

An historical assessment of NGO efficiency in progressing towards a sustainable environmental heritage focus, with as case study the Wonderfontein Spruit catchment, Gauteng

Elize S van Eeden
School of Basic Sciences
North-West University
Vaal Triangle Campus

...The earth is mute. It doesn't get a vote in any congress or parliament. It doesn't own blocks of shares in the market. It doesn't rise up at a protest rally. It can't even buy a hybrid car. The earth has no voice – so someone must speak for it ... [Bryan Walsh]¹

It is the public that is being asked to assume the risks ... the public must decide whether it wishes to continue on the present road and it can only do so when in full possession of the facts ... [Rachel Carson]²

Opsomming

Die artikel handel in wese oor 'n histories-kontemporêre waardering van die rol van nie-regeringsorganisasies (NRO's) binne 'n demokraties-gerigte proses van omgewingsbestuur in veral die Merafong-studiegebied. Fasette wat uit die bespreking na vore kom, is: i) dat hierdie groep se deelnemerskap in die gebied eers gedurende die negentigerjare momentum gekry het, ii) dat dit beperk was tot aktiwiteite van veral “whistle-blowing” van individue, met geen gekonsolideerde poging om die primêre omgewingsdeelnemers in die Merafong-gebied as die omgewingsbesoedelaars vas te vat nie, iii) dat solank as wat NRO's se bestaan van die besoedelaar se fondse afhang, daar weinig konstruktiewe vordering in omgewingsremediëring sal wees, en iv) dat NRO's se omgewingstem in die 21e eeu wel meer gewig sal dra, onder andere as gevolg van die groter erkenning wat menseregte en 'n druk vir toepassing van

1 B Walsh, “Heroes of the environment”, *Time*, 29, October 2007.

2 “Networking directory,” *Enviropedia*, (Johannesburg, Sappi, ca 2006), p. 363.

nuut-ontwikkelde omgewingswetgewing geniet as enige tyd in die verlede.

Introduction

In a recent special issue of *Time*,³ the environmental contributions of a number of internationally recognised visionaries, activists, innovators, and entrepreneurs were highlighted as “speakers of the planet”. South Africa also has its own wide range of “speakers”, of whom some focus more nationally and others more locally on issues that range from endangered species to air and water pollution. Disasters on a micro scale, such as that experienced in the Wonderfontein Spruit in Merafong (in Gauteng Province), are a typical example that can certainly lead to the evolving of secondary disasters on a macro scale. Some “speakers” were around when this part of the voiceless earth was being exploited economically, but were somehow silenced and/or satisfied by the earth’s capacity to adapt. By reflecting the environmental history of this area up to 2007, the role and efficiency of the “speakers” are accentuated as a milestone period from which other environmentalists can learn.

It is said that the earth’s supply of water is vast. However, about 96% is salty, and most of the remaining fresh water is locked into ice caps and glaciers. Thus less than 1% of the earth’s water is readily available for human use. Modern society places tremendous demands on this limited source. As supplies of groundwater are reduced and pollution contaminates these and other reservoirs, shortages of water may become a serious concern in the future.⁴

Another interesting environmental fact is that only about 12% of South Africa is arable. So the country is, in fact, agriculturally poor, and this sector contributes very little to the overall gross domestic product (GDP). Furthermore, South Africa’s natural attributes are equally complex. Its ecological richness is unparalleled, and despite its small area (1 219 912 sq. km), it is

³ See B Walsh, “Heroes of the environment”, *Time*, 29, October 2007.

⁴ See J Trefil & RM Hazen, *The sciences, an integrated approach*, 4th edition (USA, John Wiley & Sons, 2004), p. 443.

the third most biodiverse country on earth,⁵ a “world in one country” as the tourist slogan proclaims.⁶ Yet, when the preservation of this environmental richness boils down to local environmental awareness, we might also be one of the countries with the highest rankings as far as ecological ignorance in the process of exploiting minerals is concerned.

Currently, the disastrous environmental status in, for example, the Wonderfontein Spruit catchment area (formerly known as part of the Gatsrand ward in the Potchefstroom district, then after 1959 known as the Carletonville area in the Oberholzer district and, by 2005, called the Merafong municipal area) can be labelled as a micro example of ecological ignorance.

To substantiate the above-mentioned statement, it is required to explore the positions and activities of all the stakeholders who – through the span of centuries – have had an impact on the environment to a lesser or greater extent. They, among others, could be the first indigenous San inhabitants, followed by the Mzilikazi of the Ndebele’s Difaqane movement in the interior, the settlement of Trekker groups and eventually farming communities, up to the mining industry and its complex managerial structure (including Government) that supported the industrial process in an already brittle environment to lengths of overexploitation. The focus of this article, however, is not to address the validity or invalidity of the activities of these stakeholders, but to determine to what extent especially non-governmental organisations (NGOs) efficiently adhered to their organisations’ constitutional principles, their own moral attitudes, and the pleas of the community to address environmental concerns in the Wonderfontein Spruit catchment area. These key aspects will be discussed in the following sections.

The WFS area and environment: An historical synopsis

Environmental awareness and conservation in the Wonderfontein Spruit catchment area since the 1950s appear to have had a slow beginning. Though it is accepted that physical landscape manipulations are inevitable in the process of meeting human needs, these alterations produce (and have done so in the

5 After Indonesia and Brazil, see World Conservation Monitoring Centre, *Development of a National Biodiversity Index* (Discussion paper), 1992.

6 J Carruthers, “Transnational and transdisciplinary aspects of the environmental history of Africa”, Paper presented at the International Conference on Humankind at the Intersection of Nature and Culture, Kruger National Park, 4-6 September 2006 (Aspects of this paper were also presented at the 20th International Congress of Historical Sciences held in Sydney in July 2005), Introductory.

past) biological consequences, of which some are unavoidable. Through the decades and years, the key challenge has been that of controlling the side effects of “something wanted by society”.⁷ After Merafong’s (Carletonville’s) municipal independence in 1959, the mining sector gradually featured as the dominant role player, landowner, and exploiter of – among others – the environmental status of the Wonderfontein Spruit catchment.

Since the Water Act of 1912, Government – through laws and amendments to Acts from the thirties – had intended to manage dolomitic water. Eventually, the powers of the Ministry of Water Affairs increased in the fifties when the new Water Act No. 54 of 1956 stipulated that a permit was necessary if a mine wished to discharge dolomitic groundwater beyond its boundaries.⁸ During this process, the Director of Water Affairs also continued to investigate the merits of “total” dewatering in the Wonderfontein catchment from 1956 and presented a report in this regard in November 1960. A laxity (and, in essence, a reflection of the Government’s abuse of its own stakeholder⁹ position) is to be found in the many historical events related to, for example, the disposal of the surplus dolomitic water by the mines¹⁰ – this in spite of the fact that a Government-inspired commission, known as the Jordaan Commission, revealed a few important findings. The Jordaan report of 1960 at least explicitly indicated destructive environmental possibilities and warned the mines to be prepared to bear the financial consequences.¹¹

In December 1963, another agreement was reached between the Government and the Chamber of Mines on the policy of dewatering and how to address the resulting damage.¹² Two bodies were formed to deal with the situation in 1964, namely, the State Co-ordinating Technical Committee on Sinkholes and Subsidences (SCTC) and the Far West Rand Dolomitic Water Association

7 Compare A Turton, HJ Hattingh, GA Maree, DJ Roux, M Claassen & WF Strydom (eds.) *Governance as a triad: Government-Society-Science in transition* (Berlin, Springer Verlag, 2007), p. 74.

