

THE MUNICIPAL ENGINEER AS CARING PARENT: DUTY TO MANAGE RISK OF DAMAGE AND INJURY

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Abstract

This paper argues that the municipal engineer has a role of a caring parent. Failure to fulfil this role has serious consequences. Prior to 1970 the municipal engineer often acted as if sovereign immunity still existed. However, the doctrine that the sovereign or state cannot commit a legal wrong and is immune from civil suit or criminal prosecution was outdated. Case law and the Bill of Rights, as stated in the Constitution, Act 108 of 1996, changed this. Consequently, the face of the municipal engineer changed from absolute authority to that of the caring parent. The state is bound to promote the Bill of Rights and thereby its functionaries become the *diligence paterfamilias* (meaning the careful father (parent), the reasonable and responsible person). The official in the public service, in particular the municipal engineer, should have the foresight and wisdom to guard against harm to the public. However, there is grave reason for concern. The municipal engineer is a rare species; there is a chronic shortage, most acute in the small rural towns and districts. Nearly 50% of Categories B and C municipalities have no professional engineer. Legal duty arises from a number of grounds: the Constitution, statutory duty and common law. Section 24 of the Constitution states that: “everyone has a right – (a) to an environment that is not harmful to their health and wellbeing”. The Occupational Health and Safety Act 85 of 1993 in Section 9 requires that the employer ensure that “persons other than those in his employment who may be directly affected by his activities are not thereby exposed to hazards to their health or safety”. The liability of the local authority has been highlighted in a number of court cases. Judgements highlight the principles that the municipal engineer must abide by to fulfil his legal duty. An ethical dimension also arises from the Engineering Council of South Africa (ECSA) Rules of Conduct that require of registered persons to execute their work with integrity and in accordance with accepted norms of professional conduct. The municipalities that employ inappropriate persons in technical positions face risk of negligent acts or omissions. The guiding principle, originating from Roman Law, is that: “He is responsible for skill in his profession and want of such skill is regarded as a fault”. The way forward is suggested to retain expertise, grow new professionals and reinstate the status of the municipal engineer.

INTRODUCTION

“Weak, poorly performing systems make it hard to attribute responsibility, with the frequent result that no one is accountable. The plan cites the example of what happens when the water in a town is found to be undrinkable. The media blame the Minister of Water Affairs. The community blames the mayor. The mayor blames the head of the water utility. The head of the water utility blames the technical engineer. The engineer says that the maintenance budget has been cut for the past three years and now the water is undrinkable. The head of finance in the municipality says that the budget was cut because personnel costs have crowded out maintenance expenditure. The mayor argues that the salary structure is negotiated at a national level by the South African Local Government

Association. The association says that municipalities can opt out of these agreements if they are unaffordable. And so on.” (National Planning Commission, s.a., National Development Plan 2030, Executive Summary).

Prior to 1994, the municipal engineer often acted as if sovereign immunity still existed and some engineers still do. This was the outdated doctrine that the sovereign or state could not commit a legal wrong and was immune from civil suit or criminal prosecution. Case law started changing this approach in the 1970s. Scott (2008:278) with reference to the Cape Town Municipality v Bakkerud (2000 3 SA 1049 (SCA) case, stated that “Previously municipalities could not be found liable in delict for detriment flowing from the mere failure to the municipality in question to repair or maintain a road; liability arose only if the municipality had introduced a “new source of danger” by its road-building activity”.

The Bill of Rights, as stated in the Constitution, Act 108 of 1996, the “cornerstone of democracy in South Africa” also played a role in changing this. It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom.” The state is bound to promote the Bill of Rights as stated in Section 7(2) “*The state must respect, protect, promote and fulfil the rights in the Bill of Rights*”. State functionaries must thus become the *diligence or bonus paterfamilias*. This Latin phrase refers to the careful or good father, which is in the legal sense the reasonable and responsible person. (Note that the reference to “father” is nowadays considered to be an anachronism: in this paper the term is replaced with parent where appropriate.)

LEGAL FRAMEWORK

The municipal engineer has to execute a wide range of functions and duties. The broad functional areas are listed in Schedule 4 Part B and Schedule 5 Part B of the Constitution. While some functions may not be assumed as a matter of policy, once the authority is exercised to execute the function, the obligations to fulfil the duties are established.

Legal duty (duty of care) arises from statutory duty and common law. An example in the field of waste water treatment highlights a number of legal duties.

A general duty of care is imposed in Section 28 of the National Environmental Management Act 107 of 1998 (NEMA). Section 28(1) provides for a duty of care on persons who cause significant pollution or degradation of the environment to take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring.

