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# General specification for well drilling operations affecting water in South Australia

Undertaken pursuant to a well driller's licence issued under section 115 of the *Landscape South Australia Act 2019*

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**Government of South Australia**

Department for Environment  
and Water

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Head Office  
81-95 Waymouth St  
ADELAIDE SA 5000

Telephone +61 (8) 8463 6876  
Internet: [www.environment.sa.gov.au](http://www.environment.sa.gov.au)

**Report prepared by:**  
Water Licensing Branch, Water and River Murray Group  
Department for Environment and Water

**Copies of the report can be obtained from:**  
E: [DEWDrillingInspector@sa.gov.au](mailto:DEWDrillingInspector@sa.gov.au)  
[www.environment.sa.gov.au](http://www.environment.sa.gov.au)

# CONTENTS

<b>INTRODUCTION</b>	<b>4</b>
<b>PART A: WELL DRILLER'S OBLIGATIONS</b>	<b>5</b>
<b>1. OBLIGATIONS UNDER THE LSA ACT</b>	<b>5</b>
<b>2. OBLIGATIONS UNDER OTHER LEGISLATION</b>	<b>6</b>
<b>3. VARIATIONS TO THE CHIEF EXECUTIVE'S DIRECTIONS</b>	<b>6</b>
<b>4. WELL COMPLETION REPORT</b>	<b>7</b>
<b>PART B: DIRECTIONS OF THE CHIEF EXECUTIVE</b>	<b>8</b>

# Introduction

Pursuant to section 115(3) of the *Landscape South Australia Act 2019* (the LSA Act) a well driller's licence is subject to such conditions prescribed from time to time by the *Landscape South Australia (Water Management) Regulation 2020* and to such further conditions specified in the well driller's licence by the Chief Executive.

Regulation 25 of the LSA Regulations prescribes a number of conditions in relation to well drillers' licences, including that the licensee must comply with certain directions given by the Chief Executive.

## **Directions of the Chief Executive**

This document includes the directions of the Chief Executive pursuant to Regulation 25 of the LSA Regulations (refer Part B). These directions are binding on every licensed well driller.

These directions must be complied with whether the work authorised by the well permit is undertaken by a person who is a licensed well driller or the work is undertaken by a person who is supervised by a licensed well driller.

## **Application of the *Minimum Construction Requirements for Water Bores in Australia***

The *Minimum Construction Requirements for Water Bores in Australia* (the Minimum Construction Requirements) has been developed by the National Uniform Driller Licensing Committee. It outlines the minimum requirements for constructing, maintaining, rehabilitating, and decommissioning wells in Australia and provides a consistent standard reference across Australia for the regulation of wells and well drillers.

The Minimum Construction Requirements can be located at: [www.waterconnect.sa.gov.au/Content/Publications/DEW/Minimum-Construction-Requirements-4th-Edition.pdf](http://www.waterconnect.sa.gov.au/Content/Publications/DEW/Minimum-Construction-Requirements-4th-Edition.pdf)

The Chief Executive has directed that a licensed well driller must comply with the mandatory requirements of the Minimum Construction Requirements, as amended from time to time.

In addition, licensed well drillers should have regard to the good industry practice methods and techniques recommended in the Minimum Construction Requirements.

# PART A: Well Driller's Obligations

## 1. Obligations under the LSA Act

- 1.1. Copies of relevant sections of the LSA Act are set out in Part B named Directions of the Chief Executive.
- 1.2. In South Australia provisions relating to well driller's licenses are contained in Part 8 Subdivision 5 of the LSA Act.
- 1.3. A licensed well driller must comply with the conditions as specified by the Chief Executive on the well driller's licence or prescribed by the LSA Regulations.
- 1.4. Pursuant to section 115(4) of the LSA Act it is an offence to contravene or fail to comply with a condition of the well driller's licence. In such a case, the Chief Executive may cancel or suspend the licence, or vary a condition of the licence.

### **MAXIMUM PENALTY: THIRTY FIVE THOUSAND DOLLARS**

- 1.5. Pursuant to section 104(3) of the LSA Act the following activities must not be undertaken unless authorised to do so by a water management authorisation (in this case a water resource works approval) or a well permit:
  - 1.5.1. drilling, plugging, backfilling, or sealing of a well; and/or
  - 1.5.2. repairing, replacing or altering the casing, lining or screen of a well.
- 1.6. Schedule 3 of the LSA Act sets out classes of wells in relation to which a permit is not required.
- 1.7. Pursuant to section 112(8) of the LSA Act, it is a condition of a well permit to undertake well drilling operations that the work be undertaken by a person who is a licensed well driller or is supervised in carrying out the work by a licensed well driller.

