

DEPARTEMENT VAN WATERWESE
 DEPARTMENT OF WATER AFFAIRS

Copy to NvE 26/5/80



CONFIDENTIAL

 REPUBLIEK VAN SUID-AFRIKA
 REPUBLIC OF SOUTH AFRICA

 PRIVAATSAK X313
 PRIVATE BAG
 PRETORIA
 0001

kb/ms/0222S/0511A

 TELEGRAMME DAMWATER
 TELEGRAMS
 TELEKS 322107
 TELEX

 VERWYSING REFERENCE B33/2/720/51
 NAVRAE INQUIRIES K. Bergemann
 TELEFOON TELEPHONE 299-2449

 Production Assets Manager
 Electricity Supply Commission
 P.O. Box 1091
 JOHANNESBURG
 2000

1985-07-17

Rec'd [Signature] 23 July 8

② JSH.

Sir

KOEBERL

USE OF WATER FOR INDUSTRIAL PURPOSES: ISSUE OF PERMIT 853 N IN TERMS OF SECTION 12(1) OF THE WATER ACT, 1956

Your application JD 814 dated 19 September 1980 refers.

Attached hereto is Permit 853 N issued in terms of section 12(1) of the Water Act, 1956 (Act 54 of 1956), authorizing the use of the quantity of water specified therein for industrial purposes.

Your attention is invited to the following provisions of the Water Act, 1956:

- (a) In terms of section 12(3)(c), this permit may be cancelled by the Minister if the conditions to which it is subject, are contravened or not complied with;
- (b) In terms of section 12(3)(b), the Minister may at any time render the continued validity of this permit subject to such conditions as he may then determine, whether by the imposition of further or new conditions or by the cancellation or amendment of conditions then existing.
- (c) In terms of section 12(4), the Minister may, if water is used for industrial purposes contrary to section 12(1) or a condition of this permit, direct that the supply of water to you be suspended or reduced to a quantity determined by him, in which event the State, the Minister or any person carrying out such direction shall not be liable for any loss or damage caused thereby; and
- (d) In terms of section 12(8), a contravention of or failure to comply with a condition of this permit, constitutes an offence.

Yours faithfully


 DIRECTOR-GENERAL

CONFIDENTIAL

CONFIDENTIAL

G.P.S. (L)

Telegramadres: "DAMWATER"
Telegraphic address:Teleks: No. 322107
Telex: No. 322107Leer No. B33/2/720/51
File No.
Navrae
Enquiries K. Bergemann
Tel. No. 299-2449

REPUBLIEK VAN SUID-AFRIKA · REPUBLIC OF SOUTH AFRICA

DEPARTEMENT VAN WATERWESE
DEPARTMENT OF WATER AFFAIRSPRIYAATSAK } X313
PRIVATE BAG }

PRETORIA

0001

1985 -07- 17


PERMIT 853N

PERMIT HOLDER: ELECTRICITY SUPPLY COMMISSION

PREMISES WHERE WATER WILL BE USED: KOEBERG NUCLEAR POWER STATION

PERMIT ISSUED IN TERMS OF SECTION 12(1) OF THE WATER ACT, 1956

By virtue of the powers delegated to me by the Minister of Water Affairs by Government Notice 2669 of 18 December 1981, I, David Johannes Keyser, in my capacity as Managing Engineer : Water Quality, hereby, in terms of section 12(1) of the Water Act, 1956 (Act 54 of 1956) authorize the above-mentioned Permit Holder to use the quantities of water specified in the Schedule hereto, for industrial purposes, subject to the conditions specified in the said Schedule, which forms part of this Permit.


