Western Cape Government Environmental Affairs and Development Planning

Directorate: Environmental Law Enforcement

## **REFERENCE:** 14/1/1/E1/1/2/3/0627/19 **ENQUIRIES:** Grant Dyers

Mr Peter Walsh CommsCloud Managed Infrastructure G07 The Gatehouse Century Way **Century City** 7441

**BY EMAIL** 

email: peter.walsh@commscloud.com

Dear Sir

## POLLUTION OF THE DIEP RIVER CATCHMENT AND MILNERTON LAGOON, MILNERTON

- 1. The above matter and your email dated 25 April 2020 refers.
- 2. The Department's Directorate: Environmental Law Enforcement ("this Directorate") wishes to provide you with an update pertaining to our investigation into the abovementioned pollution of the Diep River Catchment and Milnerton Lagoon.
- The following update is a synopsis of the investigation for the period December 2019 30 April 2020:
  - 3.1. The Department received several complaints from the public (including yours) relating to the alleged raw sewage emanating from the Potsdam Waste Water Treatment Works ("the Facility") (which is administered by the City of the Cape Town Municipality)("the City")) and following into the Milnerton Lagoon, resulting in pollution and offensive odours.

- 3.2. On 9 December 2019, Environmental Management Inspectors ("EMIs") from this Directorate and the Directorate of Pollution and Chemicals Management (D: P&CM) conducted a site inspection of the Milnerton Lagoon in conjunction with officials from the national Department: Environment, Forestry and Fisheries(Oceans and Coast unit) to ascertain the veracity of the complaints received.
- 3.3. On 11 December 2019, EMIs from this Department conducted a follow-up inspection and undertook water quality monitoring samples of four sites along the Milnerton Lagoon, namely: the mouth of the Milnerton Lagoon ("Site 1"); stormwater outlet within the Milnerton Lagoon ("Site 2"); the Woodbridge Island ("Site 3"), and of the final effluent from the Facility ("Site 4").
- 3.4. The purpose of the monitoring exercise was to determine the chemical and bacteriological levels within the estuary and to establish to what extent the discharge from the Facility is currently contributing to the alleged pollution and poor water quality of the Diep River Catchment and the Milnerton Lagoon.
- 3.5. The analysis of the above water quality monitoring results revealed the following:
  - 3.5.1. The bacteriological results for sites 1-3 were significantly above the Target Water Quality Range for intermediate contact as per the South African Water Quality Guidelines, Volume 2: Recreational Water Use, 1996; and
  - 3.5.2. The results for site 4 also exceeded the General Authorisation (GA) (issued by the Department of Water and Sanitation ("DWS")) limits for the discharge of wastewater into a water resource for Faecal Coliforms, E. Coli, Ammonia, EC (Electrical Conductivity), COD (Chemical Oxygen Demand) and Suspended Solids. Kindy note, the DWS is the competent authority to enforce compliance with the GA and have issued a Pre-Directive to the City due to non-compliance with the GA.
- 3.6. During the aforesaid inspection (11 December 2019), the EMIs met with the Facility's manager, who accompanied them during the walk-through of the Facility. The manager advised the EMI's of the following:

- 3.6.1. Plans are in place for an upgrade of the entire facility (which is currently in process), and will thus improve the hydraulic capacity and the treatment technology of the Facility;
- 3.6.2. The recent Eskom load shedding has resulted in the discharge of partially treated effluent into the Diep River, as there is no emergency retention capacity available. The Facility's generator, however, does not start-up immediately, which causes delays, resulting in the over extension of the system;
- 3.6.3. Inflows into the Facility are quite low due to many households and businesses still adhering to water restrictions imposed by the City and therefore, impacting on the operations; and
- 3.6.4. Daily water quality samples are taken and tested in order to make the necessary daily adjustment to the treatment process. It was also mentioned that there are instances when the General Limit Standards for the final effluent is exceeded.
- 3.7. Furthermore, the EMIs also investigated other potential sources of pollution to the Diep River Catchment and Milnerton Lagoon. The water quality monitoring results from the Department also illustrated that the samples taken at the Facility (Site 4) had a lower E. Coli count (although it still exceeded the GA limit) than the sample taken at Woodbridge Island (Site 3) further downstream. This confirms that the E. Coli counts further downstream of the Facility are more likely due to other sources of pollution, such as, run-off from neighbouring human settlements into the lagoon via the stormwater outlets, and agricultural and industrial discharge to the stormwater canals.
- 3.8. On 14 January 2020, the Department received further complaints of pollution, which resulted in a site inspection on 15 January 2020. During the said inspection, EMIs from the Department inspected the Milnerton Lagoon and the stormwater canal situated adjacent to the Theo Marais Sports Complex, Milnerton. The following was observed:
  - 3.8.1. No visible signs of any raw sewage at the Milnerton lagoon. Although, the persistence of an offensive odour was still pervasive in the area; and