8 N Funke, K Nortje, K Findlater, M Burns, A Turton, A Weaver & H Hattingh, “Redressing inequality: South Africa’s new water policy”, *Environment*, 4 January, 2007.

9 See a short discussion on the concept “stakeholder” in the next section on NGOs.

10 See CJU Swart, EJ Stoch, J van Jaarsveld & ABA Brink, “The lower Wonderfontein Spruit: an exposé”, *Environmental Geology*, vol. 43, 2003, pp. 635-665; A Taylor, “Unnatural inequalities: Social and environmental history”, *Environmental History*, 1(4), 1996, pp. 6-19.

11 Private collection, EJ Stoch, RSA, Department of Water Affairs, Final report of the Interdepartmental Committee regarding Dolomitic Mine Water: Far West Rand, November 1960, p. 16; See also RA Adler, M Claassen, L Godfrey & A Turton, “Water, mining and waste: an historical and economic perspective on conflict management in South Africa”, *The economics of Peace and Security Journal*, 2(2), 2007, pp. 33-34.

12 ES van Eeden, “Ekonomiese ontwikkeling en die invloed daarvan op Carletonville, 1948-1988: ’n Historiese studie” (PU vir CHO, PhD-proefskrif, 1992); RJ Kleyweght & DR Pike, “Surface subsidence and sink-holes caused by the lowering of the dolomitic water table on the Far West Rand gold field of South Africa”, *Annual Geological Survey of South Africa*, 16, 1982, pp. 77-105.

(FWRDWA). The key function of the SCTC was to allay the fears of the public by delineating areas suitable for development and instituting regular ground movement monitoring through geophysical and geological investigations. The SCTC also had to advise the FWRDWA with respect to the compensation for dewatering-related damage. Despite all these managerial structures being in place, the environment was still pushed beyond limits to enable the human being to produce “glittering gold”,¹³ while little was done to apply a meaningful input as compensation for this output that was expected.¹⁴

An aspect that, from the sixties, was added to especially the concerns of irrigation farmers was the effects of the water quality on crops and animals. This happened after the mines had been tasked to distribute the pumped underground water through a channel pipeline to farmers.¹⁵ Based then on purely economic motives, farmers in 1948 already petitioned the Secretary of Water Affairs with concerns in respect of the possible consequences of injecting cement to curtail the flow of water in the dolomitic fissures and the resulting failure of the springs for, for example, use for agricultural purposes.¹⁶

Though the initially fierce debate between agriculturalists and the mines (the latter supported by the Government) on whether there was indeed pollution or not slackened somewhat from the seventies,¹⁷ concerns were louder again from the nineties. This time, scientific research done by academics accentuated the validity of past water pollution concerns,¹⁸ though a number of instances of past research clearly reflected this possibility.¹⁹ In the most recent research by Barthel and Funke²⁰ and others conducted by the Government’s National

13 “Glittering gold” is a typical well-known reference authors of books use to label the physical feature and economic value of this mineral in a short and efficient way.

14 Compare ES van Eeden, “Ekonomiese ontwikkeling ...”, 1992, Ch. 4-5.

15 Compare ES van Eeden, “Ekonomiese ontwikkeling ...”, Ch. 3-5.

16 Compare EJ Stoch, ca 1960-1970, Private collection; ES van Eeden, “*Die geskiedenis van die Gatsrand vanaf Trekkervestiging 1838 tot dorpsproklamering*” 1948 (PU vir CHO, MA-verhandeling, 1988).

17 Compare ES van Eeden, “Ekonomiese ontwikkeling ...”, Ch. 3-5.

18 Compare A Turton, HJ Hattingh, GA Maree, DJ Roux, M Claassen & WF Strydom (eds.), *Governance as a dialogue: Government-society-science in transition* (Berlin, Springer Verlag, 2007), pp. 1-10; NNR, 2007; National Nuclear Regulator. “Technical report, Radiological impacts of the mining activities to the public in the Wonderfonteinsspruit Catchment Area” [also known as the Brenk report], July; ES van Eeden, AB de Villiers, H Strydom & EJ Stoch, “Mines, peoples and sinkholes – An analysis of the Carletonville municipal area in South Africa as a case study regarding policies of secrecy”, *Historia*, 47(1), May, 2003; ES van Eeden, “So long gold mines – long lives industries? A case study of Carletonville’s battle for economic survival”, *South African Economic History Journal*, November, 1997.

19 M Matic & M Mrost, “In situ leaching of uranium from Gold Mine residue dams”, *The South African Industrial Chemist*, October, 1964, pp. 127-133.

20 R Barthel & R Funke, “Radiological risks of cattle watering at polluted surface water ...”, pp. 23-25.

Nuclear Regulator (NNR),²¹ the radiological risks of the mining activities for cattle watering at polluted surface water bodies in the WFC area were extensively looked into. The researchers pointed out that the SeCa results at many sites were “to the order of 100 mSv per annum” instead of the restricted dose of 1 mSv. Recent investigations on aspects of pollution confirmed the role of the mines as polluter.²²

Farmers as affected stakeholders have, in recent years, joined hands with interested stakeholders such as NGOs and researchers to handle their concerns and defend their situation as well as support them to improve on their “injured” status.²³

People living in informal settlements are another group that can be regarded as being affected. Though very limited research has been done on this specific affected group to date, several voices from NGOs have accentuated the urgency of sufficient research and protection of these people. For the purposes of this discussion, they will, therefore, not be discussed in depth, but simply mentioned to become aware of the secondary stakeholder position that these communities are also entitled to fulfil.

In the 1970s, as part of the international focus on environmental awareness, a variety of actions and activities through various stakeholders such as the Government, the mining industry, and the provincial and local governments developed to deal with environmental issues such as that of the Merafong area in some way. As far as some departments in Government were concerned, the Department of Minerals and Energy (DME), earlier called the Department of Mines (DM), focused more on the management of the mining industry and the safety of its workforce, rather than concentrating on the wellness of the workforce as representatives of a broader community and the community’s environment. The DME also financially assisted expertise in, especially, some

21 R Barthel, G Deissmann & WLeotwane, “Radiological impact assessment of mining activities in the Wonderfonteinspruit catchment area” (Environmin Conference, Pilanesberg, NWU), 23-25 July, 2007.

22 Compare BigenAfrica, Pretoria, Wonderfontein Action Group (WAG), Meeting, Sediment sampling results, 24 August (as conducted by the Nuclear Technology Services of South Africa – NECSA), 2007; Escarpment Environment Protection Group (EEPOG), “Impacts of proposed amendments to the Minerals Petroleum Resources Development Act (MPRDA)”, 17 August, 2007, “Petition (to the facilitators of the WAG and Kromdraai Forums”); R Heyl, “The effects of mining effluent on the aquatic environment”, (UJ, Hons. Manuscript, 2007); M Liefferink, 1988-2007, Private collection.

