MINE WASTE SOLUTIONS - STILFONTEIN

Importance:

This case study firstly illustrates problems related to public participation in the environmental authorization process in terms of the National Environmental Management Act 107 of 1998 (NEMA), and in the process to obtain a water use licence (WUL) in terms of the National Water Act 36 of 1998. In the case of the former, it appears that the public participation process (based on one public meeting) left many landowners uninformed of the planned facility. In the case of the latter, the exercise of the Department of Water and Environmental Affairs' (DWEA's) discretion not to invite comment from interested parties is at issue. The most disturbing aspect of the case, however, is the reason put forward by the North West Department of Agriculture, Conservation and Environment (NW DACE) for dismissing the Federation for a Sustainable Environment's (FSE's) appeal against the positive environmental authorization. Essentially, the NW DACE had erred in incorrectly citing the physical location of the planned facility in the environmental authorization. Notwithstanding that they were at the same time considering an amendment to the authorization to cite the correct property, they dismissed FSE's appeal on the basis that the appeal cited the incorrect property, whereas in fact the appeal correctly cited the property as it was to appear in the amended environmental authorization.

Alleged Facts:

This case deals with the construction of a mega tailings dam or 'Centralized Tailings Deposition Facility' – CTDF) on nine properties situated close to the Vaal River. The project proponents are Chemwes (Pty) Ltd, Mine Waste Solutions (Pty) Ltd (MWS), and First Uranium (Pty) Ltd (with Chemwes appearing to be a subsidiary of MWS). Chemwes had entered into an agreement with Simmers and Jack Mines Limited to acquire the Buffelsfontein tailings dams in Buffelsfontein. This agreement entailed Chemwes acquiring both the right to recover uranium and gold from the tailings dams as well as the liability of the dumps. Chemwes and MWS planned to conduct hydraulic mining of 15 tailings dams using high pressure water cannons to slurry the tailings which would then be pumped to the existing Chemwes processing plants for the recovery of gold, uranium and sulphur. The tailings resulting from this process were to be located at the new CTDF. The Vaal River flows approximately 2 km to the east and south of the proposed CTDF.

The properties affected by the CTDF are: (1) the farm Stilfontein 408 IP (Portions RE 10, 15, 17, 25, 31, 48, 49, 66, 99, 100); (2) Hartebeesfontein 422 IP (Portions RE 2, 5, 6, 10, 12, 13, 30, 37, 38, 41, 42, 43, 49, 50, 57); (3) Zandpan 423 IP (Portions RE 3 and 4); (4) Kiepersol 481 IP; (5) Mapieskraal 441 IP (Portion 1); (6) Kareerand 444 IP (Portions 2 and 3); (7) Moddersfontein 440 IP (Portion 4); (8) Buffelsfontein 443 IP (Portions RE 2, 6, 7, 9) and (9) Wildebeestpan 442 IP. The properties are located in the town of Stilfontein under the jurisdiction of the Tlokwe Local Municipality in the North-West Province.

Process 1: Positive authorization of CTDF in terms of NEMA. A positive environmental authorization for the facility was issued by the North West Department of Agriculture, Conservation and Environment (NW DACE, Ref. No. NWP/EIA/176/2008) on 21 July 2009. A letter notifying stakeholders of the granting of the authorization, and indicating that

hard copies of the Environmental Impact Assessment Report and the draft Environmental Management Programme were available for viewing at the offices of MWS at Stilfontein was sent to I&APs on 23 July 2009. The FSE submitted an appeal against the positive environmental authorization on 1 August 2009. This appeal was supplemented on 27 September 2009. Responding statements to the appeal were submitted by MWS on 26 November 2009, to which the FSE replied on 18 December 2009. During October 2009 MWS also applied for an amendment to the environmental authorization to accommodate a new description of the site location. The appeal against the positive EA was however dismissed on the technical basis that the appeal (correctly) related to properties situated to the south-east of the town of Stilfontein whereas the environmental authorization (incorrectly) indicated that the properties were situated to the north of the town.

In the meantime, the NW DACE had on 23 October 2009 sent a notification to MWS indicating its intention to withdraw the environmental authorization on the basis that MWS had commenced with listed activities before being granted the authorization on 21 July 2009, and that they had failed to notify the department of their intent to commence with a listed activity. MWS responded to these allegations in a letter on 5 November 2009. Notwithstanding this letter, the NW DACE withdrew the environmental authorization on 18 January 2010. MWS submitted an appeal against this decision on 28 January 2010. This appeal was upheld by the MEC of the North West Department of Agriculture, Conservation, Environment and Rural Development. An amended Environmental Authorization was subsequently issued on 25 February 2010, now containing a correct description of the properties to the south-east of the town of Stilfontein (see explanation for the change in the identification of affected properties provided to FSE by First Uranium on 5 November 2010).

