

Regulatory challenges and opportunities

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Water Use Authorisations

Status quo

- Existing Lawful Use;
- General Authorisation
 - Small quantities.
- Water Use Licence
 - New water use (post 1998) & expansion of irrigation.
- March 2017 – Procedural Regulations on the application for Water Use Licences

The challenge of baselines

Challenges

- ELU “grandfathering approach” – based on historical use not efficiency;
- NWA – may limit use (35%, 60% etc.);
- Assessed according to own efficiencies;
- Disincentive based on Risk, but what about incentives for efficiencies?
- When restrictions are imposed, efficient and inefficient firms are treated the same.

The challenge of baselines

Opportunities?

- Benchmarking?;
- Compare with the concept of carbon budgeting;
- Reduced carbon tax liability for companies that perform better than the industry benchmark;
- Can it be possible to apply a similar system for water use efficiency?
- Reduced tariffs? – role of the proposed independent regulator?
- What about the relaxing of restrictions coupled with water rights trading a way to reward more efficient firms?

The challenge of baselines

How do you determine efficiency?

- What should be the basis for determining water allocations going forward:
- Water foot printing? – nice to know but not to use?
- Alternatives?
- SABWAT?
- Comparable international examples?

Challenges associated with WLUs

- Timelines
 - 300 day timeline only when part of the “one environmental system”
- Costs
 - Hydrological report often required, which is very costly;
- Onerous public consultation
 - Public consultation is key, but the onus is placed squarely on the applicant
- Financial provision
 - Regulations outline the form of financial provision which may be accepted, but not the circumstances under which it may be required.
- Integrated planning (water, environment & waste) not reflected in regulatory space – separate authorisations needed.

Opportunities

- Increase limits for general authorisations?
 - Could assist, but skirts past the principle challenge.

Amend Regulations:

- Allow for integrated permits
 - Where a WUL is required along with an environmental authorisation, should not duplicate processes that are substantially similar;
- Publish a guideline document outlining the information that may be collected by the applicant opposed to a Hydrologist to reduce costs;
- Share public consultation burden between state (e.g. publish in newspapers and consult other Government Departments) and applicant (affected parties).
- prescribe criteria for when financial provision should be required.

Waste water used for irrigation

Revision of General Authorisations

- May lawfully irrigate with biodegradable wastewater provided;
- You register with competent authority; and
- Meet quality standards.

(6 September 2013 – to date)

NATIONAL WATER ACT 36 OF 1998

(Gazette No. 19182, Notice No. 1091. See Act for commencement dates)

REVISION OF GENERAL AUTHORISATIONS IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) (THE ACT)

Published under Government Notice 665 in Government Gazette 36820, dated 6 September 2013.
Commencement date: 6 September 2013.

I, Bomo Edna Molewa, in my capacity as the Minister of Water and Environmental Affairs in terms of section 39 of the National Water Act, 1998 (Act No. 36 of 1998) hereby revise the general authorisation in section 3 of the Schedule to Government Notice No. 398 of 26 March 2004, and the general authorisations in sections 2, 3 and 4 of the Schedule to Government Notice No. 399 of 26 March 2004, as contained in the Schedule hereto.

Signed

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

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1. ENGAGING IN A CONTROLLED ACTIVITY, IDENTIFIED AS SUCH IN SECTION 37(1)(a): IRRIGATION OF ANY LAND WITH WASTE OR WATER CONTAINING WASTE GENERATED THROUGH ANY INDUSTRIAL ACTIVITY OR BY A WATERWORK

- 1.1. Purpose of authorisation
- 1.2. Exclusion
- 1.3. Compliance with Act and other laws
- 1.4. Area of applicability
- 1.5. Duration of authorisation
- 1.6. Definitions
- 1.7. Irrigation with wastewater

Table 1.1: Wastewater limit values applicable to the irrigation of any land or property up to 2000 cubic



Quality Standards (2000m³)

Variables	Limits
pH	not less than 5,5 or more than 9,5 pH units
Electrical Conductivity	does not exceed 70 milliSiemens above intake to a maximum of 150 milliSiemens per metre (mS/m)
Suspended Solids	does not exceed 25 mg/l
Chloride as Free Chlorine	does not exceed 0,25 mg/l
Fluoride	does not exceed 1 mg/l
Soap, Oil and Grease	does not exceed 2,5 mg/l
Chemical Oxygen Demand	does not exceed 75 mg/l
Faecal coliforms	do not exceed 1000 per 100 ml
Ammonia (ionised and un-ionised) as Nitrogen	does not exceed 3mg/l
Nitrate/Nitrite as Nitrogen	does not exceed 15 mg/l
Ortho-Phosphate as phosphorous	does not exceed 10 mg/l

Quality Standards

Up to 50m³

Ph	6-9 PH
Conductivity	200 milliSiemens per metre
COD	No more that 400 mg.l
Faecal coliforms	No more than 100 000 per 100ml
SAR	No more than 5

Up to 500m³

Ph	6-9 PH
Conductivity	200 milliSiemens per metre
COD	No more that 400 mg.l
Faecal coliforms	No more than 100 000 per 100ml
SAR	No more than 5

Challenges

- Definition of “irrigation” – means the application of wastewater to any land or property for the purpose of crop production, and includes the cultivation of pasture or any other suitable purpose;
- This does not make a distinction between food crops – public safety concern; and
- Biofuel / timber / other non-food crops.
- Risk-based approach could make more sense;
- Capped at 2000m³

Opportunities

Example of a risk-based approach - Waste Exclusion Regulations

- Promulgated under the National Environmental Management: Waste Act;
- Excludes certain waste streams from licence requirements where it can be re-used in industrial processes;
 - E.g. Ash from combustion used to make bricks;
- This is also subject to registration; and
- A risk-management plan accepted by the DEA;
- The effect is a more rational approach whereby the risk is assessed on a case-by-case basis, taking into consideration all possible mitigation measures.
- Similar provisions could create opportunities to use waste water in excess of 2000m³ that do not meet the standards for irrigation of non-food, agricultural products.