In *Agritrans CC and Another v Mafube Municipality and Another*, [2008] ZAFSHC 102, the applicant sought to hold the local authority and the municipal manager in contempt of an earlier court order to maintain certain municipal sewerage pumps to prevent sewage from spilling into the Wilge River, which is the main feeder of the Vaal River. The applicant relied on sections in the following two Acts:

(a) Section 152 of the Constitution of South Africa, Act 108 of 1996, that requires that the State through its relevant organs to ensure the provision of basic services in the communities in a sustainable manner and to promote a safe and healthy environment to them; and

(b) Section 20(1) of the Health Act, 63 of 1977, to prevent nuisance or unhygienic conditions from occurring (Lawyers for Human Rights, 2009).

The Free State High Court ordered the Mafube Municipality (inter alia) *“To properly maintain and operate the two pumps at the Namahadi pump house and the Namahadi sewerage works situated on the remaining extent of the farm Paisley No 73, district Frankfort, ”*. The municipality had the audacity to appeal, which was dismissed with cost.

International law gives more specific instructions, such as the *Ontario Water Resources Act*, that provides that sewage works *shall* at all times be maintained and kept in good repair, and operated in a manner and with facilities as may be directed by a director appointed under the Act.

The Occupational Health and Safety Act, 85 of 1993, in Section 9 requires of the Employer to ensure that *“persons other than those in his employment who may be directly affected by his activities are not thereby exposed to hazards to their health or safety”*.

In common law, the wrongful act (delict) gives rise to claims for damages, if the wrongful act (an act or an omission) constitutes a fault (i.e. intentional or negligent) and is the cause of the damage. The official in the public service, in particular the municipal engineer, should have the foresight and wisdom to guard against harm to the public.

In *Cape Town Municipality v Paine* 1923 AD 207 at 217 Innes J stated that: *“the question whether, in given circumstances, a reasonable man would foresee the likelihood of harm and governed his conduct accordingly, is one to decide in each and every case upon consideration of all the circumstances. Once it is clear that the danger would have been foreseen and guarded against by a diligent paterfamilias, the duty to take care is established and it only remains to ascertain whether it has been discarded”*.

In *Graham v Cape Metropolitan Council* 1999 (3) Sa 356 (C) van Deventer J said: *“The legal principles to be applied in cases of this kind may be summarised as follows: “Wrongfulness in terms of the sense of justice and legal convictions of the community now applies to omissions by a public authority. A duty of care towards road users should apply to the controlling public authority unless there is a valid basis for its exclusion. However, as this, is whether the sense of justice of the community would view the failure of the local authority to take positive action as wrongful, subject to the qualification that the local authority is not required to do more than may be reasonably expected”*.

In addition to the oversight of the law and professional bodies, an interesting development was the involvement of the Public Protector in an investigation into allegations of negligence by the City of Ekurhuleni which allegedly resulted in prejudice to a certain Mr Malahlela, Report No 17 of 2012/13 (Public Protector, 2013). Mr Malahlela’s house in Vosloorus was built on dolomite. A 20 mm erf connection water pipe leaked in front of the house. When repairing it, the backactor broke a 300 mm water main that discharged a huge volume of water. Subsequent to the repairs to the water pipes, a sink hole developed that caused cracks in the house. The owner was ordered to vacate the house. The case also involved the issue of alternative accommodation and payment for an equivalent rental house. The Public Protector’s main findings were that the conduct of the municipality caused the damage to the house and constituted maladministration and improper conduct as envisaged in Section 182 of the Constitution. Further, the Public Protector decided that the matter would be considered resolved once the house and land on which it was built had been repaired, rehabilitated or rebuilt or the municipality provided the complainant with a house of

substantially similar size or value. Vosloorus is on dolomitic ground and the municipality must take proactive measures and adopt policies to cater for sinkholes and relocation of occupants.

THE MUNICIPAL ENGINEER OF TODAY

Who is the municipal engineer of today? The traditional title of City or Town Engineer has been superseded by variants of Technical Services Manager, Executive Director: Technical Services or Strategic Executive Director: Services Infrastructure. These are impressive titles for which an engineering degree or technical qualification is often not a requirement.

Research by the Municipal Demarcation Board (MCB) (2012) gives insight into municipal staffing in 2010 / 2011. There are 278 municipalities in South Africa, consisting of eight metropolitan, 44 district and 226 local municipalities. In this research, the eight metropolitan municipalities (of which six responded to requests for additional information) were reported as group A, the B group of local municipalities which was subdivided in four subgroups based on size and the C group of district municipalities which was subdivided into two subgroups, C1 which are not Water Services Authorities and C2 that are. See Table 1.