Process 2: Granting of water use licence for CTDF in terms of NWA. A water use licence for the proposed project (WUL no 27087241) was issued to Chemwes (Pty) Ltd (a subsidiary of MWS) on 11 June 2010. Various requests for access to this and other documentation were made by FSE on 31 July 2010. After a meeting on 29 October 2010, MWS made 12 lever arch files of documentation available to the FSE. The FSE subsequently submitted an appeal against the granting of the WUL to the Water Tribunal on 9 March 2011.

As the mining of tailings dams falls within the scope of the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA), MWS also submitted a mining right application to the DME. No additional information, however, is available on this process and no interventions appear to have been planned on this basis.

Forum:

Appeal to MEC, NW DACE in terms of NEMA, Water Tribunal

Issues:

The processes outlined above raise the following issues: Regarding **process 1**:

Insufficient public participation. Although two meetings appear to have been held prior to the submission of the environmental impact

- report, it is claimed that many affected landowners were ignorant of the application and only became aware of the project after a positive authorization was given.
- Gaps and incomplete information in the EIR. It is alleged that
 insufficient attention was given in the environmental impact
 assessment to the impacts of the proposed CTDF on the soil,
 vegetation, ground- and surface water, air quality and health within the
 Koekemoerspruit Catchment Area. The proximity of these impacts to
 the Vaal River is a cause of major concern.
- Dismissal of the appeal on a technical ground ultimately grounded in NW DACE's own error. The FSE appeal was dismissed on the basis that their appeal related to the construction of the CTDF to the south-east of the town of Stilfontein, whereas the environmental authorization referred to a site to the north of the town. During the same time the NW DACE was considering an amendment to the authorization to correctly refer to the site to the south-east. Using this 'technical error' as the basis to dismiss FSE's appeal can therefore be regarded as mischievous in the extreme.

Regarding process 2:

- Failure on the part of DWEA to initiate a public participation process. The Department of Water and Environmental Affairs failed to exercise its discretion in terms of s 41(2)(c) of the NWA to invite submissions from persons interested in the matter prior to granting the WUL.
- Failure on the part of DWEA to take the cumulative impact on water resources and the sustainability of the mining project into account. In addition to concerns related to dust suppression and the lining of the new facility using a combination of clay and PVC liners, the appeal points out that should the calculations and predictions of Chemwes fall short by even the slightest fraction, the risk is very high that large quantities of polluted water from the facility would enter the Vaal River. The impact of long-term groundwater pollution on the use of a low-yield aquifer by landowners in the area was also not properly considered. The construction of a sulphuric acid plant was critical to an assessment of the pollution potential of the facility (claims were made in the IWWMP that the plant would remove 90% of the sulphur from the final tailings), however it was indicated to FSE on 20 October 2010 that the plant would no longer be constructed due to financial considerations.

Paper Trail:

Document	Author /Originator	Date
Process 1: Appeal against positive authorization of CTDF in terms of NEMA		
Notification of grant of positive environmental authorization	GCS	23 July 2009
Notice of intention to appeal against positive environmental	FSE	28 July 2009

authorization granted by NW DACE		
Appeal against positive environmental authorization	FSE	1 August 2009
Supplementation of appeal	FSE	27 September 2009
Notice of intention to withdraw environmental authorization on the	NW DACE	23 October 2009
basis of non-compliance with conditions		
Response to notice of intention to withdraw EA	MWS	5 November 2009
Withdrawal of environmental authorization	NW DACE	18 January 2010
Reply to MWS response on appeal	FSE	18 December 2009
Appeal against withdrawal of EA	MWS	28 January 2010
Notice of amendment to environmental authorization	GCS	2 March 2010
Notification of dismissal of FSE appeal	NW DACE	Undated
Notification of upholding of appeal against withdrawal of EA	NW DACE	Undated
Explanation for EA amendment	First Uranium	5 November 2010
Process 2: Appeal against granting of WUL for CTDF in terms of		
NWA		
Water use licence issued to Chemwes (Pty) Ltd	Dept of Water Affairs	11 June 2010
PAIA request for access to all relevant licences granted in terms of	Mariette Liefferink	31 July 2010
the National Water Act for the reworking of tailings dam project		
Letter addressing concerns re groundwater infiltration from	Mine Waste	13 January 2011
Kareerand CTDF	Solutions	
Appeal against granting of WUL	FSE	9 March 2011