- 3.8.2. The stormwater canal situated at the Theo Marais Sports Complex had visible signs of suspended solids, which appears to be raw sewage and had an offensive odour.
- 3.9. Based on the above water monitoring results and the observation during the Department's site inspection on 15 January 2020, the Department issued a letter to the City dated 12 February 2020, requesting the City to undertake the following:
  - 3.9.1. Conduct a clean-up of the solid waste situated at the stormwater outlets flowing into the Milnerton Lagoon;
  - 3.9.2. Implement adequate measures at the stormwater outlets to prevent solid waste from flowing into the Milnerton Lagoon in the future;
  - 3.9.3. Implement adequate measures to effectively deal with the current power outages/load-shedding, in order to prevent the discharge of substandard effluent from the Facility, as the current measures are inadequate;
  - 3.9.4. Investigate the source(s) of pollution emanating upstream from the stormwater canal adjacent to the Theo Marais Sports Complex, Milnerton, as it forms part of the City's stormwater management system;
  - 3.9.5. Proposed short, medium and long-term measures to be implemented in order to improve the current state of the Diep River and Milnerton Lagoon;
  - 3.9.6. Provide a list of projects/initiatives/measures to be undertaken within the City's current (2019/20) and following financial years (2020/21), with adequate budget projections and timeframes, in order to address the pollution caused by the run-off from the neighbouring human settlements, agricultural and industrial discharge into the City's stormwater outlets, in respect of the City's by-laws relating to stormwater management. This will reduce the pollution load within the Diep River Catchment and Milnerton Lagoon, as the status quo is unacceptable and poses a risk to human health and the environment.
- 3.10. On 13 March 2020, this Directorate received the City's response to the above requests as stipulated in paragraph 3.9 above, as well as providing the Department with the City's Pollution Abatement Plan ("the Plan") outlining the

interventions already undertaken and pending in the future, in order to address the pollution issues within the Milnerton Lagoon and Diep River Catchment. The City also provided the Department with a draft report from the City's Water and Sanitation Informal Settlement Service Branch, which sets out the parameters of the service delivery to the informal settlements within the Diep River Catchment. This also included the interim measures at the Facility to address the challenges with load shedding, such as overflows from the Facility will be directed to the stormwater overflow dam and pumped back into the Facility once the power is restored, as well as the repairing of backup generators at the Facility.

- 3.11. After considering the City's Plan for the Milnerton Lagoon and the Diep River Catchment, the Department's EMIs undertook a follow-up inspection and a further sampling exercise on 19 March 2020, which revealed that the various sections along the Diep River continues to hold significant polluted water and that the current measures within the City's Plan was not adequately being implemented by the City to prevent the ongoing pollution of the Diep River Catchment, which poses a significant risk to the health and well-being of inhabitants of the area and the general public.
- 3.12. As such, the Department issued the City with a <u>Pre-Directive on 26 March 2020</u>, informing the City of the Department's intention to issue the City with a Directive in terms of section 28(4) of the NEMA, if the City does not adhere to the Department's requests which was to:
  - 3.12.1. Commence with a thorough clean-up operation of the waste/ pollutants (i.e. raw sewage and general waste) from the storm-water canals, adjacent to the Theo Marais Sports Complex and the Potsdam WWTW) towards the mouth of the Milnerton Lagoon area, including the affected areas within the coastal public property, which must be completed within 30 (thirty) calendar days from the date of receipt of the Pre-Directive;
  - 3.12.2. Amend and submit to this Department, for approval, the City's Plan, dated 13 March 2020, within 30 (thirty) calendar days from the date of receipt of the Pre-Directive, which must include the following:
    - 3.12.2.1. reasonable timeframes (i.e. daily, weekly and/or monthly) associated with the mitigation measures to address the

immediate impacts of the pollution within the Diep River Catchment, including the coastal public property;