### **MAXIMUM PENALTY: FIFTY THOUSAND DOLLARS (NATURAL PERSON)**

### **ONE HUNDRED THOUSAND DOLLARS (BODY CORPORATE)**

- 1.8. Regulation 25(f) of the LSA Regulations provides that a licensed well driller must comply with the well permit authorising the work that he or she is performing.
- 1.9. Regulation 25(c) of the LSA Regulations provides that a licensed well driller must not commence an activity that requires a permit or water resource works approval under the LSA Act unless the licensee has sighted the permit or approval.
- 1.10. Pursuant to section 120(3) of the LSA Act, if, in the Chief Executive's opinion, a defect in a well resulted from work carried out by a licensed well driller, the Chief Executive may serve notice on the well driller directing that:
  - 1.10.1. the work or other action specified in the notice be carried out or taken to remedy the problem; and/or
  - 1.10.2. the well be plugged, backfilled or sealed.Such a notice must not be served later than six months after the work was carried out.
- 1.11. A well driller on whom a notice is served is entitled to enter the land on which the well is situated in order to comply with the notice.
- 1.12. A person who fails to comply with a notice is guilty of an offence.

**MAXIMUM PENALTY: TWENTY THOUSAND DOLLARS (NATURAL PERSON)**

**FORTY THOUSAND DOLLARS (BODY CORPORATE)**

## 2. Obligations under other legislation

2.1 In undertaking well drilling operations, a licensed well driller or a person supervised by a licensed well driller must act in accordance with all other relevant legislative obligations and policies including obligations under the:

- *Environment Protection Act 1993*
- *Environment Protection (Water Quality) Policy 2015*
- *River Murray Act 2003*
- the relevant regional natural resources management plan or Landscape Plan
- the relevant water allocation plan

2.2 The above list is not exhaustive and there may be other relevant legislative obligations that must be complied with.

2.3 It is the responsibility of the individual licensed well driller to keep up to date with relevant legal obligations.

## 3. Variations to the Chief Executive's directions

3.1 Where the licensed well driller or well permit holder wishes to conduct well drilling operations in a manner other than in accordance with the Chief Executive's Directions, the proposal must be discussed with the Drilling Inspector prior to commencement of the well drilling operations.

*Note: Reference in this document (General specification for well drilling operations affecting water in South Australia) means a Drilling Inspector of the Department for Environment and Water or any person appointed by the Chief Executive of the Department for Environment and Water from time to time. Any person holding such position or acting in such position has been appointed to be an authorised officer pursuant to and for the purposes of the LSA Act.*

3.2 Contact details of the Drilling Inspector:

Address: Water Licensing Branch  
Department for Environment and Water  
GPO Box 1047, Adelaide SA 5001

Telephone: (08) 8463 6841 or 0428 828 569

Email: [DEWDrillingInspector@sa.gov.au](mailto:DEWDrillingInspector@sa.gov.au)

3.3 Any formal proposal for a variation of the Chief Executive's Directions must be made in writing by the licensed well driller, either addressed to:

The Chief Executive, c/o the Drilling Inspector  
Water Licensing Branch  
Department for Environment and Water  
GPO Box 1047, Adelaide SA 5001

or via email to [DEWDrillingInspector@sa.gov.au](mailto:DEWDrillingInspector@sa.gov.au)

## 4. Well completion report

- 4.1 A Well Completion Report form is required to be submitted to the Department for Environment and Water upon the completion of each activity authorised by the well permit. This information may be used to assess compliance with the conditions of the well permit and is entered into the state groundwater database.
- 4.2 The licensee must submit a Well Completion Report to the Chief Executive within 30 days of completion of each activity authorised by a well permit.

# PART B: Directions of the Chief Executive

I, John Schutz, being the CHIEF EXECUTIVE of the Department for Environment and Water, DIRECT that:

## **Direction 1: Keeping and producing records**

Pursuant to Regulation 25(a) and (b) of the LSA Regulations and unless otherwise directed by me:

- 1.1 The licensed well driller must complete a Well Completion Report upon the completion of each activity authorised by the well permit.
- 1.2 If multiple well drilling operations result from unsuccessful well drilling attempts, a Well Completion Report is required for each unsuccessful well drilling operation.
- 1.3 Within 30 days of the completion of a well the licensed well driller must produce to the Chief Executive, (c/o the Department for Environment and Water at one of the addresses shown on the Well Completion Report form or via the online Well Completion Report form):
  - 1.3.1 the completed Well Completion Report
  - 1.3.2 any strata and water samples collected (if required by the well permit)
  - 1.3.3 a map showing the location of the well as close as possible to its actual location, and in any event to an accuracy of not more than 50 meters from its actual location or the GPS coordinates of the well on the form.
- 1.4 The licensed well driller must provide a copy of the Well Completion Report to the permit holder within 30 days of the completion of the well.
- 1.5 The licensed well driller must retain a copy of the Well Completion Report for a period of five years from the date of submission of the report to the Department for Environment and Water.

## **Direction 2: Taking samples of water and other material**

Reference Chapter 6 of the Minimum Construction Requirements.

