturnix* (Common Quail).

29. As appears from the '*Biodiversity Baseline & Impact Assessment Report*' by Natural Scientific Services CC dated September 2013 (which is Appendix H1 to the EIAR) ('the NSS biodiversity report'), all of these have been recorded as occurring in several areas (or 'pentads') which coincide with the proposed mine. The White Stork and Common Quail occur in the precise area where the surface infrastructure will be placed, regardless of its revised configuration for the Best Environmental Option (NSS biodiversity report (Appendix H1) Appendix 3 and Figure 2-1 (pp. 74, 119 and 120 of Atha's responding statement) – the pentad into which the surface infrastructure will fall has remained the same).

30. The NSS biodiversity report does not assess likely impacts of the mine on these species specifically, but records that removal of vegetation for proposed surface infrastructure will cause loss of breeding and foraging habitat including for several bird species ((NSS biodiversity report (Appendix H1) p. 240).

31. It stands to reason that any activity which may impact on species listed in Appendix II to the Migratory Species Convention would also have implications for South Africa's duty to conclude agreements covering the conservation and management of such species.

C.3 The Convention on Biological Diversity

32. South Africa ratified the Convention on Biological Diversity ('the Biological Diversity Convention') on 2 November 1995.

33. The Biological Diversity Convention provides that contracting parties shall, among other things:

33.1. Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity (article 8(a));

33.2. Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings (article 8(d));

33.3. Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering the protection of these areas (article 8(e)); and

33.4. Develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations (article 8(k)).

34. The Biological Diversity Convention was given effect to in part by the National Environmental Management Act: Biodiversity Act 101 of 2004 ('the Biodiversity Act').

35. In terms of section 56(1) of the Biodiversity Act, the Minister of Environmental Affairs may by notice in the Gazette publish a list of –

35.1. Critically endangered species, being any indigenous species facing an extremely high risk of extinction in the wild in the immediate future;

35.2. Endangered species, being any indigenous species facing a high risk of extinction in the wild in the near future, although they are not a critically endangered species;

35.3. Vulnerable species, being any indigenous species facing an extremely high risk of extinction in the wild in the medium-term future, although they are not a critically endangered species or an endangered species;

35.4. Protected species, being any species which are of high conservation value or national importance or require regulation in order to ensure that the species are managed in an ecologically sustainable manner.

36. In terms of section 57(1) of the Biodiversity Act '*[a] person may not carry out a restricted activity involving a specimen of a listed threatened or protected species without a permit issued in terms of Chapter 7*'.

37. '*Restricted activity*' is defined in section 1 of the Biodiversity Act as meaning, among other things, '*conveying, moving or otherwise translocating any specimen of a listed threatened or protected species*'.

38. On 23 February 2007 the Minister published a list of critically endangered, endangered, vulnerable and protected species in the Government Gazette (notice 151 in GG 29657 dated 23 February 2007) ('the species listing notice').

39. Although the NSS biodiversity report describes the threatened status of the various flora and fauna found in the study area with reference to the IUCN Red Lists which do not necessarily coincide with the species listing notice, there are several mammal species which overlap between the two, including the *Chrysospalax villosus* (Rough-haired Golden Mole) (Critically Endangered); the *Parahyaena brunne* (Brown Hyaena) (Protected Species); *Leptailurus serval* (Serval) (Protected Species) and the *Vulpes Chama* (Cape Fox) (Protected Species) (NSS biodiversity report (Appendix H1) pp. 98-99).

40. All of these are deemed to be Present or Highly Likely to occur in the study area (NSS biodiversity report (Appendix H1) p. 98-99)[4].

41. The appellants have not conducted a similar comparison in relation to other fauna or flora found on the site but the EA appears to assume that there will be listed species which will need to be removed from the site – see condition 3.57 which provides that '*[a] permit must be obtained from the Mpumalanga Tourism and Parks Agency for the removal or destruction of indigenous protected and endangered plant and animal species*'.

42. It is clear from this that the proposed activity would have implications for threatened species or species with significant conservation value and therefore for South Africa's international environmental commitments in terms of the Biological Diversity Convention.

[4] The appellants note in this regard that to the extent that Atha relies on a subsequent visit by SAS to the site to contend that in fact these species were not seen there, and that they are therefore unlikely to exist there, this contention can obviously not be relied upon to dismiss the detailed and thorough investigations performed and reported on by the biodiversity specialist, NSS

C.4 The United Nations Framework Convention on Climate Change

43. South Africa ratified the United Nations Framework Convention on Climate Change on 29 August 1997. It acceded to the Kyoto Protocol in July 2002.

