

**GUIDELINES ON PROVISION OF TECHNICAL RECOMMENDATION ABOUT
DRILLING AND/OR INTAKE/UTILIZATION OF UNDERGROUND WATER**
(Regulation of the Governor of the Province of Jakarta Capital Special Region No. 21/2006
dated February 28, 2006)

BY GRACE OF GOD THE ALMIGHTY

THE GOVERNOR OF THE PROVINCE OF JAKARTA
CAPITAL SPECIAL REGION,

Considering:

- a. that pursuant to Decision of the Governor of the Province of Jakarta Capital Special Region No. 42/2001, license to drill and take underground water is issued after securing technical recommendation from Mining Service;
- b. that the important aspect in provision of the technical recommendation as meant in letter a is regulation of the depth of tapping and restriction of debit of intake of underground water on the basis of the Jakarta Underground Water Conservation Map 2004;
- c. that based on the considerations as meant in letters a and b, as well as in the framework of enhancing public service in the exploitation of underground water, it is necessary to stipulate a regulation of the Governor on Guidelines on Provision of Technical Recommendation about Drilling and/or Intake/Utilization of Underground Water;

In view of:

1. Law No. 34/1999 on Provincial Administration of Jakarta Capital Special Region;
2. Law No. 32/2004 on Regional Administration;
3. Government Regulation No. 25/2000 on the Authority of the Government and the Authority of Provinces as Autonomous Regions;
4. Decree of the Minister of Energy and Mineral Resources No. 1451K/10/MEM/2000 on Technical Guidelines on Realization of Administration Tasks in the Management of Underground Water;

5. Regional Regulation of the Province of Jakarta Capital Special Region No. 10/1998 on Exploitation and Utilization Tax on Underground Water and Surface Water;

6. Regional Regulation of the Province of Jakarta Capital Special Region No. 3/2001 on Organizational Structures and Working Arrangements of Regional Apparatuses and Secretariat of the Jakarta Provincial Legislative Council;

7. Decision of the Governor of the Province of Jakarta Capital Special Region No. 88/1999 on Technical Directives for Application and Collection of Underground Water and Surface Water Tax in Jakarta Capital Special Region as already amended by Decision of the Governor of the Province of Jakarta Capital Special Region No. 42/2001;

8. Decision of the Governor of the Province of Jakarta Capital Special Region No. 57/2002 on the Organization and Working Arrangement of the Jakarta Provincial Mining Service;

9. Decision of the Governor of the Province of Jakarta Capital Special Region No. 56/2003 on Procedures for Service in the field of Underground Water Business in the Jakarta Provincial Mining Service;

D E C I D E S :

To stipulate:

THE REGULATION OF THE GOVERNOR ON GUIDELINES
ON PROVISION OF TECHNICAL RECOMMENDATION
ABOUT DRILLING AND/OR INTAKE/UTILIZATION OF
UNDERGROUND WATER

CHAPTER I

GENERAL PROVISION

Article 1

Referred to in this regulation as:

1. Region shall be the Province of Jakarta Capital Special Region.
2. Regional Government shall be the Governor and regional apparatuses as regional administrator.
3. Governor shall be the Governor of the Province of Jakarta Capital Special Region.
4. Mining Service shall be the Jakarta Provincial Mining Service.
5. Underground Water shall be all kinds of water found in water containing layer below the land surface, including spring coming up naturally above the land surface.
6. Underground Water Conservation shall be management of underground water with a view of assuring wise utilization and continuous supply by preserving as well as enhancing the quality.
7. Underground Water Conservation Zone shall be classification of an area on the basis of similarity in condition of supporting power of underground water, destructive power of underground water and management.
8. Aquifer or water carrying layer shall be underground saturate sediment that can save or channel water in a sufficient and economic quantity.
9. Acquitter shall be waterproof sediment.
10. Underground Water Shape shall be underground-water surface in well, which is counted from local land or sea shape.
11. Technical recommendation shall be a suggestion/recommendation containing technical provisions for the drilling and intake of underground water, which are binding in the framework of the issuance of license to drill and/or take/utilize underground water.
12. Drilled well shall be a well made by means of drilling that uses mechanical appliance with the depth of over 40 m, using pot pipe with a diameter of over 4 inches or 10.16 cm and using pump with a capacity of over $\frac{3}{4}$ HP.
13. Pegged Well shall be a well made by non-mechanical means with the depth of up to 40 m, using pot pipe with a maximal diameter of 4 inches or 10.16 cm and using pump with a capacity of up to $\frac{3}{4}$ HP.
14. Drilled Well Construction shall be a drilled water installation, which is installed after the making of well is completed, consisting of protective pipe, pebble wrapping filter, clay separator and cement separator.
15. Pot Pipe shall be a composition of pipe with a specified diameter in the structure of drilled well construction, starting from the land surface to certain depth, which functions to accommodate underground water and place pump.
16. Raising Pipe shall be a composition of pipe with a specified diameter in the structure of drilled well construction, located below the pot pipe, functioning as instrument of underground water to raise as far as pot pipe.
17. Filter shall be pipe having holes with a specified diameter in its wall and functioning to filter underground water coming into the drilled well.

