

NORSOK STANDARD

SYSTEM REQUIREMENTS
SEAWATER INJECTION
SYSTEM NO. 51

P-SR-010
Rev. 1, December 1994

CONTENTS

1. FOREWORD	2
2. SCOPE	2
3. NORMATIVE REFERENCES	2
4. DEFINITIONS AND ABBREVIATIONS	2
4.1 Definitions	2
4.2 Abbreviations	2
5. FUNCTIONAL REQUIREMENTS	2
5.1 General	2
5.2 Products/Services	2
5.3 Equipment/Schematic	3
5.4 Performance	3
5.5 Regularity	3
5.6 Process/Ambient Conditions	3
5.7 Operational Requirements	3
5.8 Maintenance Requirements	4
5.9 Isolation and Sectioning	4
5.10 Layout Requirements	4
5.11 Interface Requirements	4
5.12 Commissioning Requirements	4

1. FOREWORD

This standard has been developed by the NORSOK Standardisation Work Group.

2. SCOPE

3. NORMATIVE REFERENCES

NORSOK Standard

P-CR-001

Process Design

4. DEFINITIONS AND ABBREVIATIONS

4.1 Definitions

4.2 Abbreviations

5. FUNCTIONAL REQUIREMENTS

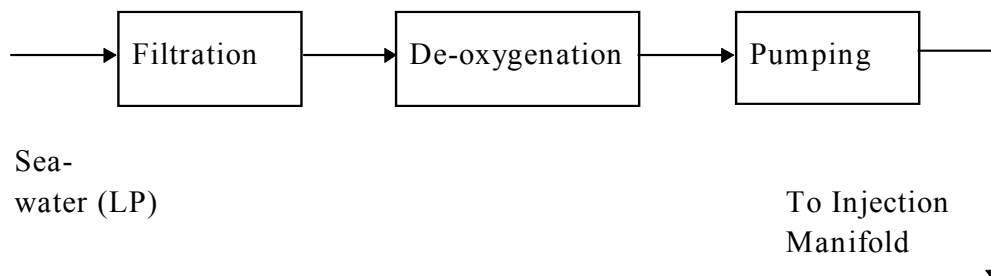
5.1 General

Deliver treated seawater at high pressure for injection to maintain reservoir pressure.
Treatment includes fine filtration (optional) and deoxygenation.

5.2 Products/Services

Not Applicable

5.3 Equipment/Schematic



5.4 Performance

- System Capacity $\text{Sm}^3/\text{cal.day}$
- Seawater filtration Reservoir specific
- Injection Pressure Reservoir specific
- Oxygen content $< 50 \text{ mg}/\text{Sm}^3$
- Free chlorine $< 0.2 \text{ mg}/\text{Sm}^3$

5.5 Regularity

5.5.1 Regularity

85 % (Reservoir dependent)

5.5.2 Training/sparing

Single train. Number of parallel units shall be determined based on unit capacity.

5.6 Process/Ambient Conditions

Supply to the system will be seawater filtered to remove all particles larger than 1000 microns, and with a free chlorine residual of 0.3 - 1.0 p.p.m.

5.7 Operational Requirements

5.7.1 Control and Monitoring

The system shall be controlled and monitored from the CCR.

5.7.2 Sampling

Sampling points shall be provided for routine monitoring of process performance.

5.8 Maintenance Requirements

Space shall be provided close to filters and pumps for laydown of dismantled components during major overhaul and repair.

5.9 Isolation and Sectioning

Individual equipment items in parallel duty shall be furnished with valves for individual isolation.

5.10 Layout Requirements

None.

5.11 Interface Requirements

Biocid and other chemicals as required.

5.12 Commissioning Requirements

None.