44. As noted in annexure '**H**' to the statement of appeal:

44.1. Underground coal mines, such as the proposed Yzermyn mine, are a large direct contributor of greenhouse gases ('GHG') emissions, particularly methane gas because ventilation causes significant quantities of methane to be pumped into the atmosphere. Methane is estimated to have a global warming potential 23 times higher than carbon dioxide. Methane emissions from coal mining have been estimated to contribute 6-10% of total anthropogenic global methane emissions, with such emissions predicted to rise by 15% by 2020.

44.2. EcoPartners identified that methane gas may be produced as a result of the coal extraction activities, without mitigation (EIAR p. 495). However, the EIAR failed to assess or address this impact at all.

44.3. Although South Africa does not, at this stage, have any set emission reduction obligations under the Kyoto Protocol, it has undertaken to make commitments for national contributions towards GHG emission reductions, it participated in the negotiations for the universal agreement on climate change entered into at the 21st Conference of the Parties ("COP21") in Paris in December 2015 ("the Paris Agreement"), and it acknowledges that "*the science is clear that action to address*

the causes and impacts of climate change by a single country or small group of countries will not be successful. This is a global problem requiring a global solution through the concerted and cooperative efforts of all countries".

44.4. South Africa's Intended Nationally Determined Contribution ("INDC") was formulated in the context of, *inter alia*, the environmental right set out in section 24 of the Constitution, and its National Development Plan ("NDP") (NPC, 2012), which provides a '2030 vision' to guide the country's sustainable development trajectory where poverty is eliminated and inequalities are reduced by 2030. The INDC commits to emissions in a range between 398 and 614 Mt CO2–eq between 2025 and 2030 within the peak plateau decline ("PPD") trajectory.

44.5. On 22 April 2016 South Africa signed the Paris Agreement in terms of which parties are obliged to submit new INDCs every 5 years and they can at any time adjust their INDCs, but only with a view to enhancing their commitments. The first global stocktake is due to take place in 2023 and every 5 years thereafter.

44.6. The effect of this is that South Africa can only commit to more stringent GHG emission reduction targets, meaning that concerted efforts will be required by the South African government to reduce its GHG emissions with a view to further reducing the country's GHG emissions.

44.7. Authorising an underground coal mine without assessing its emissions flies in the face of this commitment.

44.8. South Africa is already one of the world's largest contributors to global climate change, having produced around 547Mt of carbon dioxide equivalent (CO_2-eq) in 2010 (around 231.9 Mt is produced by the electricity sector alone). The South African government has recognised the need for climate action and has set 398Mt CO_2-eq per year as the target limit for CO_2 by 2025.

45. It is clear that the proposed coal mine and others like it will have implications for South Africa's international environmental commitments in terms of the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement.

46. The appellants therefore persist in the contention that the Minister was in fact identified correctly as the competent authority in terms of NEMA including, for the reasons given in the statement of appeal, because all the indications are that the actual power requirements of the project, taking into account the water treatment plant, would trigger a listed activity.

47. Having correctly identified the competent authority, the Minister's Department engaged substantively with the application. The DEA made detailed and comprehensive suggestions about how the project ought to be adapted and the EIAR supplemented. It was irregular and unlawful for the application after that to be determined by a different authority.

PART D: ABSENCE OF MATERIAL INFORMATION

48. In this section the appellants identify and deal with certain of Atha's responding statements in relation to the appeal ground that there are and were material gaps in the information contained in the EIAR placed before the Chief Director.

49. As regards the allegation that no additional surface water studies were undertaken to quantify the acid mine drainage (AMD) impacts and/ or their rigorous management:

    49.1. Atha does not dispute that no additional surface water studies were undertaken to quantify acid mine drainage (AMD) impacts and/ or their rigorous management. It refers instead to the groundwater assessment by Delta H dated August 2014 (Appendix F) ('the Delta H groundwater assessment'). As appears from the Delta H groundwater assessment, it considered the risk posed by acid mine drainage only in relation to the discard dump (which is no longer part of the project) and the coal stockpile (Delta H groundwater assessment p. 19). It mentioned, but did not assess the risk posed by AMD associated with decant after mine closure.