Table 1: MIIF Category descriptions (Source: MDB 2012 Table 2)

MIIF category	Description
A	Metropolitan municipalities (metros)
B1	Secondary cities, local municipalities with the largest budgets
B2	Local municipalities with a large town as core
B3	Local municipalities with small towns, with relatively small population and significant proportion of urban population but with no large town as core
B4	Local municipalities which are mainly rural with communal tenure and with, at most, one or two small towns in their area
C1	District municipalities which are not water services authorities
C2	District municipalities which are water services authorities

The technical services managers of 48% of the municipalities did not have undergraduate degrees. The metropolitan municipalities all had graduates as technical services managers, but of the B1 and B2 subgroups of secondary cities and large towns, 75% were graduates. Small towns in the B3 and B4 subgroups had 35% and 45% graduate technical services managers. The average time in the position of technical services manager in groups A and B was less than 3,5 years, with B2 the lowest at 2,07 years. Across the provinces, the average time in the position ranges from 1,9 years in the Eastern cape, to 4,61 in the Western Cape. The national average is 3,56 years. The relatively low average time in this management position indicates that there is a high mobility and lack of continuity.

The technical staff who work for municipalities was dealt with in the categories of professional engineer, technologist and technician. Registration with the ECSA was not a prerequisite for the latter two categories. This may have led to participants overstating their status. More than 50% of the 983 professional engineers worked for metropolitan municipalities; on average 127 professional engineers per metropolitan municipality. The average number of professional engineers in the four group B municipalities varied from 3,5 in B1 to 0,5 in B3. More than 50% of the municipalities did not have a professional engineer. The distribution per province varied from 459 in the Western Cape, 242 in Gauteng to 20 in Mpumalanga.

The MDB report concluded a number of key points:

1. There is a chronic shortage of municipal engineers in South Africa.
2. This shortage is most acute in B4 and C2 municipalities.
3. There is a large infrastructure asset value present in these municipalities that do not have the engineering capacity to manage these assets.
4. The geographical distribution of engineers is uneven.

The extent of the undersupply of technical staff is best illustrated by looking at the number of engineering professionals per technical class per 10 000 of population for each municipal subcategory. See Figure 1.

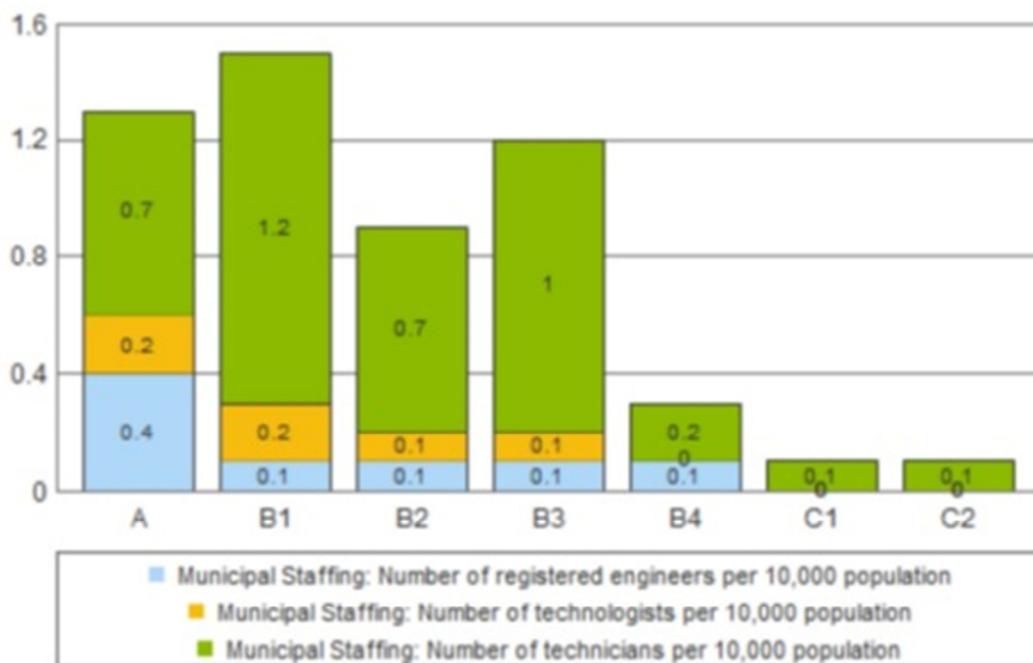


Figure 1: Average number of engineering professionals per 10 000 population per municipality in each subcategory. (Source: MDB 2012 Figure 64)

PROFESSIONAL CONDUCT

The Guideline professional engineering practice (Professional Engineers Ontario, 2011) provides a definition of the practice of professional engineering based on Section 1 of the Canadian Professional Engineers Act. The practice of professional engineering is established if the following three questions can be answered:

- Is it an act of designing, composing, evaluating, advising, reporting, directing or supervising?
- Does it involve the safeguarding of life, health, property and the public welfare?
- Does it require the application of engineering principles?