23 The NGO’s Jubilee Groundwork and members of the former Mine Workers Union have also recently entered the debate and focus to improve the WFS area and community’s situation. On 28 October 2007 a workshop was organised with the Bekkersdal community close to the Randfontein-WFS area to initiate discussions in this regard. See ES van Eeden, Private Collection, 2006-2007, E-mail, M Liefferink/E.S van Eeden, 27 October 2007.

departments of Government to survey various environments for explicit mineral exploitation for the sake of economic progress for all.²⁴

From the nineties, some departments in local governments were exclusively tasked to manage environmental issues in their area. The early 21st-century status of this outcome still appears to be in its infancy. By 2007, the Enforcement Directorate of the Department of Environmental Affairs and Tourism (DEAT) was approached to accentuate the responsibility of local governments with regard to environmental issues related to water and air pollution.²⁵ This and other activities happened against concerted efforts worldwide to progress towards environmental sustainability and environmental awareness programmes as well as to draft best-practice policy documents by, among others, the International Union for the Conservation of Nature or World Conservation Union (IUCN) and Global HQ. By 2007, the latter – also hosting a huge website – was regarded as by far the biggest and most credible environmental conservation sustainably focused agency in the world.²⁶ To what extent local NGO activities have benefited, or have allowed themselves to benefit, from international environmental structures could be assessed from the information as provided in Section 3.

Non-governmental organisations (NGOs) as environmental stakeholders

NGOs are non-profit organisations (NPOs) as defined and governed by the NPO Act 71 of 1997. As such, NGOs are recognised by the South African Revenue Service (SARS) as organisations that are excluded from income tax exemption. Another distinguished aspect of NGOs is that they are regarded – and also see themselves – as stakeholders concerning something that affects themselves and/or others. According to Ramirez,²⁷ the word “stakeholder” was first recorded in 1708 as “a person who holds the stake or stakes in a bet,” with the current definition being “a person with an interest or concern in

24 Department of Mines (DM), Report No. 6869, LT Nel, HF Frommurze, J Willemsse & SH Haughton, “The geology of Ventersdorp and adjoining country”, *Geological Survey* (Government Printer, Pretoria, 1935), pp. 66-70; Report No. 4423, LT Nel, FC Truter & J Willemsse, “The geology of the country around Potchefstroom and Klerksdorp”, *Geological Survey* (Government Printer, Pretoria, 1939); HB Bunkell, “Geology of the Krugersdorp District”, *Trans. Geological Society of South Africa*, V(iv), Johannesburg, 1902.

25 M Liefferink, Private Collection, 1988-2007, Private collection.

26 Compare M Liefferink, Private collection, 1988-2007, E-mail, T Ferrar/Multiple recipients, 12 September 2007.

27 R Ramirez, “Stakeholder analysis and conflict management”, D Buckles (ed), *Cultivating Peace: Conflict and collaboration in natural resource management* (IDRC/World Bank Institute, Ottawa and Washington D.C., 1999), pp. 101-126.

something” with the intention to “care” for it or to “improve” it.

Interested stakeholders are, among others, involved in environmental decision-making or participation processes as well as soliciting the affected. This is done in a variety of ways, namely, to obtain consent, increase transparency, and even legitimise the infliction of a potential negatively perceived change to an environment. The concept “interested” stakeholders thus defines the morally and ethically concerned, and they are, therefore, regarded as, for example, environmentalists or persons acting on behalf of public interest to mainly support the injured or affected. The academic community and/or research groups as well as consultants or NGOs could also be categorised as interested stakeholders.

In their research, Tesch and Kempton concluded that four distinct meanings of the term “environmentalist” exist, namely, those who care, but do not act in the public sphere, the conservationists, the activists (those taking civic actions), and the radical environmentalists.²⁸ Within NGO circles, environmental activists will be found, and they can operate as part of NGO activities or separate from them. The following has been observed on environmental activists:²⁹

As watch dogs for civil society’s rights and interests, environmental activists and pressure groups represent the most informed and hence appropriate group to represent stakeholders on environmental reporting issues. It can be argued that without enforceable and comprehensive environmental accounting and environmental reporting standards, little will be done to regulate the activities of business and industry, as those in a position to regulate such activities (Government and the public) may not be aware of the severity of impact of particular business/industrial activities.

In South Africa, a number of organisations exist that directly or indirectly deal with environmental heritage and/or remediation. Some can be traced back to even before the 1980s. Among others, the Federasie van Sake en Beroepsvroue and the Cape Town Chamber of Commerce had the following to say to Government departments:

There has been some criticism of the fact that South Africa lacks a body which would be responsible for the overall control of pollution in its various forms ... to co-ordinate all the factors involved in the protection of natural resources

28 D Tesch & W Kempton, “Who is an environmentalist? The polysemy of environmentalist terms and correlated environmental actions”, *Journal of Ecological Anthropology*, 2004, pp. 67, 81.

29 CG Mitchell & NW Quinn, “Environmental reporting disclosure in South Africa: A comparative study of the expectations of selected groups of preparers and users”, *Meditari Accountancy Research*, 13(2), 2005, p. 19.

– the development areas, the conservation of wild life, public health both mental and physical – which should have full power to ensure immediate control for present and long term planning ...

After 35 years, these complaints, coming from 21st-century NGOs and activists, are just as fresh as they were then:

... poor institutional control, failure on the part of the responsible authorities to fulfil their mandates, failure to carry out environmental monitoring and enforcement in an efficient and considered manner, and failure to enforce the Polluter Pays Principle ...

The efficiency of NGOs as spokespersons and spokes organisations, in some way, is reflected in the several repetitions of requests for environmental action, of which few had borne fruit up to 2006, with more consolidated efforts since the scenario changed somewhat in 2007.³⁰

NGO's as the environmentally concerned

Formal NGO presence since the nineties

Environmental preservation from the nineties became more prominent as a result of a growing environmental awareness and certain problems that were accentuated (such as global warming). By 2006, approximately 116 NGOs existed in South Africa. They covered either local concerns or a broader national concern. Even international organisations are active as NGOs to support environmental remediation in some way. Approximately 24 of these NGOs are steered from the Gauteng Province and none from the North-West Province, under which the WFS catchment was originally administered.

A general trend of the NGO profile is that it includes a variety of organisations and divisions: from academic institutions to corporate businesses and private companies. Some focus on multidisciplinary and transdisciplinary research ventures, others focus more specifically on the care of animals or endangered species, and yet others focus on promoting healthy sustainable environments as well as educating people to improve the quality of their environment.³¹

30 See *National Archive* (NA), Dept for the Protection of the Environment (PE) Letter, Federasie van Sake- en Beroepsvroue, 1972; M Liefferink, 1988-2007, Private collection, Letter, M Liefferink/Multiple recipients, 2 September 2007.