    49.2. *In lieu* of referring to any specialist report which deals with the risk posed by AMD related to actual mining, Atha says '*It was clear from these assessments [presumably the Delta H assessment and certain tables prepared by EcoPartners in the EIAR] and a site visit to the historic mine on the property where water samples were collected and*

assessed and reported on in the EIAR, that the risk of AMD is limited, quantification to the levels of confidence available was done' (Atha responding statement p. 78).

49.3. No reference is given for where this site visit is dealt with in the EIAR and no information is provided as regards the details of the site visit: by whom it was undertaken; the precise nature of the tests which were done; or what the actual results were. In any event, what is described here by Atha hardly constitutes a risk assessment of the type required by NEMA and its regulations.

49.4. As regards the concern raised by Scientific Aquatic Services CC ('SAS') quoted in paragraph 73.2 of the statement of appeal, Atha responds as follows '*During workshops held impact mitigation measures were discussed among the project professional team and it was determined that through starving the underground workings of oxygen rich air through cutting it off from the surface and by plugging the adit at closure the risk of AMD is greatly reduced. This was regarded by SAS as being a significant mitigation measure to reduce the risk of impact to the receiving environment*' (Atha responding statement p. 79)

49.5. The problem is that this workshopped mitigation measure has never been assessed by a specialist. The appellants point out in this regard that it is no answer for Atha to contend, as it does, that the water related aspects have been '*addressed through the WULA*' (Atha

responding statement p. 79). The Chief Director was obliged to consider all environmental impacts associated with the mine.

49.6. Finally as regards the question of AMD, as appears from the GCS review, the authors note the absence of a proper assessment of the risks posed by AMD including that there was no contamination plume modelled for AMD (while the Delta H groundwater assessment does contain models in relation to the discard dump and stockpiles, there is no similar model in respect of AMD associated with the underground workings of the mine) (see for example pp. 15, 38 and 39 of the GCS review). GCS advises that '*Were AMD taken into account, the water quality-related risks and mitigation measures would change. Accordingly, the existing water quantity-related and water-quality risks and mitigation methods are potentially inaccurate and inappropriate*' (GCS review p. 55)[5].

50. As regards the allegation that although the DEA requested that a geotechnical specialist study be included in the revised EIAR to address the issue of mine stability and the potential for subsidence, there is no mention or assessment of the risk of subsidence in Appendix C3 (the updated Geotechnical Study):

---

[5] In response to an allegation that the impact significance of AMD has not been assessed in any of the specialist studies, Atha refers to page 341 of the EIAR and says '*This was submitted to the competent authority and formed part of the decision-making process*' (p. 92). Presumably Atha means by '*this*' the surface water quality baseline and IA report which were not available at the time of compiling the EIAR. It goes without saying that if, as Atha suggests, the Chief Director's decision was based on a report which did not form part of the EIAR and therefore the public participation process, especially if that report relates to a subject as important as AMD, that the decision would be reviewable on that ground alone. (As regards the reference on page 342 of the EIAR to the Delta Report having predicted 'the quality of decant', as already explained above, Delta H assessed the risks of AMD associated only with the discard dump and the stockpile)

50.1. In its answer, Atha describes the method of mining which will be employed, but does not refer to any specialist report in which it is concluded that the risk of subsidence is considered to be low. Instead Atha refers to a conclusion to this effect which appears to have been drawn by EcoPartners itself in the EIAR, presumably based on the Updated Geotechnical Study (p. 326 of the EIAR).

50.2. The drawing of a conclusion as regards the risk of subsidence lies in the domain of a suitably qualified expert, which EcoPartners is not.

50.3. In any event, the updated Geotechnical Study contains, apart from recommendation as regards pillar design, certain recommendations as regards a roof bolting system. These recommendations have not found their way into the EA conditions.

50.4. Atha adds that '*the historical mining adits further confirm the stated risk for subsidence that was submitted is correct*' (Atha responding statement p. 80). It can never be that a risk such as this can be discounted based on an observation of what has or has not happened to historical mines in the area, let alone what has or has not happened to their entrances (or 'adits').