Pursuant to Regulation 25(d) of the LSA Regulations, and unless otherwise directed by me:

- 2.1 If the well permit contains conditions that require strata samples from wells drilled, the licensed well driller must take and submit strata samples in accordance with the following:
- 2.2 **Strata samples**
  - 2.2.1 A strata sample of not less than 250 grams must be collected:
    - at intervals not exceeding three metres, and
    - at each change of strata observed in the well.
  - 2.2.2 Each strata sample must be secured in a clean sample bag or container and appropriately sealed.
  - 2.2.3 Individual sample bags or containers must be labelled with the following details:
    - Permit Number, and

- Depth Interval (in metres) from which the sample was taken.
- 2.2.4 In the event of multiple well drilling operations being undertaken pursuant to the same permit as a result of unsuccessful well drilling attempts, the strata samples for each well must be separately identified by consecutive alphabetical letters ('A', 'B', 'C' etc) on the label.
- 2.2.5 Individual strata samples for a well must be packed in one box (if possible) in sequence of sample depths.
- 2.2.6 In the event that the licensed well driller wishes to submit samples from more than one well undertaken pursuant to more than one permit in one box, a separator inscribed with the permit number must be placed at the beginning of each sample 'run'.
- 2.3 If the well permit contains conditions that require water samples from wells drilled, the licensed well driller must take and submit water samples in accordance with the following:
- 2.4 **Water samples**
- 2.4.1 A water sample of not less than 500 millilitres of water must be collected:
- as soon as any water is cut unless the drilling method used does not permit the taking of such sample, and
  - at the completion of the well drilling operations.
- 2.4.2 A water sample must be collected in a clean bottle and must be appropriately sealed.
- 2.4.3 Water samples must be labelled with the following details:
- the well permit holder's name,
  - the well permit number,
  - the date the sample was collected,
  - the depth from which the sample was taken (in metres),
  - when the sample was taken (during drilling, development etc), and
  - the name and address of the well driller responsible for the operation.
- 2.4.4. If the licensed well driller wishes to submit samples relating to more than one permit in one box, a separator inscribed with the permit number must be placed at the beginning of each permit sample 'run'.

### **Direction 3: Well drilling operations**

Pursuant to Regulation 25(e) of the LSA Regulations, and unless otherwise directed by me:

- 3.1. In undertaking well drilling operations, a licensed well driller or a person supervised by a licensed well driller must comply with the mandatory requirements of the Minimum Construction Requirements as amended from time to time.

### 3.2. **Siting**

- 3.2.1. Before undertaking any well drilling operations the licensed well driller must obtain confirmation from the permit holder that the well location meets the requirements specified in the well permit.

### 3.3. **Notification of intention to undertake well drilling operations**

- 3.3.1. The holder of a Class One well driller's licence may be requested to provide notification of the intention to commence well drilling operations prior to such commencement. In such a case the licensed well driller must notify the Drilling Inspector at least 24 hours prior to commencement.
- 3.3.2. If a condition of the well construction permit requires a holder of a Class 2 or Class 3 driller's licence, the licensed well driller must notify the Drilling Inspector at least 24 hours before commencement of the activity.

### 3.4. **Notification of occurrences of artesian water**

- 3.4.1. All unexpected occurrences of artesian water must be immediately reported to the Drilling Inspector.

- 3.5. For the purposes of Clauses 3.3 and 3.4, notification of the Drilling Inspector may be provided by one of the following means:

Telephone: (08) 8463 6841 or 0428 828 569

Email: [DEWDrillingInspector@sa.gov.au](mailto:DEWDrillingInspector@sa.gov.au)

## **Direction 4: Definitions**

For the purposes of my directions:

**Chief Executive** means the Chief Executive of the Department for Environment and Water

**Department for Environment and Water** means this, or any subsequent or equivalent Department name, being the administrative unit designated from time to time by the Minister by notice in the Gazette as being the Department primarily responsible for assisting a Minister in the administration of the LSA Act.

**Licensed well driller** means a person who holds a licence under Part 8 of the *Landscape South Australia Act 2019* to drill wells.

**LSA Act** means the *Landscape South Australia Act 2019*.

**LSA Regulations** means the *Landscape South Australia (Water Management) Regulations 2020*.

**Minimum Construction Requirements** means the *Minimum Construction Requirements for Water Bores in Australia*, Third edition 2012 (ISBN 978-0-646-56917-8).

**Permit holder** means a person who holds a well permit issued by the Department for Environment and Water to construct a well on a specified location. A permit holder may or may not be the land owner.

**Supervision** by a licensed well driller means supervision on the site where well drilling operations are being undertaken and not remote or off-site supervision.

**Well drilling operations** includes the following activities affecting water:

- a) drilling, plugging, backfilling, or sealing of a well
- b) repairing, replacing or altering the casing, lining or screen of a well.

**Well permit** means an authority issued by the Department for Environment and Water to construct a well on a specified location. This document lists relevant legislative requirements, authorises construction, and outlines conditions relating to the well drilling operations, including the:

- a) drilling, plugging, backfilling, or sealing of a well
- b) repairing, replacing or altering the casing, lining or screen of a well.

These directions are subject to further directions made by me or my delegate in writing from time to time.

John Schutz, Chief Executive

June 2020