31 Compare "Networking directory" *Enviropedia* ca. 2006, pp. 350-494 as obtained from M Liefferink, 2007.

Some of the NGOs that deal with the environment are Africa Health and Development, Legal Resources Centre, Habitat Council, South African Council of Churches, Parliamentary Research Unit “Biofuels: The Environmental Context”, Bluepebble: Independent Environmental Agency, Watercourse, Pearly Beach Conservation Society, Nelson Mandela Bay Local Environmentalists – NiMBLE, FACT – For A Cleaner Tomorrow, and Envirosec, as well as the Public Environmental Arbiters (PEA), etc. The latter is an initiative that originated within the environmental controversialities of the WFS-catchment area and water issues in the Potchefstroom area.

Other key non-NGO interested parties or stakeholders in, specifically, the WFS area (who actually contributed to making the local general public aware of environmentally-related problems) are the Potchefstroom Petitioners (PP), the Randfontein Environmental Action Group (REAG), and The Wonderfontein Action Group (WAG).³²

NGOs with an indirect focus on environmental remedial proactivity in the WFS area

NGOs, nationally and legally acknowledged – and with an indirect WFS focus, (mainly active since the nineties) – are the Chronicle Group, Green Cross, Groundwork, the Legal Resource Centre (LRC), Pelindaba Working Group, WESSA, and Earthlife Africa. To make functioning possible, these NGOs rely on governments, industries, organisations, and individuals from national and international spheres to support them. An ironical aspect in this regard is that the South African Government and the gold mining industry, active in the Merafong and broader mining area, also financially support some of these organisations, which have taken up the challenge in recent years and months of “whistle-blowing” against these financial supporters regarding the environmental destruction in the Wonderfontein Spruit area. WESSA and the LRC, for example, are partially funded by Gold Fields South Africa, and Earthlife Africa is partially funded by the African National Congress (ANC) Government.³³

Though NGO actions in the Wonderfontein Spruit appear to have been noteworthy and impressive in recent years, not all have actively taken part. Two

³² Compare M Liefverink, Private collection, 1988-2007, General information & memories on PEA.

³³ M Liefverink, 1988-2007, Private collection, E-mail, M Liefverink/Dr EJ Stoch, 14 June 2007.

arguments for this historical impression exist, namely, i) the “sole mandate” and individualism in operating in this area by environmental activist Mariette Liefferink as a member of basically all of these aforementioned NGOs and ii) the cautious approach of these NGO leaderships in reacting against polluters or “supporters of polluters” who provide life money for their existence.³⁴

Also, from an historical perspective, some environmental actions specifically steered by the general public were apparently not always as highly regarded as those initiated by Government or highly respected industries and/or institutions. This perception has an historical tail, linked to people in governmental periods where the majority of the public was visible, but not supposed to be heard.³⁵ Therefore, local action groups who also contributed in making the general public and the media more aware of their water and general environmental pollution problem were the Potchefstroom Petitioners (PP) and later the Randfontein Environmental Action Group (REAG).

As a result of a lack of efficient coordination and consolidation among the various NGO groupings as affected and/or interested stakeholders, a concerned group – with Mrs Liefferink as key organiser – formally progressed towards founding an umbrella federation in August 2007, with debates afterwards on what its exact name should be.³⁶ However, efforts at all-inclusivity failed because of insufficient communication channels. Therefore, some national stakeholders perceived the newly formed federation of NGOs as unacceptable and intended to concentrate on their own activities and efforts:³⁷

While I support in principle the formation of a Global Conservation Union, I believe the timing of this is divisive and an attempt to draw the attention away from the formation of our national Coalition Against Nuclear Energy. Consequently I must decline your invitation to participate in the naming of the organization to which I have not been a consulting party, and whose members have not bothered to consult me regarding the merits of forming such an organisation in the first place.

Thus, with regard to the role of NGOs in the environmental remediation of the Wonderfontein Spruit area, only four to five role players actively committed themselves because of the proactive intervening role of a member

34 Impressions are based on the private collections of M Liefferink & ES van Eeden.

35 M Liefferink, Private collection, 1988-2007; N Funke, K Nortje, K Findlater, M Burns, A Turton, A Weaver & H Hattingh, “Redressing inequality: *South Africa's new water policy*”, *Environment*, 4 January 2007.

36 M Liefferink, Private collection, 1988-2007, E-mail, M Liefferink/Multiple recipients, 12 September 2007; 21 September 2007.

37 Compare M Liefferink, Private collection, 1988-2007, E-mail, DR Lewis (Founder Member, Coalition Against Nuclear Energy [CANE])/M Liefferink, 22 September 2007.

of their organisations, South Africa's well-known environmental activist Ms Mariette Liefferink, for more than a decade.³⁸ During these years, the academic community of the North-West University (as an NGO), which was just as actively involved and represented a variety of disciplines working in this area, was divided in its approach to reporting matters related to the environment and the possible effects of mining activities in the WFS area and surrounds. Because reasons for this statement could result in an endless debate, it seems best to rather mention key motivators that could have been factors to take into consideration:

- Funds occasionally received from the mining industry for research and other research needs
- Financial considerations by individuals in rather supporting a future remedial plan by the polluter and refraining from being “destructive by requesting that the polluter must pay”. By thus supporting the mines, these individuals may reap some financial benefit to boot.³⁹ As mentioned earlier, this approach is labelled pragmatic if it is not about financial considerations only, but seriously for the course of environmental remediation.

An average profile of an NGO member as an environmentally concerned person or as an environmental activist

Though the theme in this section still requires some solid empirical research to avoid stereotyping, the following notes may serve as a first stride to provide some perspective – based on impressions of a few NGO members themselves and from some first-hand experience of the writers:⁴⁰

NGOs/NPO members as environmentally concerned activists:

- can work actively or progressively against environmental injustices, regardless of how much time or expenses it takes and

38 See M Liefferink. Private collection, 1988-2007, E-mail, J Thebaut (Director Chronicles Group)/M Liefferink, 17 December 2006; E-mail, B Charrier (Vice-President Green Cross International, Switzerland)/M Liefferink, 27 November 2006; E-mail, A Turton (Executive Director IWRA)/M Liefferink, 1 December 2006; E-mail, B Peek (Member, Groundwork Friends of the Earth, SA)/M Liefferink, 4 April 2007; Legal Resource Centre, E-mail, E Nicol (Member, LRC)/M Liefferink, 6 February 2007.

39 Compare ES van Eeden, Private collection, 2006-2007, Correspondence (on numerous occasions), ES van Eeden/EJ Stoch.

40 An argument may be that some of these characteristics may very well also apply to ordinary members of the public. This is not disputed. Compare M Liefferink, Private collection, 1988-2007, Oral memories, 24 September 2007; D Tesch & W Kempton, “Who is an environmentalist? The polysemy of environmentalist terms and correlated environmental actions”, *Journal of Ecological Anthropology*, 2004.

- realise that the future of humankind is inevitably linked to the way the environment is preserved;
- are emotionally sensitive;
- most of the time occupy more than one occupation or have retired and offer free time with no remuneration to practise environmental activities;
- could sometimes be labelled as irrational, though well-informed;
- may have hidden agendas or motives for being environmentally active;
- are perceived as different from the average member of society as far as personalities are concerned;
- can work/agitate for improvement in extreme ways;
- are not necessarily wealthy or rich;
- are sometimes careless in the way they themselves preserve the environment or care for themselves;
- do not necessarily base their urge for, or focus on, environmentally righteous practices on any religious or ethical grounds, but purely on preserving the environment for the generations to come or to serve the principle of righteousness or to avoid health destructors.⁴¹

In the “environmental battle” of the WFS catchment area NGOs - reflecting these profile features - were visible.