51. As regards the allegation that the EIAR fails to assess cumulative impacts adequately and to evaluate their potential significance reliably including the cumulative impacts that would result from a combination of the mine and other mines in the area including the Loskop Coal Mine which also falls within the Mabola Protected Environment:

51.1. Atha refers to p. 574 in the EIAR where cumulative impacts are considered. It is correct that certain cumulative impacts are considered there, including those of the several mining applications pending in the area. The EIAR considers that the cumulative impacts on the wetland habitat and the species it supports are significant – it says among other things '*increased development in the region results in isolation of natural areas, which may lead to decreases in faunal diversity, not only locally, but on a regional scale through population declines as a result of genetic isolation*' (EIAR p. 575). But NSS went much further than this when it reported that '*If a significant portion of these (mining) applications are approved, the combined impacts of mining, afforestation and agriculture will have a massive deleterious impact on Biodiversity at provincial and national levels*' (NSS biodiversity report p. 267)

51.2. The EIAR also failed to take into account the Loskop Coal Mine in its analysis of cumulative impacts, despite the fact that it lies 2km to the east of the proposed mine and also falls within the Mabola Protected Environment. This is a critical omission.

52. As regards the allegation that there has been no adequate ground-truthing undertaken to prove that the development does not impact on the reason for the 'irreplaceability' classification of the area by the MBSP:

52.1. Atha's responding statement to this allegation is to refer to the NSS biodiversity report.

52.2. But the NSS biodiversity report is one of the reports which formed part of the EIAR which served before the DEA. As is noted in the statement of appeal, the NSS reported that due to the '*HIGH and* ***long-term (if not irreversible) status of this impact in an area far exceeding the study area****, the project should be a NO GO*' (NSS biodiversity review p 253). Having considered this report, the DEA pointed out in its letter of 16 May 2014 that there had been no adequate ground-truthing undertaken to prove that the development does not impact on the reason for the 'irreplaceability' classification of the area by the MBSP.

52.3. To the extent that Atha meant to refer to the more recent reports by SAS, namely the SAS '*Wetland Ecological Assessment as part of the Environmental Assessment and Authorisation Process for the proposed Yzermine Coal Mining Project*' dated June, August 2014 ('the SAS 2014 report') and the wetland delineation letter by SAS dated 9 December 2014 ('the SAS delineation letter'): As appears in greater detail below, the former confirmed the ecological value and sensitivity of the wetlands; and the scientific veracity of the latter has been called into question by both Professor Ingrid Dennis (Annexure G to the statement of appeal p. 6-7) and GCS (as elaborated upon below).

53. While these are not the only material gaps in information, they do constitute some of them and Atha has not demonstrated how these gaps are filled in the EIAR.

54. Atha's responding statement demonstrates a further material gap in vital information. The statement by Atha, to meet the concern about post-closure decant, that it will '*pre-grout any zone of inflow intersected*' (see for example Atha's responding statement at p. 49) must be read in light of GCS's comments as regards this method (please refer to the GCS review p. 47). GCS makes two points in this regard. The first is that grouting has not been assessed by any of Atha's groundwater specialists and it may have its own impacts which have not been assessed. The second is that whereas grouting may reduce potential inflows into the underground workings and therefore also reduce the potential drawdown, this was not assessed or simulated by Delta H and it is therefore simply not known whether this proposed measure will reduce the post-closure decant impact.

55. Finally as regards gaps in information, the appellants rely in this appeal on the GCS review, including crucially, GCS' identification of the absence of hydrogeological information in respect of the sills, dykes and faults present on the site (GCS review pp. 6-7; 9; 10; 13; 16). This is a material gap in the information required for a decision to be taken as regards likely impacts of the proposed mine.

PART E. RELIANCE ON OUTDATED INFORMATION

56. Atha answers many of the allegations contained in the statement of appeal by suggesting that the appellants and Brownlie have relied on 'dated' specialist studies and have failed to take into account subsequent updated specialist reports.

57. That is not correct. As appears from the statement of appeal, the appellants have considered carefully the updated reports to which Atha refers, in particular the Delta H groundwater assessment; the SAS 2014 report; and the SAS delineation letter).

58. As regards the Delta H groundwater assessment:

58.1. Atha relies in several places on the fact that it redefined the impact of dewatering caused by underground mining (see for example Atha's responding statement at p. 91).

58.2. The cones of dewatering developed by Delta H were however comparable to those which had been developed by WSP in the earlier geohydrological study (see Dennis annexure G to the statement of appeal at p. 7; and GCS at p. 29).

