

# Review/ comments/ Queries on the Integrated Water and Waste Management Plan for the Solids removal and Treatment Facilities Upgrade at the Southern Waste Water Treatment Works, Merewent, KwaZulu-Natal

## Key Stages and Processes

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.
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 pelletising are indicated. What would be the composition, concentration and impact of the sludge on agricultural land or crops? Has any trials been carried out?
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 alternatives? What are the contingency plans?

### 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?

### 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.

### 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.

### 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.