## RESPONSE/ACTION TAKEN WITH RESPECT TO REVIEWER'S COMMENTS ON SWWTW IWWMP

## **Reviewer's Comments**

Comment 1: Currently with most of the sludge discharged to sea via the sea outfalls pipeline the odour in the vicinity of the local resident population is not acceptable. With the upgrade it is identified as a waste impact (Page 16), what action would be put in place to contain/control the odour and attraction of flies? It is going to have a negative impact on the local community.

Comment 2: Removal of the anaerobically treated sludge to landfill sites is a good option however removal to agricultural sites might not be the best option when taking into account the high nutrient concentration of the sludge. How will this be addressed? Thermal drying and pelletizing are indicated. What would be the composition, concentration and impact of the sludge on agricultural land or crops? Has any trials been carried out?

Comment 3: What quantity of the dewatered sludge will be generated on a daily basis? Is there sufficient space for stockpiling in the event that the sludge cannot be moved to landfill or agricultural sites for whatever reason? Also stockpiling has its own inherent problems of odour and attraction of flies, how will this be overcome/controlled? What are the

## **Action Taken**

Response 1: Efficient pumping of the effluent will be realized via regular monitoring and maintenance of pumps and pipe networks to prevent spillage or leakage. The pumps will also be enclosed to prevent odour or attraction of flies.

Considering that the sludge will be anaerobically digested, it is expected the sludge would be stable and hence would not have a negative impact on the local community.

(Refer to page 17 for new inclusions).

Response 2: Point source pollution control procedures will be in place.

Regular monitoring and evaluation will be done on time.

Sludge classification will be carried out before disposal or utilization.

(Refer to page 17 for new inclusions).

Response 3: The storage of general waste (sludge) will be undertaken in 350 m³ silos on the site, for a period of a few days prior to being trucked to a landfill site. The silos are of sufficient capacity to allow for stockpiling / storage before the dewatered sludge is being trucked for offsite disposal. The silos will also be enclosed thereby minimizing possible odour and vector attraction.

(Refer to page 17 for new inclusions).

alternatives? What are the contingency plans?

Comment 4: Page 24: Wind

Under stable, low wind conditions odour can be acute.....This can have a

local social impact. How is this issue

going to be addressed?

Response 4: This will be addressed by ensuring that the tanks, vessels or surfaces are well covered and also by having mechanical ventilation in place at the thickener units. Regular monitoring for spillage and leakages will also be conducted. In addition, a complaints management system has been proposed as part of the air quality impact study in particular and EIA process in general. (Refer to page 24 for new inclusion).

Comment 5: Page 26: Water management Area (last paragraph)
Once contamination is identified should this effluent not be contained within the treatment works in order to prevent continuous contamination of the canal until the root cause is determined and rectified.

Response 5: Refer to new inclusion on page 26. "Hence, excessive contaminant load will be managed by on-going monitoring and systematic enforcement of point source contributors".

Comment 6: Page 29: High COD and Total solids at sea Outfall discharge The cause of the high concentrations can be scientifically tested. On average there is more than a 7-fold increase at the discharge end.

Response 6: Refer to page 29 for new inclusion

Comment 7: Page 30: Table 4-3
What are the compliance limits for the constituents indicated? Is there an update on the figures since 2010? It will be interesting to include the Faecal coliform results pre and post upgrade in future tables to show improvements in water quality discharge.

Response 7: The compliance limits for the South African Water Quality Guidelines for Coastal Marine Waters and 2012 SWWTW licence have been included in Table 4-3. The table has also been updated with figures from years 2011 – 2014.