58.3. The Delta H groundwater assessment also confirmed that '*The ensuing cone of dewatering due to mine inflows will capture groundwater, which would otherwise contribute to spring discharges, leakages along hillslopes, wetlands, river baseflow or to deeper regional groundwater flow*' (p.vi). It also confirmed that '*Groundwater dependent eco-*

systems and yields of (water supply) springs located within the significant zone of dewatering of the shallow aquifer, limited to the site boundaries, could be negatively impacted and some may dry up during the life of mine' (Delta H groundwater assessment pp. 52-52)[6].

59. As regards the SAS 2014 report:

59.1. As noted in the statement of appeal, that report did not evaluate the impacts associated with the Best Environmental Option (but instead those associated with an earlier surface infrastructure layout).

59.2. The SAS 2014 report also did not assess the impacts of mine dewatering on the wetlands in light of the groundwater model developed by Delta H (see in this regard Dennis (annexure G to the statement of appeal pp. 5-6).

59.3. In other words, there is no wetlands specialist report which (a) assesses the likely impacts of the mine as it is presently configured; and (b) assesses the impacts of the cone of dewatering predicted by Delta A.

59.4. In any event, the SAS 2014 report confirmed the ecological value and sensitivity of the wetlands in the study area.

60. As regards the SAS delineation letter, which contrasts starkly with the SAS 2014 report, this letter has been reviewed by two specialists both of whom

[6] Atha says as regards the impact of dewatering on FEPA's that the drawdown 'does not reach any of the FEPAs' and gives as a reference page 317 of the EIAR. Page 317 does not however demonstrate this. While it does contain a figurative representation of the drawdown cones, it does not show where these are in relation to FEPAs

have seriously questioned its scientific veracity, pointing out among other things that:

60.1. The Ecological Importance and Sensitivity ('EIS') assigned to both the CVB and seep wetlands by SAS in the SAS 2014 report was an 'A' (although SAS did acknowledge that the hill slope seeps were less sensitive to modification than the CVB wetlands), which is inconsistent with the SAS delineation letter (Dennis Annexure G to the statement of appeal, p. 6);

60.2. The SAS team assigned the wetlands the highest scores possible for Present Ecological State ('PES'); populations of unique species, ecological integrity; and rare and endangered species, which is inconsistent with the SAS delineation letter (Dennis Annexure G to the statement of appeal, p. 6);

60.3. The findings of both hydrogeology reports (Delta H and WSP (2013)) suggest that the dolerite sill does not underlie the entire area, as suggested in the SAS delineation letter (Dennis Annexure G to the statement of appeal, p. 6);

60.4. The absence in the Delta H groundwater assessment of hydrogeological information in respect of the sills, dykes and faults amounts to a material gap in information and also means that when SAS reported in the SAS delineation letter that the dolerite sill would minimise the impact of drawdown on the wetlands, there was no scientific basis on which it could have done so (GCS p. 17); and

60.5. Based on the results obtained during the specialist wetland assessments by both NSS and SAS in the SAS 2014 report, the scientific veracity and value of the SAS wetland delineation letter is questionable (GCS p. 25).

61. Atha's reliance on the Delta H groundwater assessment, SAS 2014 report and SAS delineation letter for a contention that the NSS biodiversity report has been largely rendered irrelevant, or that impacts to wetlands have been properly assessed is therefore misplaced. Both Dennis and GCS describe in detail the field and modelling work which would need to have been done for this to be the case (Dennis pp. 7 and 8 and GCS at pp. 10, 13, 14, 18 and 19 among others).

62. The statement by Atha that the appellants have relied on an outdated figure as regards the underground workings of the mine (p. 18) is also simply incorrect. The appellants referred in the statement of appeal to the figure which they attach as annexure '**A**' to the statement of appeal. That figure corresponds exactly with the figure which is at page 140 of the EIAR which Atha refers to as being the correct figure. (The underground workings area was not altered by the Best Environmental Option)[7].

[7] The appellants point out as an aside that the allegation in the statement of appeal to the effect that the EIAR contains the following inaccurate statement as regards impacts associated with water quantity and quality: '*…there might be 15 years of impacts associated with water quantity and limited impacts on water quality, provided the mitigation of impacts are implemented*' (p. 7) is in fact correct. That statement does, contrary to what Atha says (at p. 90 of Atha's responding statement) appear at page 7 of the EIAR

PART F: ECOPARTNERS AND SUSIE BROWNLIE

63. In the statement of appeal, the appellants raised the contention (at para 109) that they have been unable to establish that either Charlaine Baartjes or San Oosthuizen are professionally registered with the South African Council for Natural Scientific Professions as they are required to be in terms of sections 18(2) and 20(1) of the South African Natural Scientific Professions Act 27 of 2003 before they may act as paid Environmental Assessment Practitioners.

