



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

MINISTRY OF WATER AND
ENVIRONMENTAL AFFAIRS

2011 -10- 27

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EdST

Enquiries: A Starkey
Telephone: 043 604 5402
Reference: 6/2/2/6

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

NATIONAL ASSEMBLY: QUESTION 3216 FOR WRITTEN REPLY

A draft reply to the above question asked by Mrs A T Lovemore (DA) is attached for your consideration.

ACTING DIRECTOR-GENERAL

DATE: 27/10/2011

DRAFT REPLY APPROVED/AMENDED

MRS B E E MOLEWA, MP
MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

DATE: 2011/10/27

NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION NO 3216

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 21 OCTOBER 2011
(INTERNAL QUESTION PAPER NO. 33)

3216. Mrs A T Lovemore (DA) to ask the Minister of Water and Environmental Affairs:

- (1) Since her reply to question 1904 on 18 August 2010, what are the results of the (a) chemical and (b) bacteriological analyses of the samples that had been taken since 7 May 2010;
- (2) whether the Department of Water Affairs has taken any action to compel compliance with discharge standards and pollution prevention measures in terms of the National Water Act, Act 36 of 1998; if not, why not; if so, what (a) action and (b) has been the response by the responsible parties in each case?

NW3828E

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REPLY:

- (1)(a) The results of the chemical and bacteriological analysis of the water samples that had been taken from the Swartkops River during the financial years 2011/11 and 2011/12 are combined on the attached **Annexure A and B**.
- (1)(b) Falls away.
- (2)(a) Yes, the Department has since issued a letter of non-compliance to the Nelson Mandela Bay Municipality on 29 July 2011 regarding the non-compliance of the final effluent discharges as well as the pollution of the Swartkops River by the sewage spills. This was followed by a notice in terms of section 19(3) of the National Water Act of intention to issue a directive dated 19 September 2011.
- (2)(b) The Nelson Mandela Bay Municipality has failed to present a plan of action demonstrating strategies planned to address the issues raised in the letter of non-compliance as well as the notice of intention to issue directive. The Department will now follow the internal enforcement protocol and issue a directive to the Municipality to comply with the provisions of the National Water Act.