The ECSA Rules of Conduct as published in the Government Gazette 37123 confirm the commitment to the public and the environment in sections 3(3) and 3(4). The registered person must at all times have due regard for and give priority to the health, safety and interest of the public, and avoid or minimise adverse impact on the environment.

The ethical dimension arising from the ECSA Rules of Conduct require of registered persons to execute their work with integrity and in accordance with accepted norms of professional conduct.

Due diligence is important as a legal defence against claims of negligence or charges of offences (e.g., occupational health and safety). A practitioner will have demonstrated due diligence if he or she has:

- *identified all actual or potential hazards to the interests of the client, employer or public associated with the work*
- *assessed the risk to the interests of any affected party associated with the identified hazards*
- *taken steps to control or reduce those hazards*
- *communicated the risks to all affected parties* (Professional Engineers Ontario, 2011).

Municipal engineers are a rare species of knowledgeable, experienced and skilled employees who have to perform in accordance with legislation and common law to an ethical code. The MDB (2012) analysis of municipal performance shows that 50% of municipalities do not have technically qualified persons in service. Often these posts are filled by project managers, administrative clerks or tradesmen. This leads to risks for the individuals and vicariously the municipality.

If a person takes on a position such as municipal engineer that requires special skills, he is expected to be able to perform the tasks. *“The standard by which his conduct is measured is the conduct of a reasonably skilled, competent, and experienced person who is a qualified member of the group authorized to engage in that activity. Anyone who performs these special skills, whether qualified or not, is held to the standards of conduct of those properly qualified to do so, because the public relies on the special expertise of those who engage in such activities”* (Legal Dictionary s.a.).

The difference between “qualification” and “competence” should be borne in mind when considering the suitability of a person as municipal engineer. Qualification is an accomplishment which fits a person for some function, office or position. This manifests in degrees and diplomas that cannot be lost. Competence is having suitable skill, knowledge, or experience for some purpose. A municipal engineer needs to assess his/her competence to fill a position before agreeing to accept the appointment (Professional Engineers Ontario, 2011).

The municipalities that employ inappropriate persons in technical positions, bear risk for negligent acts or omissions. The guiding principle, originating from Roman Law, is that: *“Spondet peritiam artis, et imperitia culpa adnumeratur”* (meaning that he is responsible for skill in his profession and want of such skill is regarded as a fault) (Bell, 1870”).

CARING PARENT

One of the most devastating legacies of South Africa's past is households without a parent, mainly due to past migrant labour policies. Research by Eddy, Thomson-de Boor and Mphaka (2013) starts with the statement:

“South Africa has an exceptionally high number of absent parents with approximately half of the children in the country living without daily contact with their parents. This situation presents social and developmental challenges.”

This resonates with the approximately half of the municipalities that have no professional engineer employed. The majority of professionals are located in or have migrated to the metropolitan areas. The consequences are devastating, with challenges in the delivery of services, under-employment and stunted economic growth. There is a dire need for a local technical *bonus / diligence paterfamilias* in the rural municipalities.

WAY FORWARD

The National Development Plan 2030 calls for a strategy to ensure that high-calibre people are recruited into local government. In the interest of all, sufficient capacity needs to be provided to deliver high-quality basic services. A flow of graduates is required, but even more pressing is the immediate need for implementers at the coal face. They must be the mentors of the next generation of professional engineers, technologists and technicians.

Encouragement comes from the consulting engineering community: *“CESA calls for the embracing of the municipal engineer as a trusted advisor as well as creating a working environment to attract and retain municipal engineers. The municipal engineers must be incentivized (long term employment, purpose in life, emoluments, respect and freedom) and unqualified people should be discouraged from trying to do the job of the municipal engineer”* (Pirie, s.a.).

A step in the right direction may be to bring back the position of the Municipal Engineer as the head of technical services. The professional engineer, registered technologist and technician subscribes to the Rules of Conduct and professional ethics. Recognition of these values could help to regain the trust of the community and enable the municipal engineer to serve the community as the good and diligent parent.

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