The NGO focus on dealing with environmental matters

In the Wonderfontein Spruit catchment area, it was NGOs, mainly in their capacity as research organisations, who first wrote research reports on the features and the vulnerability of this environment, as well as the environmental impact of the human being’s economic practices on the environment. This process of gathering environmentally related information in the Merafong area stretched over more than a century. The commencement of the 21st century historically reflected that a limited number of these results were:

- followed up efficiently and immediately by those making money available for the research; and
- released to the general public, as they were either confidential and absorbed into bigger reports or the results/outcomes were regarded as being the ownership of

⁴¹ Compare M Loefflerink, Private collection, 1988-2007, Oral memories, 24 September 2007; Impressions by ES van Eeden, 2006-2007.

those who had paid for the research.

As such, the multidisciplinary variety of academic input could be perceived as voiceless in the public sphere, but its contribution has at least been acknowledged in the limited space of the academic environment in which the producers of this research find themselves in order to earn a living.

A combination of a number of factors can probably be identified that have changed the WFS scenario to being only the domain of the gold mining industry as capitalists and exploiters, the Government as the sharers of profits, and the academic intellectuals (the latter as NGOs and as individuals employed by the industry or the national/local government) as the powerless and the voiceless, but most probably the best informed. These factors are:

- a growing general awareness of the long-term need to environmentally preserve since the 1970s;
- improved educational levels of communities in general to support a notion of awareness;
- the visibility of more environmentally focussed NGOs and individuals;
- a change in the ideological and political perspectives of the day that allowed for more human freedom in, for example, “whistle-blowing” (and accentuated constitutionally through, for example, the National Environmental Management Act No. 107 of 1998, section 31) within the circles of “ordinary” voices to stand up against the destructive economic dominance of environmental exploiters (foreign and local) over decades;
- the opportunity for ‘whistle blowing’ through the news media and the disclosure of environmental incidents and infractions to the Human Rights Commission, the Public Protector, the Director Generals of the relevant organs of Government such as the Department of Minerals & Energy (DME), The Department of Environment and Tourism (DEAT), the Department of Water Affairs and Forestry (DWAF), the National Nuclear Regulator (NNR) as well as the Ministries of the relevant organs of Government. Environmental governance since 1996 is founded on the Bill of Rights, Section 24 of the Constitution of the Republic of South Africa, Act No 108 of 1996 that people have environmental rights. These rights include entitlement to an environment that is not harmful to the health or well being of people as well as a claim to environmental protection for the benefit of present and future generations. Backed by the Constitution then, whistle blowing became a more feasible option for environmentalists as the interested stakeholders and
- the order of the day recently has been the general public’s exposure to research

reports, more frequently available as a result of the openness accentuated by the relatively new South African Constitution. Therefore, research findings such as those of the Water Research Commission in Report No. 1095/02 and the controversially received Report No. 1214/06 as examples were more seriously addressed and questions asked.⁴²

Therefore, with more concerned or interested parties on the scene as NGOs, other than those mentioned above as non-NGO interested and/or affected parties, some moves have been made in the past two years (2006-2007) to force the Mining Industry and Government i) to be more explicit on their historical role in the eventual outcome of the WFS environment, ii) to be clear on their intentions of how the WFS environment should be remediated, and iii) to promptly apply the “polluter must Pay Principle”, which has been so neatly constituted.⁴³

Apart from numerous discussions and sessions with these major role players on the economy and the WFS environment,⁴⁴ NGOs have also combined this pragmatic approach with a blunt enforcement action of creating public awareness, stirring the status quo, and creating quicker responses from Government and the mines by utilising the following communication pathways:⁴⁵

42 Compare M Liefferink, Private collection, 1988-2007, Letter, M Liefferink/Environmental Management Inspector (Enforcement Directorate, DEAT), 11 June 2007; ES van Eeden, 2006-2007, Private collection, E-mail, A Turton (International Water Research Association [IWRA]), “Mine water and strategic focus points”, 16 April, 2007, pp. 1-10; ES van Eeden, “Whose environment? whose nature? – a trans-disciplinary discussion on some inhumane actions in the destruction and construction in nature – case study, the Merafong municipal region”, South Africa, International Conference on Humankind and the Intersection of Nature and Culture, *Transdisciplinary Journal*, 2, November 2006.

43 Compare the several letters and reports exchanged between environmental activist Ms Mariette Liefferink and the mining authorities as well as with the Government and academics from tertiary institutions in M. Liefferink, Private collection, 1988-2007.

44 In international circles, this is called the pragmatic way of doing. Thus not to battle heavy industry, but to collaborate with it. The WFS area also hosts collaborators. Compare B. Walsh, “Heroes of the environment”, *Time*, 29, October 2007, p. 54; EJ Stoch, Private Collection, 1960-1970; ES van Eeden, Private collection, 2006-2007.

45 ES van Eeden, “Ekonomiese ontwikkeling en die invloed daarvan...”, Ch. 4-5. Also compare M Liefferink, Private collection, 1988-2007. Oral memories, 24 September 2007.

- Pressure on Government and mines by ‘whistle blowing’ in a variety of newspapers (especially the *Beeld*,⁴⁶ the *Sowetan*,⁴⁷ the *Citizen*,⁴⁸ *Sunday Tribune*,⁴⁹ *Cape Times*,⁵⁰ and TV coverage on the programme Carte Blanche).⁵¹
- As a result of ‘whistle blowing’ together with continuous talks and complaints through local action groups (in which individual NGOs and/or environmental activists also participated), a forum to include all role players was founded. In the WFS area, the Wonderfontein Action Group (WAG) was formed by Gold Fields on 5 July 2006 to consolidate all stakeholders as affected/“injured” and interested parties with a key focus on finding solutions that satisfy all. To do so, an “independent” facilitator, BigenAfrica, was appointed in October 2006.⁵²
- A proactive, continuous “whistle-blowing” in newspapers during the past months through the voices of reporters – which, in turn, also gave voice to the voiceless NGO individuals/environmental activists as well as some community members and organisations active in the WFS area – saw the growth of a general environmental awareness among the general public.⁵³
- Oral and written submissions were also directed to the Ministers of DEAT, DWAF, and DME and written responses and oral submissions to the Parliamentary Portfolio Committee on Environmental Affairs.
- Dr Koos Pretorius and Mariette Liefferink also called for a meeting, on 8 September 2007, with environmental lawyers, conservationists, environmental managers and consultants, scientists, advocates (Adv. George Bizos), NGOs,

46 Compare the recent articles of the SAB award-winning environmental journalist (as reported on 12 October 2007 in the *Beeld*), E Tempelhoff, “Groep plaas druk op regering oor spruit se water”, *Beeld*, 4 Januarie 2007; E Tempelhoff, “Mense en omgewing stik onder goudwelvaart. Mynmonopolie se grumoeras”, *Beeld*, 2 Februarie 2007, p. 11; E Tempelhoff, “Gifspruit”, *Beeld*, 3 Februarie 2007; E Tempelhoff, “Owerheid erken Spruit is besoedel”, *Beeld*, 8 Februarie 2007; E Tempelhoff, “Suur mynwater lei tot sinkgate. Vreet aan dolomietkompartemente”, *Beeld*, 24 April 2007; E Tempelhoff, “Besoedeling: Gif in die water. Mooirivier lankal deur myne besmet”, *Beeld*, 31 Julie 2007.