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| ANNEXURE A | | | | | | | | | | | | |
|---|-----|-------|-----|----|-----|----------------------|-------|-------|-----------|-----|---------|------|
| SWARTKOPS RIVER SAMPLES RESULTS : 2010/2011 | | | | | | | | | | | | |
| SWARTKOPS RIVER AT PERSEVEARANCE BRIDGE | | | | | | D/S OF DESPATCH WWTW | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2010/05/06 | 7 | 354 | 53 | | 70 | 4.14 | 4.84 | 0.62 | | | 6 | 6 |
| 2010/06/02 | 8 | 385 | 14 | | 31 | 0.09 | 6.44 | 0.63 | | | 420 | 197 |
| 2010/12/14 | 7.9 | 395 | 17 | | 83 | 0.23 | 8.46 | 0.17 | | | 41 | 36 |
| 2011/03/11 | 7.6 | 370 | 60 | | <20 | 2.14 | 7.22 | 1.45 | | | 732 | 154 |
| SWARTKOPS RIVER AT FRANS CLAASEN BRIDGE | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2010/02/04 | 7.2 | 296 | 25 | 7 | 42 | 1.02 | 2.35 | 1.95 | | | 132 | 128 |
| 2010/05/06 | 7.1 | 254 | 27 | | 114 | 5.73 | 920 | 840 | | | 920 | 144 |
| 2010/06/02 | 7.5 | 368 | 42 | | 50 | 0.1 | 1.45 | 5.55 | | | 420 | 197 |
| 2010/12/14 | 8.3 | 376 | 26 | | 75 | 0.22 | 2.11 | 5.57 | | | 41 | 165 |
| 2011/03/11 | 7.4 | 43 | 68 | | 27 | 0.52 | 0.043 | 0.26 | | | 337 | 149 |
| SWARTKOPS RIVER AT VAN SKALWYK BRIDGE 1 | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2010/02/04 | 7 | 322 | <10 | 6 | 35 | 18.6 | 6.75 | 0.32 | | | 370 | 141 |
| 2010/05/06 | 7.1 | 277 | 12 | | 59 | 4.07 | 6.46 | 0.38 | | | 280 | 152 |
| 2010/06/02 | 7.3 | 311 | 10 | | 23 | 1.88 | 6.85 | 0.57 | | | 56 | 158 |
| 2010/12/14 | 7.1 | 316 | 14 | | 64 | 6.04 | 7.73 | 0.28 | | | 85 | 56 |
| 2011/01/31 | 7.1 | 274 | 22 | | 46 | 7.8 | 10.5 | 0.08 | | | 9800 | 117 |
| 2011/03/11 | 7.2 | 307 | 32 | | <20 | 6.78 | 5.61 | 0.05 | | | | 131 |
| SWARTKOPS RIVER AT VAN SKALWYK BRIDGE 2 | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2010/02/04 | 7 | 316 | <10 | 7 | 38 | 20.5 | 7.12 | 0.29 | | | 332 | 141 |
| 2010/05/06 | 7.1 | 276 | 12 | | 37 | 3.02 | 5.29 | 0.25 | | | 400 | 48 |
| 2010/06/02 | 7.2 | 304 | 11 | | 31 | 1.99 | 7.67 | 0.35 | | | 77 | 38 |
| 2010/12/14 | 7.1 | 298 | 14 | | 72 | 3.75 | 7.5 | 0.28 | | | 87 | 65 |
| 2011/03/11 | 7.3 | 299 | <10 | | 50 | 7.4 | 5.82 | <0.01 | | | 3860 | 64.8 |
| SWARTKOPS ESTUARY AT GIRDLESTONE REDHOUSE | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | |
| 2010/02/11 | 7.8 | 4,420 | 172 | | 889 | 0.14 | 0.53 | 58 | | | 144 | |
| 2010/03/10 | 8.6 | 5,340 | 112 | | 876 | 0.86 | 1.75 | 0.31 | | | 0 | |
| 2010/05/04 | 8 | 2,750 | 88 | | 618 | <0.08 | 2.04 | 0.53 | | | 128 | |
| 2011/03/11 | 7.8 | 3,790 | 120 | | 686 | 0.34 | 1.85 | 0.03 | | | 138 | |
| SWARTKOPS ESTUARY AT LAFARGE QUARRY | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | |
| 2010/02/11 | 8 | 397 | 24 | | 57 | <0.08 | 8.1 | 0.47 | | | 188 | |
| 2010/03/10 | 8.3 | 510 | 28 | | 28 | 0.85 | 7.21 | 2.53 | | | 330 | |
| 2010/05/04 | 8 | 330 | 33 | | 32 | 0.13 | 4.37 | 0.85 | | | 128 | |
| 2011/03/11 | 7.4 | 369 | 16 | | 176 | 1.99 | 6.53 | 0.8 | | | 218 | |
| SWARTKOPS RIVER AT MOTHERWELL CANAL | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | |
| 2010/02/11 | 8 | 592 | 35 | | 57 | <0.08 | 0.027 | 2.76 | | | 1,900 | |
| 2010/03/10 | 8.1 | 3,720 | 104 | | 34 | 3.75 | 0.088 | 1.08 | | | 113,000 | |
| 2010/05/04 | 7.9 | 2,540 | 80 | | 495 | 0.15 | 0.661 | 1.23 | | | 380 | |
| 2011/03/22 | 8 | 522 | 38 | | 105 | 12.3 | 1.13 | <0.01 | | | 180,000 | |