64. In its responding statement, Atha responded to this contention (at pgs. 94 and 95) as follows: '*The law relied on does not address Environmental Assessment Practitioners at all, as it does not include environmental management within its scope. Environmental management is not a natural science. Further to this as according to the notice as published in the government gazette, environmental management is not a natural science field of practice in the act relied on here. Consulting regarding environment management does not require registration through SACNASP*.'

65. The appellants persist in their contention that Environmental Assessment Practitioners are required to be professionally registered with the South African Council for Natural Scientific Professions in terms of the South African Natural Scientific Professions Act in order to practise professionally, and accordingly that Charlaine Baartjes and San Oosthuizen were required to be registered. 'Environmental science' is listed as a field of practice in the natural scientific professions under the Act and is accordingly regulated by the

Act.[8] The South African Council for Natural Scientific Professions regards '*Environmental Management (e.g.: environmental impact assessment, environmental law, environmental auditing, etc.)*' as falling under the ambit of the field of practice of 'Environmental science' for the purposes of the Act.[9]

66. Accordingly, it is clear that Charlaine Baartjes and San Oosthuizen were required to be registered with the South African Council for Natural Scientific Professions in terms of the Act in order to practise as Environmental Assessment Practitioners.

67. Turning to the myriad allegations levelled at Susie Brownlie, Atha contends, among other things, the following: *'Brownlie has been on the advisory panel for an I&AP to the project, opposing the process. This calls into question her independence and highlights her bias in this regard, as she may be tempted to influence the outcome to a predetermined result (as was demonstrated). Her close relationship with the I&AP, here the attorneys for the appellants, compromise the independence required for as an expert in this matter*.' (Atha's responding statement p. 75)

68. The appellants hereby advise that Susie Brownlie provides services as an environmental assessment practitioner and environmental advisor to the CER as and when requested. She provides such services in her professional capacity as an independent and objective environmental assessment practitioner, and in

[8] See Schedule 1 to the Act and GN No. 79 in GG No. 39433 (dated 20 November 2015), which is the most recent update to Schedule 1 to the Act

[9] See the South African Council for Natural Scientific Professions information sheet about professional registration in the field of practice of 'Environmental Science', available at http://www.sacnasp.org.za/files/20/Work_Experience_Requirement/30/Environmental_Science.doc. See specifically para 4, under the heading 'Educational requirements', on pg. 2

no way conforms to any particular stance. With specific regard to the Yzermyn EIA process, Susie Brownlie had no involvement during the EIA process and gave no input to the CER until asked to undertake a review at the appeal stage.

CONCLUSION

69. For the reasons contained in the appeal dated 19 August 2016 and in this answer, the appellants contend that the appeal by Atha ought to be dismissed.

70. The appellants recognise however that this answer includes a specialist review which Atha has not had an opportunity to consider, and hereby confirm that they would have no objection were the MEC to be minded to grant Atha an opportunity to deal with it in a further reply.

DATED AT CAPE TOWN THIS 18th DAY OF NOVEMBER 2016.

CENTRE FOR ENVIRONMENTAL RIGHTS

Appellants' Attorneys

2nd Floor, Springtime Studios

1 Scott Road, Observatory

Tel. 021 447 1647

Fax: 086 730 9098

Ref: Catherine Horsfield/Suzanne Powell

TO: THE MEC FOR AGRICULTURE, RURAL DEVELOPMENT, LAND AND ENVIRONMENTAL AFFAIRS, MPUMALANGA

Mr Vusumuza Shongwe

Email: uismail@mpg.gov.za

Authorisation Register Number: **17/2/3/GS-131**

COPIED TO: THE MINISTER OF ENVIRONMENTAL AFFAIRS

Ms Bomo Edna Molewa

Email: Minister@environment.gov.za

CNadasen@environment.gov.za

GRamutshila@environment.gov.za

NEAS REF: **DEA/EIA/0001965/2013**

DEA REF: **14/12/16/3/3/3/85**

AND TO: ATHA AFRICA VENTURES (PTY) LTD

Email: morgam.munsamy@athagroup.in

AND TO: ECOPARTNERS CC

Email: charlaine@ecopartners.co.za