47 J Avril, “Lives at risk. State knew about danger for 40 years”. *Sowetan*: 1,4. 24 July 2007; J Avril, “Report exposes high water contamination”, *Sowetan*, 3 August 2007; J Avril, “Poisoned by mines”. *Sowetan*, 20 August 2007.

48 Anon., “SA ‘Erin’ widens toxic water fight. Water too dangerous for farming”, *The Citizen*, 14 August 2007.

49 *The Sunday Independent and the Sunday Tribune* (shared the following article under the same title), L Marshall, “New alliance to fight environmental degradation”, 9 September 2007.

50 M Gosling, “The environmental impact of uranium waste”, *Cape Times*, 25 June 2007.

51 See SABC TV, Programme Carte Blanche, Genre: Environment and conservation, Producer Carol Albertyn Christie, Presenter Devi Sankaree Govender, 12 August 2007.

52 Compare the information obtained through ES van Eeden, Private collection, 2006-2007, E-mail, W Pepler (Bigenafrica, Pretoria)/ES van Eeden (Researcher), 22 October 2007.

53 Compare E Tempelhoff, “Familie wil R53m van myn hê”, *Beeld*, 24 Junie 2004; E Tempelhoff, “Inwoners moet weet van giftige gebied”, *Beeld*, 10 Augustus 2004; E Tempelhoff, “Dam se water glo giftig”, *Beeld*, 29 Januarie 2007; E Tempelhoff, “Wonderfonteinspruit besoedeling is `n ramp wat duisende bedreig sê DA”, *Beeld*, 20 Julie 2007; E Tempelhoff, “Hoe het myne siek gemaak”, *Beeld*, 30 Augustus 2007; E Tempelhoff, “Myne misken menseregte, meen Bizos”, *Beeld*, 11 September 2007; E Tempelhoff, “Vrae oor stowwe op Rietvlei, verslag hoop op”, *Beeld*, 7 September 2007.

and community representatives for the establishment of a federation in order to address negative externalities imposed on the general public and local communities by irresponsible mining practices and poor institutional control.⁵⁴

- “Whistle-blowing” also led to a more active responsibility regarding environmental remediation and implementation of precautionary measurements in the WFS and the broader former Far West Rand mining area by the mining industry and the local governments involved.⁵⁵ Among others, they looked into the complaints of water pollution and eventually ensured that warning signs were put up and that a provision was made to provide clean water where it was required.⁵⁶
- NGOs also learnt that a very important aspect of reliable “whistle-blowing” was based on reports made available by scientists and from their scientific findings.⁵⁷

In fact, NGOs and present day journalists and reporters currently regard it

54 Compare M Liefferink, Private collection, 1988-2007, E-mail, M Liefferink/ES van Eeden, 27 October 2007; E-Mail, M Liefferink/Multiple recipients on Non Governmental Organisations or NON Profit Organisations: Challenges, 26 September 2007. By the time of publishing this article in Nov. 2007 the Federation for a Sustainable Environment was formed

55 Compare Harmony Gold, Randfontein, Environmental Impact Assessment (EIA), Re-mining and processing of the tailings facilities, October 2007 and the activities steered under the Wonderfontein Action Group. See ES van Eeden, Private collection, 2006-2007, Minutes, WAG, 2006-2007.

56 Compare ES van Eeden, Private Collection, 2006-2007, E-mail, E Tempelhoff/ES van Eeden, 30 October 2007.

57 Compare the contributions of a few professionals as researchers or academics through decades in alphabetical order: W Anderson & GH Stanley, “Intimate relations between Archaeology and Geology”, *Transvaal Geological Society of South Africa*, 12, 1909; HB Bunkell, “Geology of the Krugersdorp District”, *Trans. Geological Society of South Africa*, V(iv), Johannesburg, 1902; JS Crawhill, “Control of underground water by cementation”, *Optima*, 3(1), 1953; WP de Kock, 1964. “The geology and economic significance of the West Wits Line”, *The Geological Society of South Africa*, I; D Draper, “Dolomite in South Africa”, *QJGS*, 50, 1894; C Deegan & M Rannkin, “The materiality of environmental information to users of annual reports”, *Accounting, Auditing and Accountability Journal*, 10(4), 1997, pp. 562-583; M Epstein & M Friedman, “Social disclosure and the individual investor”, *Accounting, Auditing and Accountability Journal*, 7(4), 1994, pp. 94-109; A Leopold, “The Land Ethic”, *A Sand County Almanac*, 1994; M Matic and M Mroost, “In situ leaching of uranium from gold mine residue dams”, *The South African Industrial Chemist*, October, 1964, pp. 127-133; CG Mitchell & NW Quinn, “Environmental reporting disclosure in South Africa: A comparative study of the expectations of selected groups of preparers and users”, *Meditari Accountancy Research*, 13(2), 2005, pp. 17-33; RA Pelletier, “Contributions to the geology of the Far West Rand”, *Transactions of the Geological Society of South Africa*, XL, July, 1937; CJU Swart, RJ Kleywegt & EJ Stoch, “The future of the dolomitic springs after mine closure on the Far West Rand, Gauteng, RSA”, *Environmental Geology*, 44, 2003, pp. 751-770; CJU Swart, EJ Stoch, J van Jaarsveld & ABA Brink, “The lower Wonderfontein Spruit: an exposé”, *Environmental Geology*, 43, 2003, pp. 635-653; A Taylor, “Unnatural inequalities: Social and environmental history”, *Environmental History*, 1(4), 1996, pp. 6-19; ES van Eeden, “So long gold mines – long live industries? A case study of Carletonville’s battle for economic survival”, *South African Economic History Journal*, November 1997; ES van Eeden, “The cultural experience of the people in the former Western Transvaal, with specific focus on Carletonville”, *Journal of Cultural History*, 12(1), May 1998; ES van Eeden, AB de Villiers, H Strydom & EJ Stoch, “Mines, peoples and sink-holes – An analysis of the Carletonville municipal area in South Africa as a case study regarding policies of secrecy”, *Historia*, 47(1), May, 2003; WM Walker, “The West Wits Line”, *South African Journal for Economics*, 18(1), March, 1960; L White, “The historical roots of our ecological crisis”, *Science*, 1967.

as the most powerful and most successful communication weapon against

polluters.⁵⁸ Prior to 1994, academics were not regarded, in terminology, as NGOs. Though partially independent of any external influence, it was seldom possible to voice findings randomly that were sponsored by Government or industry (unless they put their stamp of approval on them or confined them to “not publishable” because of their confidentiality).