ANNEXURE B

SWARTKOPPS RIVER SAMPLE RESULTS: 2011/12

| SWARTKOPPS RIVER AT PERSEVEARANCE BRIDGE | | | | | | | | | | | | |
|--|-----|-----|-----|----|-----|-------|-------|-------|-----------|-------|-------|-----|
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2011/03/11 | 7.6 | 370 | 60 | | <20 | 2.14 | 7.22 | 1.45 | | 732 | 154 | |
| 2011/05/31 | 7.5 | 182 | 18 | | 54 | 0.08 | 0.44 | 1.04 | | 989 | 84.2 | |
| 2011/06/28 | 7.7 | 171 | 14 | | 52 | 0.23 | 0.27 | 0.77 | | 2.060 | 82.2 | |
| 2011/07/27 | 7.2 | 59 | 40 | | 34 | <0.08 | 0.02 | 0.46 | | 1320 | 27.4 | |
| 2011/08/31 | 8 | 203 | 21 | | 94 | 0.68 | 0.57 | 2.53 | | 510 | 117 | |
| 2011/09/27 | 8.1 | 385 | 14 | | 31 | 0.09 | 6.44 | 0.63 | | 420 | 197 | |
| SWARTKOPPS RIVER AT FRANS CLAASEN BRIDGE | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2011/01/31 | 7.7 | 231 | 14 | | 31 | 0.1 | 1.65 | 2.69 | | 226 | 86.2 | |
| 2011/03/11 | 7.4 | 43 | 68 | | 27 | 0.52 | 0.04 | 0.26 | | 337 | 17.2 | |
| 2011/05/31 | 7.4 | 102 | <10 | | 31 | 0.13 | 0.04 | 0.15 | | 75 | 25.4 | |
| 2011/06/28 | 7.6 | 123 | 10 | | 76 | 0.23 | 0.09 | 0.64 | | 860 | 65.7 | |
| 2011/07/27 | 7.3 | 64 | 26 | | 61 | <0.08 | 0 | 0.44 | | 870 | 27.7 | |
| 2011/08/31 | 8.1 | 162 | 10 | | 39 | <0.08 | 0.002 | 0.04 | | 9 | <0.04 | |
| 2011/09/27 | 7.9 | 240 | 10 | | 33 | <0.08 | 0.02 | 0.03 | | 10 | 111 | |
| SWARTKOPPS RIVER AT VAN SKALWYK BRIDGE 1 | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2011/01/31 | 7.1 | 274 | 22 | | 46 | 7.8 | 10.5 | 0.08 | | 9800 | 117 | |
| 2011/03/11 | 7.2 | 307 | 32 | | <20 | 6.78 | 5.61 | 0.05 | | 570 | 68.7 | |
| 2011/05/31 | 7.4 | 162 | 10 | | 162 | 0.35 | 0.32 | 1.3 | | 1,840 | 70.1 | |
| 2011/06/28 | 7.5 | 138 | 10 | | 84 | 0.27 | 0.21 | 0.71 | | 15000 | 28.4 | |
| 2011/07/27 | 7.1 | 57 | 24 | | 38 | <0.08 | 0 | 0.6 | | 9600 | 233 | |
| 2011/08/31 | 7.6 | 180 | 12 | | 31 | 1.32 | 0.82 | 2.03 | | 113 | 133 | |
| 2011/09/27 | 7.8 | 293 | 20 | | 67 | 2.71 | 1.74 | 1.04 | | | | |
| SWARTKOPPS RIVER AT VAN SKALWYK BRIDGE 2 | | | | | | | | | | | | |
| DATE | pH | EC | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | SO4 |
| 2011/01/31 | 7 | 271 | 15 | | 38 | 7.92 | 10.3 | 0.04 | | 7700 | 47.2 | |
| 2011/03/11 | 7.3 | 299 | <10 | | 50 | 7.4 | 5.82 | <0.01 | | 3860 | 64.8 | |
| 2011/05/31 | 7.4 | 158 | <10 | | 158 | 0.35 | 0.35 | 1.29 | | 280 | 31 | |
| 2011/07/27 | 7.2 | 304 | 11 | | 31 | 1.99 | 7.67 | 0.35 | | 307 | 38 | |
| 2011/08/31 | 7.1 | 310 | 11 | | 47 | 6.14 | 7.67 | 0.41 | | 288 | 180 | |
| 2011/09/27 | 7.8 | 291 | 20 | | 63 | 2.85 | 1.62 | 1.04 | | 32 | 132 | |

