

LTE CONSULTING’S EMERGENCY INTERVENTION IN MOPANI DISTRICT (LIMPOPO)

The legacy of apartheid is well entrenched in infrastructure throughout South Africa. There is a stark difference in the quality of infrastructure one finds in the former homelands when compared to the rest of the country. The two small Limpopo towns of Giyani and Tzaneen are just about 100 kilometres apart physically but worlds apart when it comes to infrastructure. Admittedly the municipal infrastructure is aged in both towns, but Tzaneen has fared much better as a result of the previous apartheid policies.

By 2014 the water and sanitation infrastructure in Giyani had deteriorated to crisis proportions. The water supply situation in the town had become critical, with constant outages and breakages at the water treatment plant and the bulk distribution system. If the situation in town was critical then the position in the outlying villages was dire. Most of the villages had not received municipal water for years. A lot of the boreholes that had been dug to alleviate the situation were not operational for various reasons. The situation was so critical that the Minister of Water & Sanitation had to pay a visit in July 2014, and was met with the following dire conditions:

- There was effectively no water supply to Nkhensani Hospital. The municipal supply was erratic and the six boreholes at the hospital were dysfunctional
- The projects underway to refurbish and upgrade the Giyani Water Treatment Works were stalled with no definite project end date.
- The Giyani Wastewater Treatment Works was completely dysfunctional, with untreated sewage being discharged in to the river systems.

Taking cognisance of the fact that the dire situation was mainly as a lack of capacity within the Mopani District Municipality the Minister appointed Lepelle Northern Water, an organ of state within the Department of Water & Sanitation, as the Implementing Agent to address the emergency situation in Giyani as well as lay the basis for a long term solution for the improvement of the water and sanitation infrastructure in the Municipality. LTE Consulting was then appointed by Lepelle Northern Water as the EPC Contractor to give effect to the required remedy.

LTE Consulting decided to tackle the problem in two parts. The first part was to put into effect solutions that would solve the immediate crisis at the hospital as well as some sixteen priority villages that had been identified as critical. Also included in this would be to resolve the dire situation regarding wastewater treatment in the municipality.

1. Emergency Interventions

The following situations were resolved completely by LTE Consulting and their service providers:

(a) Nkhensani Hospital

The six boreholes were completely refurbished. Yield tests were conducted to ensure enough water be supplied to the Hospital. Water quality was tested using independent laboratories. A suitable water purification plant was then designed, constructed, installed and commissioned. The Hospital now has enough water supply of the right quality even when the municipal supply is not available.

(b) Giyani Water Treatment Works

The Mopani District Municipality has embarked on a 6 ML/day expansion project as well as refurbishment of the water works. The projects were long overdue as a result of lack of management of consultants and contractors. Lepelle Northern Water and LTE Consulting intervened and ensured that the projects were completed before the end of 2014. The new 6ML/day module was officially launched by the President in October 2014.

(c) Giyani Wastewater Treatment Works

The Mopani District Municipality had embarked on a project to build a new 1.5ML/day module at the plant. Because of various financial and other problems the project was abandoned in 2010 and lay incomplete and non-functional. LTE Consulting completed the project and it is now fully operational. Furthermore, because of the realization that the treatment capacity was inadequate for the town, a new 1.5ML/day package plant was designed, constructed and commissioned. The Giyani Wastewater Treatment Works now has a fully operational capacity of 3ML/ day. There is no raw sewage being discharged into the river systems anymore.

(d) Giyani Transfer Pumpstations

The main transfer pumpstation (IK Nxumalo Pumpstation) had been dysfunctional for more than two years. The municipality had cut the main pipeline as a result to direct raw sewage into the river. LTE Consulting repaired the pumpstation as well as the other transfer pumpstations. These are all currently operational.

(e) Giyani Water Reticulation Network

The major problem of the bulk distribution network inherited from the apartheid days was that it consisted mainly of asbestos cement (AC) pipes. These pipes are no longer environmentally acceptable. Operationally they experience constant breakages resulting in loss of water supply. The problem was further exacerbated by the fact that the municipality did not have adequate repair and maintenance systems and equipment. LTE Consulting therefore assisted the municipality in the repair and maintenance of distribution and reticulation pipelines, leaking reservoirs and associated equipment. There are many villages throughout the Greater Giyani Municipality which now receive water as a result of these interventions.