As mentioned earlier, some scientists are/were part of NGOs, but others form(ed) part of the employee structure of the polluter (mines) or the receiver of tax income (Government) on the mineral products by the polluter. Therefore, it takes more than the usual effort by NGOs to obtain these usually restricted reports that, for many years, were not even released for public consent to righteously apply their constitutional right of freedom of communication and human rights. So, after more than 50 years of environmental destruction in the WFS area and the immediate environs, it actually became inevitable for the consumer public in their NGO variety to not respond to global environmental concerns via local destructions such as that in the WFS area.⁵⁹ If perhaps debated from an ethical point of view, not even the scientists as the “informed” can excuse themselves for keeping a low profile professionally through all these decades of environmental destruction while they knew better.

Difficulties with which NGOs have to cope

When looking more closely at the difficulties NGOs have in pulling through in what they regard as meritorious environmental campaigns, most parts of the globe experience similar difficulties. For example, Frederic Hauge of Norway fears apathy along the way, whereas Wang Canfa of China has ample experience of frustrations of local officials attempting to interfere with a judicial process in an attempt to protect local industries. Unchecked

58 Also compare the notes of N Reynolds (on behalf of the NGO: “The People’s agenda”), The Community Investment Programme, BEE and employee ownership, *Community crises around mining and land restitution*, December 2005; M Liefierink, Private collection, 1988-2007, E-mail, N Reynolds/M Liefierink, 16 September 2007.

59 Compare N Jacobs, *Environment, power and injustice: A South African history* (Cambridge, Cambridge University Press, 2003); A Turton, HJ Hattingh, GA Maree, DJ Roux, M Claassen & WF Strydom (eds.), *Governance as a dialogue...*, RA Adler, M Claassen, L Godfrey, A Turton, “Water, mining and waste: an historical and economic perspective on conflict management in South Africa”, *The Economics of Peace and Security Journal*, 2(2), 2007. Also compare ES van Eeden, “Economiese ontwikkeling ...”, Ch. 4-5; M Liefierink, Private collection, 1988-2007; Impressions by the authors are based on the day-to-day historical events during 2006 and early 2007).

environmental destruction is regarded as one of the main sources of rural unrest in China. The experience of being victimised by Government forces is shared by Olga Tsepilova – a sociologist researcher and environmental activist in Russia – against the country’s nuclear legacy of secrecy.⁶⁰ The NGOs active in the Wonderfontein Spruit Catchment and wider area, with environmental activist Mariette Liefferink at the forefront, will most probably be able to associate with some of these experiences from their international counterparts, but they can also identify their own frustrations as difficulties:

- Despite sufficient indicators, the gold mining industry refuses to adhere to the “polluter must pay” principle.
- Despite several calls for effective remediation on a large scale, the process of doing so is necessarily slow because the large-scale destruction over decades requires a transdisciplinary stakeholder input that will take time to produce some solutions. In the meantime, all appear too lax and/or do not have sufficient funds to actively participate in remedial projects.⁶¹
- Inefficient funds, also in local government circles, to do effective impact studies.
- NGO environmentalists, in practice, do not have sufficient funds to be utilised in environmental struggles. With regard to environmental campaigners, Liefferink recently remarked that:

... It has become evident that environmental struggles are often fought, by small groups of local people and roving campaigners, armed with a tiny fraction of their opponent’s budgets. We are of the respectful opinion that grassroots environmentalists must link their campaigns. Instead of trying to prove whose struggle is more important, it is important to realize that strong linkages between our environmental struggles exist ...

- Within NGO circles, there also appear to be different opinions of who should steer a major campaign and what the key focus should be, etc. As a consequence, a lack of cooperation to strengthen forces against, for example, polluters and against those preferring to reap the financial benefits while it is still possible is a constraint in the way of successful NGO involvement.
- The efficient monitoring of the utilisation of funds (obtained nationally and internationally) donated to NGOs is another breach to overcome because it is sometimes perceived as a difficulty in the way of being efficient.⁶²

60 B Walsh, “Heroes of the environment”, *Time*, 29, October 2007, pp. 54-64.

61 Compare ES van Eeden, Private collection, 2006-2007, E-mail, M Liefferink re letter C Bosman (Legal Environmentalist)/ES van Eeden, 22 September 2007.

62 M Liefferink, Private collection, 1988-2007, E-mail, M Liefferink/Multiple recipients, 2 September 2007; G Montbiot, “The new aristocracy”, *Mail & Guardian*, 8-15 April 2004.

- It is speculated that some NGOs represent the view of Government more than they represent the views of the general public.⁶³
- Government has failed to:
 - use its constitutional authority to take decisions and carry out actions;
 - be accountable to the people, especially vulnerable and previously disadvantaged communities;
 - create public awareness among affected communities of the hazards and/or risks pertaining to the contamination of the Wonderfontein Spruit catchment;
 - monitor and regulate the actions of the gold mining industry;
 - enforce environmental regulation and
 - engage the mining sector regarding the problem of acid mine drainage and related environmental problems. This is partly due to the fact that, during the apartheid era, the NP Government had entered into a relationship with the mining industry in which it became a direct beneficiary.⁶⁴

Stakeholder participation, whether it is inclusive of individuals, NGOs, non-NGOs, the Government, tertiary institutions, and several other industries or local government or not, is problematic and always challenging. On the one hand, apart from the fact that not all stakeholders are equally engaged and informed, their ability to understand and adopt processes or instruments of governance also varies. On the other hand, concerned citizens seek a closer rational cooperation with scientists in that, among others, science must be used to contribute to the satisfaction of the fundamental human needs of the public in general, which include a clean and healthy environment.⁶⁵ Within stakeholder forums such as the Wonderfontein Forum (since ca. 2004 and, from 2006, fully operational) and the Wonderfontein Action Group, it appears as if the drive for these forums was mainly from Government or the Mining Industry and that the same people or departments are represented in all of them.⁶⁶

As mentioned before, from the WFS history, it also appears as if environmental actions, specifically steered by the general public, were not always as highly regarded as those initiated by Government or highly respected industries and/

63 Compare CG Mitchell & NW Quinn, "Environmental reporting disclosure in South Africa: A comparative study of the expectations of selected groups of preparers and users", *Meditari Accountancy Research*, 13(2), 2005, p. 23.

64 Compare ES van Eeden, "Ekonomiese ontwikkeling ...", (Ph.D, PU for CHE, 1992).

65 N Funke, K Nortje, K Findlater, M Burns, A Turton, A Weaver & H Hattingh, "Redressing inequality: South Africa's new water policy", *Environment*, 4 January 2007.

66 Compare E-mail, M Keet (Regional Director DWAF)/M. Loefflerink, 25 January 2007 as in ES van Eeden, Private collection, 2006-2007.

or institutions, and this perception has a historical tail, linked to people in governmental periods where the majority of the public was visible, but not supposed to be heard.⁶⁷

An assessment of NGO efficiency in the wider Wonderfontein catchment

From past and present impressions, it appears as if NGO efficiency in the WFS area can be assessed as a mixture of “success” and “failure”. Success, in this context, would then imply an outcome that reflects progress towards an achievement and that accentuates a level of change or progress, though it may not be the ultimate outcome that was hoped for. The word “failure” indicates the opposite, namely, that efficiency and care in finding pathways to progress have completely failed.