- 3.12.2.2. increase in the frequency of the short- and medium-term actions in order to adequately address the ongoing pollution of the catchment;
- 3.12.2.3. reasonable timeframes by when the stagnating sludge/ raw sewage within the Diep River Catchment will be removed;
- 3.12.2.4. measures to be implemented in order to prevent raw sewage from flowing into the canal adjacent to the Theo Marais Sports Complex.
- 3.12.3. Erect adequate signage in English, isiXhosa and Afrikaans along the Diep River Catchment to inform the public of the risks and dangers of the pollution in the river;
- 3.12.4. Submit bi-weekly (i.e. every two weeks) update reports on the implementation of the Plan for **the first 30 (thirty) calendar days of receipt of the Pre-Directive** and thereafter submit update reports **once a month until the situation has improved or is under control**;
- 3.12.5. Conduct meetings or engagements with affected groups to communicate and inform the communities along the Diep River Catchment of the City's short-, medium and long-term actions, as stipulated in the Plan, in order to address the current pollution of the river. Such meetings/engagements must take place within 30 (thirty) calendar days from the date of receipt of the Pre-Directive and the City must provide this Department with proof thereof.
- 3.13. On 03 April 2020, the Department received correspondence from the City which essentially outlined the City's commitment to undertake the requests of the Department as stipulated in paragraph 3.12 above.
- 3.14. To this end, the City has commenced with the clean-up operation of the relevant stormwater canals on 31 March 2020, and has also attended to the Theo Marais canal by pumping out the stagnant sewage from the canal and is currently busy with a thorough clean-up of the entire canal and implementing measures to prevent further pollution from flowing into the Diep River.

- 3.15. In addition, the City has also submitted the bi-weekly reports and the Amended Action Plan dated 24 April 2020, which is currently being monitored and assessed by the Department.
- 4. Insofar as your question pertaining to your "legal right in terms of feedback specifically on complaint and time to resolution", kindly note, this Directorate receives on average between 200 250 complaints per annum, which are investigated by 11 EMIs for the Province. Hence, it is not physically possible for this Directorate to provide weekly or monthly status updates on investigations to complainants. This Directorate, does however, provide complainants with written feedback on the <u>outcome</u> of an investigation once it has been concluded. Furthermore, throughout the investigation of a particular complaint, the relevant complainant may contact the EMI investigating the complaint for a status update or progress on the investigation.
- 5. Investigations of certain complaints dealing with on-going pollution and/or degradation, and complex matters often take months or years to conclude.
- 6. Furthermore, with regards to your second question pertaining to affected parties to receive formal feedback, the Department has requested the City to provide such feedback to affected parties, as stipulated in paragraph 3.12.5 above. However, the City has indicated in their response (dated 03 April 2020) that the Water Quality Improvement Programme covers the aspect of engagements with a broad spectrum of stakeholders, which includes all affected parties, but has been disrupted by the current Covid-19 Disaster Management Regulations. The City further indicated that it has been in extensive engagements with OUTA, who purports to represent the community.
- 7. For further queries/ updates on the City's progress in respect of their Amended Action Plan dated 24 April 2020 or future complaints/incidents, you may contact the following officials on the details below:

Conrad Frehse Manager: Catchment Stormwater and River Management Branch Directorate: Water and Waste City of Cape Town **Tel:** 021 400 2973 | **Email**: <u>Conrad.Frehse@capetown.gov.za</u>; or Richard Nell Head: Strategy & Specialist Support Catchment, Stormwater & River Management – Water & Sanitation Department Water & Waste Services Directorate City of Cape Town **Tel:** 021 400 1280 | **Email:** <u>richard.nell@capetown.gov.za</u>

- 8. In light of the above, it is evident that the situation is multifaceted as there are a number of sources contributing to the pollution of the Diep River catchment and Milnerton Lagoon, and a number of agencies involved in the investigation.
- 9. As such, the Department and the City are working closely to address the ongoing pollution, not only through the implementation of the above plan, but also in identifying other landowners, sectors (i.e. industries, farming, etc.) and role-players along the river, who may have a legal obligation to ensure that the pollution of the Diep River catchment area is minimised and/or prevented.
- 10. In addition, this Directorate will continue to monitor the implementation of the City's plan in order to address the pollution of the Diep River catchment and Milnerton Lagoon.
- 11. I trust that the above synopsis has provided you with sufficient insight into the ongoing investigation by this Directorate and wish to thank you for your concerns in the protection and preservation of our environment.

## Achmad Bassier Director: Environmental Law Enforcement Date: 11/05/2020 CC:

- (1) Piet van Zyl (HoD -DEA&DP)
- (2) Marius du Randt (Office of the Minister -LG, EA&DP) Email: <u>Marius.duRandt@westerncape.gov.za</u>
- (3) Michael Webster (City of Cape Town)
- (4) Conrad Frehse (City of Cape Town)
- (5) Richard Nell (City of Cape Town)

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