2. Long Term Interventions

Lepelle Northern Water and LTE Consulting realized that a proper plan was required to ensure a long term solution to the water supply problems of the Greater Giyani Local Municipality. It was also realized that, for various reasons including financial, the problems would not be eliminated entirely during this intervention. Through careful consideration it was then decided that strengthening the bulk supply and distribution network would lay a solid platform for the long-term improvement of the water supply network. The following projects are therefore current underway:

(a) Giyani Bulk Distribution Network Upgrade.

The project involves the renewal of the bulk pipelines A, B, C, D, F1 and F2 which form the backbone of the Giyani Water Scheme. It involves the replacement of old AC pipelines with modern PVC and PVC-o pipes. Design and engineering is complete and the project is currently at the construction stage, with completion anticipated in 2017. This will ensure secure water supply throughout the Scheme. Reticulation in the villages also needs to be upgraded but this will be done at a later stage in accordance with the availability of funds.

(b) Nandoni-Nsami Bulk Pipeline

The Mopani District Municipality correctly identified that the water available from Nsami Dam was inadequate and needed to be augmented. A project was then initiated to bring water from the larger Nandoni Dam in Thohoyandou. The project ran into trouble and was abandoned. The Department of Water & Sanitation then instructed that the project be resuscitated. LTE Consulting reviewed the design work and made the necessary changes to deliver potable water from the Nandoni Water Treatment Works to Giyani. An open tender process was initiated leading to the appointment of the contractor at the beginning of 2016. Construction is currently underway and the project is scheduled for completion in 2017. This will become a vital source of water supply as it is anticipated to deliver 17ML/day of water to Giyani when complete.

The infrastructure problems in the Mopani District Municipality, as in many other places in the country, are immense and will not be solved overnight. The important thing is that the Government of the Republic of South Africa is committed to eradicating these problems and delivery adequate services to our people. LTE Consulting is committed to working Government at the various spheres to reverse the evil legacy of apartheid. We have made, in our own small way, a real and lasting impact in the lives of the people in the Greater Giyani Municipality and will continue to do so.

55 VILLAGES IN GIYANI BENEFIT FROM OVER R77 MILLION WATER PLANT

INSTEAD of faulting the past regime, the management of Lepelle Northern Water (LNW) led by its CEO Phineas “PK” Legodi has embarked on confronting the water and sanitation backlog which left the communities of Mopani vulnerable for forty-two years .

And fifty-five (55) villages in Limpopo are set to benefit from the water reticulation plant which will address the water and sanitation problems that had been troubling the villages in Limpopo.

LNW managed to meet the deadline regarding the acceleration of the work on Giyani Water scheme. On the 28 September 2014, the scheme was 98% complete both the refurbishment of the old and 6 megalitre extensions. The remaining 2% was snag-list.



Completed borehole in Mapatha Village

Legodi said:“The situation in Giyani has been a national crisis of ugly proportions for too long. Our quick progress in turning the situation around warranted the President should come and talk to the communities about same and future plans in the broader water-distressed area of Mopani.”

“The little dilapidated infrastructure that was there was more that 30 years old. It was installed way back in 1974 when scheme erected. It has long outlived its lifespan. When water was pumped from the scheme, it used to spill all over the area meant to be fed the scheme because of the dilapidated state of the infrastructure.” This project was officially launched last year in the Greater Giyani Municipality by President Jacob Zuma who was accompanied by the Minister of Water and Sanitation Nomvula Mokonyane.

Nkhensani hospital was the most affected as patients didn’t have water to bath and had to rely on their families to bring them water when visiting them.

Legodi confirmed that indeed the problem has been resolved following serious emergency intervention. “We had to implement an emergency plan to restore water and sanitation services in Mopani and immediately begin in the Greater Giyani municipality,” added Legodi.

Premier Stan Mathabatha confirmed that during the Siyahlola visit last year in Greater Giyani Local Municipality, the President Zuma launched water reticulation plant to the value of R77. 4 million.

Mathabatha added that indeed 55 villages will benefit from this programme, and Lepelle Northern Water has since been appointed as an implementing agent.



Aerial view of commissioning of Giyani WWTW 1.5ML/day package plant.

Mathabatha said:“This project should also help to respond to water supply challenges the people of Giyani have experienced for some time now. The MEC for of Co-operative Governance, Human Settlements and Traditional Affairs(Coghsta) MEC Makoma Makhurupetje has, on the other hand been mandated, to coordinate an implementation plan to Wastewater Treatment Works in consultation with relevant stakeholders.”

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Water purification plant at Nkhensani Hospital.

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