

## MIDDLE VAAL WMA

Name of waste water treatment works	Position		Peak rated design flow capacity (Mℓ/day)	Treatment process description	Effluent disposal process
	Longitude	Latitude			
Allanridge STWs (2)	Unknown	Unknown	3.1	Oxidation ponds	No discharge
Arlington STW	Unknown	Unknown	Unknown	Oxidation ponds	No discharge
Beatrix mine STW	Unknown	Unknown	3.8	Unknown	For irrigation and a portion to Theronspruit
Bothaville STWs (2)	Unknown	Unknown	5.0	Dasveer system	No discharge
Bultfontein STW	Unknown	Unknown	1	Oxidation ponds	No discharge
Edenville STW	Unknown	Unknown	Unknown	Oxidation ponds	Evaporation ponds
Free State Geduld	Unknown	Unknown	5	Unknown	Unknown
Heilbron STW	Unknown	Unknown	4.1	Activated sludge	Oxidation ponds
Henneman STWs (2)	Unknown	Unknown	1.8	Biological/oxidation	Irrigation and a small proportion into the Rietspruit
Hoopstad	Unknown	Unknown	0.45	Oxidation ponds	No discharge
Joel Mine STW	Unknown	Unknown	1.5	Unknown	Irrigation and a small proportion into the Theronspruit
Klerksdorp STW	Unknown	Unknown	21.9	Activated sludge	Discharge into the Schoonspruit
Kroonstad STW	Unknown	Unknown	8.0	Activated sludge and biological seep beds	Discharge into Vals River
Lindley STW	Unknown	Unknown	Unknown	Unknown	No discharge
Marquard STW	Unknown	Unknown	Unknown	Oxidation ponds	No discharge
Odendaalsrus STWs (2)	Unknown	Unknown	10	Biofilters and activated sludge	All effluent re-used by mines
Midvaal WCW	Unknown	Unknown	10	Activated sludge, extended aeration	Unknown
Oryx Mine STW	Unknown	Unknown	1.2	Unknown	Irrigation and into the Bosluisspruit
Paul Roux STWs (2)	Unknown	Unknown	Unknown	Oxidation ponds	No discharge
Ohenimuri WCW (for Midvaal Municipality in Walkerville)	Unknown	Unknown	0,3	Activated sludge	No discharge
Petrus Steyn STW	Unknown	Unknown	0.6	Oxidation ponds	No discharge
Senekal STW	Unknown	Unknown	3.0	Unknown	Discharge into Sand River

## MIDDLE VAAL WMA

Name of waste water treatment works	Position		Peak rated design flow capacity (Mℓ/day)	Treatment process description	Effluent disposal process
	Longitude	Latitude			
Theunissen STWs (3)	Unknown	Unknown	4.9	Activated sludge and oxidation ponds	No discharge
Vaal Marina WCW (owned by Midvaal Local Municipality, next to the Vaal Dam)	Unknown	Unknown	2	Activated sludge (sequential batch reactor)	Unknown
Ventersburg STWs (2)	Unknown	Unknown	1.7	Oxidation ponds	No discharge
Viljoenskroon STW	Unknown	Unknown	3.5	Activated sludge	Swamp
Virginia STWs (2)	Unknown	Unknown	46	Activated sludge	Re-use and a proportion into the Sand River
Wesselsbron STW	Unknown	Unknown	3.4	Oxidation ponds	No discharge
Winburg STW	Unknown	Unknown	0.5	Activated sludge	Discharge into the Winburgspruit
Wolmaranstad STW	Unknown	Unknown	Unknown	Biosphere	Discharge into Makwassiespruit
Witpan STW (Welkom)	Unknown	Unknown	22	Biological	Discharge onto Witpan
Theronia STW (Welkom)	Unknown	Unknown	15	Biological	Discharge onto Flamingo Pan
Thabang STW (Welkom)	Unknown	Unknown	14	Biological	Discharge into the Sand River

(2) Number of sewage treatment works

WCW: Water care works

STW: Sewage treatment works

Source: SSI Engineers and Environmental Consultants *Water Resources Situation Assessment Study 2002* using the Water Affairs document *1st Order Strategy to Develop Community Water Supply and Sanitation for the Free State Province*. Updated (in green) using *Green Drop Report* (South African Department of Water Affairs) and confirmed by municipal officials.