| SMARTKOPS ESTUARY AT GIRDESTONE REDHOUSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----|-------|-----|----|-----|-------|------|-------|-----------|---------|-------|----------|----|----|------|--------------|----|----|----|----|----|----|----|-----|---|----|----|---|-------|--|
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | Chloro A | S2 | Na | Hg/l | Oil & grease | Fe | Cu | Cr | Cd | Pb | Ca | Mg | SO4 | K | Si | Cl | F | Boron | |
| 2011/03/22 | 7.8 | 3,790 | 120 | | 686 | 0.34 | 1.85 | 0.03 | | 138 | | | | | | | | | | | | | | | | | | | | |
| 2011/05/26 | 7.7 | 709 | 36 | | 135 | 0.33 | 0.74 | 0.7 | | 157 | | | | | | | | | | | | | | | | | | | | |
| 2011/07/18 | 8.1 | 650 | 22 | | 158 | <0.08 | 0.42 | 1.1 | | 61 | | | | | | | | | | | | | | | | | | | | |
| 2011/08/31 | 8.3 | 932 | 32 | | 94 | <0.08 | 0.43 | 1.72 | | 54 | | | | | | | | | | | | | | | | | | | | |
| 2011/09/27 | 8 | 2,330 | 75 | | 435 | 0.2 | 0.46 | 0.46 | | 10 | | | | | | | | | | | | | | | | | | | | |
| SMARTKOPS ESTUARY AT LAFARGE QUARRY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | Chloro A | S2 | Na | Hg/l | Oil & grease | Fe | Cu | Cr | Cd | Pb | Ca | Mg | SO4 | K | Si | Cl | F | Boron | |
| 2011/03/22 | 7.4 | 369 | 16 | | 176 | 1.99 | 6.53 | 0.8 | | 218 | | | | | | | | | | | | | | | | | | | | |
| 2011/05/26 | 7.4 | 191 | 24 | | 50 | 0.26 | 0.59 | 0.88 | | 10 | | | | | | | | | | | | | | | | | | | | |
| 2011/07/18 | 8.3 | 229 | 26 | | 81 | <0.08 | 0.43 | 1.2 | | 67 | | | | | | | | | | | | | | | | | | | | |
| 2011/08/31 | 7.7 | 198 | 20 | | 39 | 0.4 | 0.56 | 1.71 | | 145 | | | | | | | | | | | | | | | | | | | | |
| 2011/09/27 | 8.8 | 352 | 38 | | 104 | <0.08 | 1.35 | 1.13 | | 278 | | | | | | | | | | | | | | | | | | | | |
| SMARTKOPS RIVER AT MOTHERWELL CANAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | Chloro A | S2 | Na | Hg/l | Oil & grease | Fe | Cu | Cr | Cd | Pb | Ca | Mg | SO4 | K | Si | Cl | F | Boron | |
| 2011/03/22 | 8 | 522 | 38 | | 105 | 12.3 | 1.13 | <0.01 | | 180,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/05/26 | 8.2 | 584 | 26 | | 92 | 0.2 | 0.07 | 3.81 | | 1,330 | | | | | | | | | | | | | | | | | | | | |
| 2011/07/18 | 8.4 | 674 | 38 | | 116 | 1.36 | 0.15 | 6.82 | | 332,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/08/31 | 8.3 | 956 | 36 | | 70 | <0.08 | 0.07 | 7.86 | | 6300 | | | | | | | | | | | | | | | | | | | | |
| 2011/09/27 | 8.7 | 127 | 26 | | 127 | 0.08 | 0.02 | 7.91 | | 156 | | | | | | | | | | | | | | | | | | | | |
| MARKMAN CANAL-OP-ALOES WDS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | Chloro A | S2 | Na | Hg/l | Oil & grease | Fe | Cu | Cr | Cd | Pb | Ca | Mg | SO4 | K | Si | Cl | F | Boron | |
| 2011/03/22 | 7.8 | 562 | 26 | | 112 | 28 | 3.76 | 0.09 | | 46,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/05/26 | 7.3 | 401 | 50 | | 146 | 20.2 | 2.03 | <0.01 | | 23,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/07/18 | 7.5 | 798 | 42 | | 180 | 20.4 | 1.64 | <0.01 | | 198,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/08/24 | 7.6 | 693 | 51 | | 50 | 16.3 | 1.81 | 0.01 | | 660,000 | | | | | | | | | | | | | | | | | | | | |
| 2011/09/19 | 7.9 | 944 | 141 | | 141 | 23.2 | 2.85 | 0.09 | | 7 | | | | | | | | | | | | | | | | | | | | |
| MARKMAN CANAL DOWNSTREAM M19 (MOTHERWELL ROAD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | pH | COND | TSS | OA | COD | NH3 | PO4 | NO3 | Turbidity | TDS | F.COL | Chloro A | S2 | Na | Hg/l | Oil & grease | Fe | Cu | Cr | Cd | Pb | Ca | Mg | SO4 | K | Si | Cl | F | Boron | |
| 2011/03/22 | 7.8 | 93 | 30 | | 93 | 20.9 | 3.28 | 3.92 | | 16,500 | | | | | | | | | | | | | | | | | | | | |
| 2011/05/26 | 7.4 | 366 | 30 | | 73 | 19.1 | 2.2 | <0.01 | | 4,600 | | | | | | | | | | | | | | | | | | | | |
| 2011/07/18 | 7.7 | 830 | 30 | | 962 | 22.1 | 1.76 | 0.04 | | 20800 | | | | | | | | | | | | | | | | | | | | |
| 2011/08/24 | 7.8 | 750 | 78 | | 43 | 14.4 | 1.46 | 0.01 | | 17,400 | | | | | | | | | | | | | | | | | | | | |
| 2011/09/19 | 7.9 | 915 | 70 | | 130 | 23.9 | 2.59 | 0.23 | | 58,000 | | | | | | | | | | | | | | | | | | | | |