CHAPTER II

UNDERGROUND WATER CONSERVATION MAP

Article 2

- (1) The underground conservation map shall consist of:
 - a. shallow underground-water conservation map;
 - b. deep underground-water conservation map.
- (2) The conservation map as meant in paragraph (1) shall formulated jointly by the Mining Service and related institutions, associations of profession in the underground water field and universities.
- (3) Model and content of the conservation map shall be as enclosed to this regulation.

CHAPTER III CONSERVATION ZONE

Article 3

The Jakarta underground-water aquifer system in accordance with the conservation map as meant in Article 2 shall be divided into:

- a. aquifer zone/group 1 (shallow underground water), namely non-pressed/free aquifer;
- b. aquifer zone/group 2 (deep underground water), namely pressed aquifer.

Article 4

(1) The aquifer zone/group 1 as meant in Article 3 letter a shall have distribution of underground water shape with the average depth of up to 40 cm, classified into three underground-water zones, namely:

- a. area with the highest intake debit/volume of 18 m³/hour/km²;
- b. area with the maximum intake debit/volume of 21.6 m³/hour/km²;
- c. area with the maximum intake debit/volume of 25.2 m³/hour/km².

(2) The aquifer zone/group 2 as meant in Article 3 letter b shall have distribution of underground water shape with the average depth of over 40 cm, classified into three underground-water zones, namely:

- a. area with the highest intake debit/volume of 12.6 m³/hour/km²;
- d. area with the highest intake debit/volume of 36 m³/hour/km²;
- e. area with the maximum intake debit/volume of 90 m³/hour/km².

CHAPTER IV WELL CONSTRUCTION

Article 5

(1) The tolerable aquifer depth of pegged well shall be 40 m at the maximum, with the maximum pipe diameter of 4 inches or 10.16 cm.

(2) Design of drilled well construction shall be as follows:

- a. the tolerable aquifer depth is deeper than 150 m

in accordance with the conservation map;

- b. the maximum pot-pipe diameter is 6 inches or 15.24 cm with the maximum length of 60 cm;
- c. the maximum raising-pipe diameter is 3 inches or 7.62 cm with the length dependent on the depth of well;
- d. the maximum filter-pipe diameter is 3 inches or 7.62 cm with the maximum length of 9 m;
- e. the maximum piezometer-pipe diameter is ¾ inch or 1.9 cm with the maximum length one meter longer than the pot pipe.

(3) The tolerable aquifer depth as meant in paragraph (2) letter a can be less than 150 m in the case of the intake being designated to household or social activities.

(4) The diameter and length of pot pipe and filter as meant in paragraph (2) letters b and c can be longer, dependent on local underground water condition with a compensation for reduction of the volume/debit of water which is taken as well as minimizing the capability of pump.

(5) Any change in the design as meant in paragraphs (3) and (4) can be realized after technical recommendation is issued.

CHAPTER V DEBIT/VOLUME OF UNDERGROUND-WATER INTAKE

Article 6

(1) Debit/volume of water taken from pegged well in aquifer 1 shall be as meant in Article 4 paragraph (1) on the basis of the conservation map with the intake duration of 8 hours per day.

(2) The tolerable debit/volume of water which can be taken as meant in paragraph (1) for every well shall be 10% of the highest intake debit/volume in the respective intake zones.

(3) Debit/volume of water taken from drilled well in aquifer 2 shall be as meant in Article 4 paragraph (2) on the basis of the conservation map with the intake duration of 8 hours per day.

- (4) The tolerable debit/volume of water which can be taken as meant in paragraph (3) for every well shall be 10% of the highest intake debit/volume in the respective intake zones.
- (5) Any change in the tolerable debit/volume as meant in paragraph (2) can be realized after result of pumping test is evaluated and technical recommendation is issued.
- (6) Any change in the tolerable debit/volume as meant in paragraph (4) can be realized after result of pumping test is evaluated and technical recommendation is issued with the provision as follows:.
- a. in the case of the zone/aquifer 2 as meant in Article 4 paragraph (2) letter a, the tolerable debit is maximally 100 m³/day with the tolerable aquifer intake more than 250 m;
 - b. in the case of the zone/aquifer 2 as meant in Article 4 paragraph (2) letter b, the tolerable debit is maximally 100 m³/day with the tolerable aquifer intake more than 200 m;
 - c. in the case of the zone/aquifer 2 as meant in Article 4 paragraph (2) letter c, the tolerable debit is maximally 100 m³/day with the tolerable aquifer intake more than 150 m;

CHAPTER VI
CONCLUSION
Article 7

The regulation shall come into force as from the date of promulgation.

For public cognizance, the regulation shall be promulgated by placing it in Jakarta Provincial Book.

Stipulated in Jakarta
On February 28, 2006

THE GOVERNOR OF THE PROVINCE OF JAKARTA
CAPITAL SPECIAL REGION

Sgd
SUTİYOSO

Promulgated in Jakarta
On March 20, 2006

THE REGIONAL SECRETARY OF THE PROVINCE OF
JAKARTA CAPITAL SPECIAL REGION

Sgd
RITOLA TASMAYA

REGIONAL BOOK OF THE PROVINCE OF JAKARTA
CAPITAL SPECIAL REGION YEAR 2006 NO. 28