Networking to enforce environmental action

Since NGO involvement (heavily backed by private individuals and locally founded groups), a networking system has provided lifeline information and easy focus, understanding, and intellectual backing of NGOs in this area as represented by environmental activists, journalists, and academics themselves. In this networking system, it was environmental lawyers and advocates who initialled assisted.⁶⁸ Currently the Escarpment Environment Protection Group (EEPOG) and the recently founded Federation for Sustainable Environment (FSE) are new initiatives by NGOs to enforce environmental acts by Government Departments.⁶⁹

⁶⁷ Impressions from the author. Also compare with N Funke, K Nortje, K Findlater, M Burns, A Turton, A Weaver & H Hattingh, “Redressing inequality: South Africa’s new water policy”, *Environment*, 4 January 2007.

⁶⁸ Compare the assistance of Attorneys Morne Viljoen, Duard Barnard, Richard Spoor and Advocates Hendrik Schmidt, Caroline Dreyer, and Dirk Vetten to Ms Mariette Lieferrink as in M Lieferrink, Private collection, 1988-2007.

⁶⁹ ES van Eeden, Private Collection, 2006-2007, E-mail, M Lieferrink/ES van Eeden, 9 November 2007; Public Hearing Submission, EEPOG, 6 November 2007; E-mail, FSE/ES van Eeden, 22 November 2007.

Gold mining and WFS environmental remedial progress

Partially as a result of an NGO whistle-blowing in the WFS area, some progress has recently been made by the gold mining companies operating within the Wonderfontein Spruit catchment in understanding the challenges and in starting progress towards formulating possible remedial solutions.⁷⁰ Another challenge facing gold mining companies is to recognise and accept that the mineral wealth under the ground should also be translated into social development, broad-based economic growth, and environmental protection, inclusive of biodiversity and water issues. This challenge has been shared with the gold mining industry by researchers, of whom some operate in association with NGOs.

By 2007, some gold mining companies within the Wonderfontein Spruit started focussing on developing and refining their environmental management programme reports. While engagement started out as efforts by individual companies, efforts have been made to involve all gold mining companies. To this end, the Mining Interest Group has been established as a substructure of the Wonderfontein/Loopspruit Forum, through which mining companies can act in a consolidated manner in addressing catchment management issues.

Individual gold mining companies within the Wonderfontein Spruit area are using the Global Reporting Initiative (GRI) guidelines in reporting on their sustainable development performance. The purpose of the guidelines is to provide a common framework for reporting, for assisting organisations to meet their non-financial reporting requirements, or for reporting on the economic, environmental, and social dimensions of their activities. However, the use of these guidelines is voluntary.

Individual gold mining companies have also applied for or obtained ISO 14001 and 19011 accreditation. ISO 14001 (SANS 14001) is the flagship standard of the ISO (International Organisation for Standardisation) series and is widely known. ISO 19011 (SANS 19011) is the standard dealing with the auditing of both environmental and quality management systems and provides guidance on principles of auditing, managing audit programmes, conducting audits, and auditor competence. Gold Fields, in addition,

⁷⁰ For instance, individual gold mining companies are endeavouring to find a high-order solution to address the historic and current contamination of the Wonderfontein Spruit that is both profitable and reduces environmental impact. Gold Fields commented that these solutions sought were not intended to be profitable, but rather sustainable.

has recently committed itself to the Global Compact and the Sustainable Development Principles of the International Council on Minerals and Metals (ICMM), as well as the implementation of the Cyanide Code. However, NGOs perceive remediation and mitigation measures still to be reactive rather than proactive.⁷¹

Stakeholder engagement and the gold mines

Individual gold mining companies are becoming more creative, and partnerships with statutory bodies (such as the CSIR and the Council for GeoScience), authorities (such as the DWAF), and NGOs (such as the Wildlife and Environmental Society of South Africa or WESSA, the IUCN, the WWF, and the Legal Resource Centre) are becoming commonplace. Gold Fields as gold mining group regards stakeholder engagement as a key performance area in its own sustainable development programme. To ensure a systematic and credible process of stakeholder engagement, Gold Fields has implemented the AA1000 Stakeholder Engagement Standard of Accountability (SESA) at all of its operations worldwide. The SESA provides Gold Fields and its stakeholders with a structured approach and system for engagement. There have been significant benefits and improvements in the Wonderfontein Spruit, specifically in the quality of engagement with stakeholders. Also the Government's Task Team for Mine Water Management and Closure (GTT), as established by the DME and DWAF in 2005, intended to facilitate Government decision making on mine water management, related pollution problems and sustainable mine closure within highly mine-out areas.⁷² Though the newly founded FSE only recently initiated a process of communication with the GTT, several NGO environmental expertise label this pathway to solutions as a dead duck.⁷³

71 Compare ES van Eeden, Private collection, 2006-2007; M Liefferink, Private collection, 1988-2007, Response by Gold Fields to questions posed regarding recent environmental development to be used for writing this article, August 2007.

72 ES van Eeden, Private Collection, 2006-2007, E-mail, E Swart (Director, Mine Environmental Policy Research and Development)/M Liefferink, 22 November 2007.

73 ES van Eeden, Private Collection, 2006-2007, E-mail, FSE/ES van Eeden (Letters, C Bosman; A Turton; M Liefferink), 23 & 27 November 2007.

Conclusion

In essence the article focussed on an historical contemporary appreciation of the role and influence of NGOs within an democratic inspired environment.⁷⁴ It has been pointed out that this group's participation in environmental issues has only been acknowledged since the nineties. In this decade it mainly was a process of "whistle-blowing" by individuals, with no extraordinary effort to address the polluter's actions of polluting the environment. Ways of addressing polluter's actions and environmental issues in general differed from individual to individual and group to group (for example the fierce environmental campaigns in the Wonderfonteinspruit Catchment – as organised by Mariette Liefferink but always under the banner of many NGOs – opposing to example the views by former local inhabitant and geologist Dr EJ Stoch), certainly contributed to the scenario of limited successful efforts of consolidation by primary environmental stakeholders as the interested or the injured parties. It was also realised by individuals that, as long as NGOs rely on the polluter's money in some or the other way to survive as organisation, the difficulty of being independent and act independent remains. In turn this outcome affects "whistle-blowing" and a general progress to address controversial-like environmental issues in favour of progressive remediation in general.

With solid backing and support by NGOs and NPOs from especially tertiary institutions, the utilizing role of environmental activists in expertise backing – though not necessarily in the forefront seats yet – will continue to grow from strength to strength in the decades to come. This freedom and support they provide each other are also mainly as a result of the freedom provided by the newly accepted South African constitution. A growing awareness by the general public as a result of "whistle blowing" contributes in strengthening the forces against the century long freedom industries have enjoyed to randomly pollute.

In many ways the WFS also could serve as an area from which other environments eventually could learn on how NGOs should approach any environmental crisis.

⁷⁴ See also the recent contribution on NGOs in South Africa by D Fig (ed), "Corporate social and environmental responsibility in South Africa", *United Nation's Research Institute for Social Development*, 2007.