MANAGING ENGINEER : WATER QUALITY
p.p. MINISTER OF WATER AFFAIRS

CONFIDENTIAL

kb/lf/0146F/0333A

SCHEDULE

TO

PERMIT 853N

CONDITIONS TO WHICH PERMIT IS SUBJECT

- 1.(a) This permit authorises the use for industrial purposes, at the premises to which the permit applies, of the following quantities of water:
- (i) 1 825 000 cubic metres (m³) per year of potable water, supplied by the Divisional Council of the Cape. This quantity is based on an average use of 5 000 m³ per day, with a maximum of 7 500 m³ on any one day;
 - (ii) 912 500 m³ per year of purified or treated water (sewage effluent), supplied by the Melkbosstrand water care works (sewage purification works) of the Divisional Council of the Cape. The yearly quantity of 912 500 m³ is based on a daily average of 2 500 m³; and
 - (iii) 2 920 000 000 m³ per year of sea water, based on an average of 8 000 000 m³ per day.
- (b) The abovementioned quantities may not be exceeded except on the authority of a further permit issued in terms of section 12(1) of the Water Act, 1956 (hereinafter referred to as "the Act").
2. This permit does not imply any guarantee that the quantities referred to in paragraph 1 are at present available or will at any time in the future be available and the authority hereby granted is subject to the condition that the supplier referred to in paragraph 1(a)(i) and (ii) is prepared and able to supply the said total quantity of water at the specified rate.
3. The Permit Holder shall record the quantity of water used each day and submit a summary of the record to the Regional Representative, Pollution Control Division, Department of Water Affairs, Private Bag X9075, Cape Town 8000 at the end of each month.
4. The Permit Holder shall, if required to by the Director-General: Water Affairs, investigate and put into practise any water-saving device or technique or the reuse of any purified or treated water, including effluent.

5. For such time as the Divisional Council of the Cape is prepared and able to accept the domestic sewage from the residential area for purification or treatment and disposal thereof, the provisions of sections 21(1)(a) and (b) of the Act shall, in terms of section 21(2)(b) of the Act, not apply to the Permit Holder in respect of this sewage, unless the Minister otherwise directs, provided that the Permit Holder shall at all times comply with all conditions or regulations imposed or prescribed by the Divisional Council of the Cape.
6. The use of the purified or treated water (purified sewage effluent) as mentioned in paragraph 1(a)(ii) above, shall be practised in accordance with the guide lines laid down in the attached document titled "Guide: Permissible Utilization and Disposal of treated Sewage Effluent", issued by the Department of Health and Welfare, or in accordance with any relevant regulations promulgated under section 26 of the Act.
7. This permit shall not be construed as conferring exemption from compliance with the provisions of any other applicable act, ordinance, regulation or bylaw.



CHEMISTRY
CONFIDENTIAL
DEPARTEMENT VAN WATERWESSE
DEPARTMENT OF WATER AFFAIRS

005



REPUBLIC VAN SUID-AFRIKA
REPUBLIC OF SOUTH AFRICA

PRIVAATSAK X313
PRIVATE BAG

PRETORIA
0001

kb/lf/0146F/0333A

TELEGRAMME DAMWATER
TELEGRAMS

TELEKS 322107
TELEX

VERWYSING
REFERENCE

B33/2/720/51

NAVRAE
INQUIRIES

K. Bergemann

TELEFOON
TELEPHONE

299-2449

1985-07-17


EXEMPTION 1133B

EXEMPTEE: ELECTRICITY SUPPLY COMMISSION
PREMISES: KOEBERG NUCLEAR POWER STATION

EXEMPTION GRANTED IN TERMS OF SECTION 21(4) OF THE WATER ACT, 1956 IN RESPECT OF:

- (a) THE PURIFICATION OR TREATMENT OF WATER USED FOR INDUSTRIAL PURPOSES;
AND
- (b) DISPOSAL OF THE PURIFIED OR TREATED WATER

By virtue of the powers delegated to me by the Minister of Water Affairs by Government Notice 2669 of 18 December 1981, I, David Johannes Keyser, in my capacity as Managing Engineer: Water Quality, hereby, in terms of section 21(4) of the Water Act, 1956 (Act 54 of 1956), exempt the abovementioned Exemptee from complying with the provisions of sections 21(1)(a) and (b) of the said Act, relating to the purification or treatment of water used for industrial purposes (which includes water used in any sewerage system or works) and any effluent produced by or resulting from such use, and the disposal of the treated or purified water, including water recovered from any effluent, to the extent specified in the attached Schedule and subject to the conditions specified in the said Schedule, which forms part of this Exemption.


MANAGING ENGINEER: WATER QUALITY
p.p. MINISTER OF WATER AFFAIRS

CONFIDENTIAL

C O N F I D E N T I A L

B33/2/720/51

SCHEDULE

TO

EXEMPTION 1133B

ELECTRICITY SUPPLY COMMISSION IN RESPECT OF KOEBERG NUCLEAR POWER-STATION

1. This exemption authorises the disposal of the quantities of effluent mentioned below as follows:

- (a) 75 m³ per day of purified domestic effluent from the Power-Station by means of discharge into the sea.
- (b) 2 920 000 000 cubic metres (m³) per annum of effluent arising from the use of sea water for cooling purposes by means of discharge into the sea; and
- (c) effluent arising from the use of potable water for industrial purposes by means of discharge into the sea.

