

2 The J&K Govt. Gazette, 12th Nov., 2018/21st Kart., 1940. [No. 32-8
it in that behalf, the State Water Resources Regulatory Authority hereby
makes the following Regulations namely :

CHAPTER-I

General

1. *Short Title and Commencement.* (1) These Regulations may be called the State Water Resources Regulatory Authority (Guidelines on Selection of Water Sources and for, ensuring availability of Water for the Water Supply Irrigation Systems) Regulations, 2018 :

- (i) These Regulations shall come into force from the date of their publication in the Government Gazette.
- (ii) These Regulations shall extend to the whole of the Jammu and Kashmir State and shall serve as guidelines on selection of water sources ensuring availability of water for Drinking Water Supply/Irrigation Systems from different sources like Rivers, Lakes, Tributaries, Streams, Ponds, Springs, Wells, etc. in the State of Jammu and Kashmir.

CHAPTER-II

Definitions

2. *Definitions.* (i) In these Regulations unless the context otherwise requires,

- (a) "Act" means the Jammu and Kashmir Water Resources (Regulation and Management) Act, 2010 (Act No. XXI of 2010) ;
- (b) "Assistant Executive Engineer" means an Assistant Executive Engineer incharge of the concerned wing of Irrigation and Flood Control Department ;
- (c) "Authority" means the State Water Resources Regulatory Authority established under the Act ;

- (d) -Chairpersonømeans the Chairperson of the Authority ;
- (e) -Executive Engineerø means Executive Engineer of the concerned wing of Irrigation and Flood Control Department ;
- (f) -Governmentø means the Government of Jammu and Kashmir ;
- (g) -Memberømeans a Member of the Authority ;
- (h) -Officerømeans an Officer of the Authority ;
- (i) -Prescribed Authorityø means the Chief Engineer Incharge Irrigation and Flood Control ;
- (j) -Rulesø mean The Jammu and Kashmir Water Resources (Regulation and Management) Rules, 2011 ;
- (k) -Secretaryømeans the Secretary of the Authority.

(ii) Words or expressions occurring in these Regulations and not defined herein but defined in the Act or Rules or in the State Water Resources Regulatory Authority (Conduct of Business) Regulations, 2013 shall bear the same meaning as in the Act or Rules or in the State Water Resources Regulatory Authority (Conduct of Business) Regulations, 2013.

CHAPTER-III

Guidelines on Selection of Water Sources and for ensuring availability of Water for Water Supply/Irrigation Systems from different Sources

PHE Sector :

(a) Surface Sources of Water :

The surface sources of water are characterized by an easy access for tapping them for the water supply

(e) Topography :

The area or land between the source and the targeted area should not be highly uneven i.e. it should not have steep gradient because cost of construction or laying of pipes would be high in that case.

(f) Elevation of Source of Water Supply :

The source of water must be at a high elevation to provide sufficient pressure in the supply of water. If a source is available at lower levels, pumps would be required to be installed to lift water. This may add to various problems including frequent interruptions and breakdowns and may, therefore, need an assured power back up. All this would add to the developmental as well as operational costs.

(g) Reliability :

A reliable water source is one that will supply round the year the required quantum of water as envisaged in the Scheme. To determine the reliability of the water source, the engineer concerned shall study data, such as hydrological data, to determine the variations expected in the water availability in that source. Geological data should also be studied since geological formations can limit the quantity and flow of water available. Another important factor in the selection of water source should be the experience gained by local community or people, especially elders and womenfolk of the area, over the years, about the quantum and quality of water availability from the proposed source.

(h) Protection Measures for surface Water Sources :

Many surface water sources are used for drinking water purposes. Their protection is therefore, vital. Generally, three basic strategies shall be employed for protection :

É Prevention : protection against pollutants or untreated water from domestic, industrial or agriculture use. Optimized water use and practices in agriculture to stop nutrients from entering aquatic system (e. g. establishing buffer zones).

É Treatment: treatment of polluted water prior to discharge from storm water and its management, ensuring that runoff does not transport pollutants into water bodies.

É Restoration of Ecosystems : enable or support rehabilitation processes, besides protection of flora and fauna.

(i) Location Water Works/Irrigation Intakes :

A water works intake is a device or structure installed in a surface water source to permit the right quantity of withdrawal of water from the source. It is used to draw water from lakes, reservoirs or rivers in which there is either a wide fluctuation in water level or when it is proposed to draw water at the most desirable depth.

The following factors shall be considered for selecting/locating the intake :

- (1) The location where the best quality of water is available.

- (2) Absence of currents that will threaten the safety of the intake.
- (3) Absence of ice float etc. and ice-storms.
- (4) Location where formation of shoal takes place shall be avoided.
- (5) Navigation channels shall be avoided as far as possible.
- (6) Absence of fitch of wind and other conditions affecting the waves.
- (7) Availability of power and its reliability.
- (8) Accessibility.
- (9) Nearness to the pumping station.
- (10) Least or no possibilities of damage by heavy moving objects and other hazards.

(j) Groundwater Sources :

Numerous simple preventive measures shall be applied to protect springs, wells and aquifers from contamination. They are expressed in the following five steps :

- Step 1. Site selection of the water source be never close to pollutant sources.
- Step 2. Construction of spring and well protection.
- Step 3. Fencing.
- Step 4. Set up rules for all community members to observe.
- Step 5. Management, operation and maintenance in the right perspective.

its geology and topography, the extent and nature of development by mass etc. The quantity of water available at the source must be sufficient to meet various demands and requirements of the area of supply/Culturable Command Area (CCA) for the entire irrigation period. The natural and man-made pollution results in producing colour, turbidity, hardness, bacteria and other microorganisms in the water supplies that need to be taken into consideration while selecting the source.

(ii) A correct assessment of the capacity of the source is required to be investigated to decide on its dependability for the Scheme in question. The incidence and the intensity of rainfall, the run-off from a given catchment and the actual gauged flows in streams are the main factors in estimating the safe yield from any source. Reliable statistics on the rainfall over representative regions of the catchment area, recorded through the past 25 years, should be collected, wherever available. In order to cover deficiencies in such data, it is desirable that rainfall recording stations are set up in all water sheds as part of the basic minimum infrastructure requirement.

(iii) Use of River Gauging Data :

(a) Wherever river gauging data for at least 8 years is available, the minimum and maximum discharge likely once in a 30 years period may be statistically arrived at and adopted. A 100 years period may be used, if the data available is for a minimum of 25 years.

- (c) Nothing in these Regulations shall bar the Authority from adopting in conformity with the provisions of the Act a procedure, which is at variance with any of the provisions of these Regulations, if the Authority, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing deems it necessary or expedient for dealing with such a matter or class of matters.

- (d) Nothing in these Regulations shall, expressly or impliedly, bar the Authority dealing with any matter or exercising any power under the Jammu and Kashmir Water Resources (Regulation and Management) Act, 2010 and the Jammu and Kashmir Water Resources (Regulation and Management) Rules, 2011 for which no regulations have been framed, and the Authority may deal with such matters, powers and functions in a manner it thinks fit.

By order of the Authority

(Sd.)

Secretary.