2. Domestic effluent



The purified sewage effluent from the Power-Station disposed of into the sea (in admixture with the sea water coolant and other effluent), shall at all times comply with the quality requirements of the General Standard prescribed in terms of section 21(1)(a) of the Water Act, 1956 and published in Government Notice 991 of 18 May 1984, with the exception of the requirement in respect of typical (faecal) coli which is relaxed to permit a count of not more than 1 000 units per 100 millilitres of effluent.

C O N F I D E N T I A L

C O N F I D E N T I A L

3. Sea water effluent

3.1 The final combined effluent, comprising effluent arising from the use of sea water for cooling purposes, industrial effluent and purified sewage effluent and disposed of into the sea shall comply with the following quality requirements:

- (i) the temperature shall not exceed 10°C above that of the sea in that area;
- (ii) the free chlorine content (as Cl₂) shall not exceed 0,5 mg/l; and
- (iii) the Boron content (as B) shall not exceed 1,0 mg/l above that of the sea in that area.

4. Industrial effluent

4.1 Effluent arising from the use of potable water for industrial purposes shall, prior to being disposed of into the sea, be tested and approved, on a batch basis, and conform to the Atomic Energy Corporation's standards for radio activity.

5. General

No effluent shall be disposed into the sea unless such effluent meets with the requirements as laid down in the nuclear licence issued by the Atomic Energy Corporation.

6. No effluent nor wastes of any description shall be disposed of within the Exclusion Area unless with the express knowledge and consent of the Atomic Energy Corporation. Such accumulated wastes as may be permitted by the Atomic Energy Corporation to be disposed of outside the Exclusion Area may, with the prior approval of the Director-General: Water Affairs (hereafter referred to as the Director-General), be disposed of by a competent firm of waste-disposal experts at an approved site.

7. Liquid high level radioactive wastes shall be disposed of on land at a remote site to the satisfaction of the Director-General and the Atomic Energy Corporation.

8. All radiological effluents shall be handled according to the standard laid down by Escom, reference OPS 7015/26-8 dated June 1982 whilst all non-radiological effluents shall be handled according to the standard laid down by Escom, reference OPS 0603/30-0 dated December 1982 and as may be amended from time to time after consultation with the Director-General and with the approval of the Atomic Energy Corporation.

C O N F I D E N T I A L

9. Any water, other than that permitted for industrial use, which becomes polluted directly or indirectly as a result of industrial activities at the Power-Station, shall be treated and disposed of as may be directed by the Director-General, after consultation with the Atomic Energy Corporation and other State and semi-State institutions if deemed necessary by the Director-General.
10. No health or marine hazard of any nature shall be caused by effluent discharged to sea. Escom shall, if required to do so, co-operate with the Director-General in a programme of investigation and/or monitoring of any matter relating to health or marine environmental control and shall, if called upon, submit reports on such work.
11. Escom shall forward copies of the nuclear licence within 30 days of the date of issuing, to the Director-General and to the Assistant Director: Pollution Control, Department of Water Affairs, Private Bag X9075, Cape Town 8000.
12. Amendments to the nuclear licence issued by the Atomic Energy Corporation for this enterprise shall be held to confer identical amendment to this permit. Copies of any such amendments shall be forwarded to the Director-General and the said Assistant Director within 30 days after such amendments.
13. Escom shall undertake the following routine monitoring of effluent quality:
- (i) Final sewage effluent

A 24 hour composite sample shall be taken and analysed once per week. Consecutive samples shall be taken on alternative days in order that any series of 7 samples would cover all 7 days of the week. The following determinants shall be analysed for: pH, oxygen absorbed, chemical oxygen demand, free and saline ammonia (as N) and suspended solids;
 - (ii) Final combined effluent (this includes sea water coolant)

Free chlorine and temperature shall be measured continuously. Boron shall be determined on discharge. Sampling for boron determination shall be representative of the discharge.
14. Copies of reports on all effluent quality monitoring as required in terms of condition 13 shall be submitted to the Assistant Director in Cape Town at the end of every month, unless requested to do so more frequently. Copies of reports on the monitoring and discharge of any radioactive wastes and emissions, as may be required by the Atomic Energy Corporation, shall be submitted to the Assistant Director in Cape Town as regularly as such reports are to be submitted to the Atomic Energy Corporation.

C O N F I D E N T I A L

15. The Director-General and any person authorised thereto by him shall, subject to security measures which may be imposed from time to time, have the right of access to the Escom's premises at all reasonable times for monitoring purposes.
16. This permit shall not be construed as conferring any exemption from compliance with the provisions of any other applicable act, ordinance or bylaw.



C O N F I D E N T I A L