

CHAPTER 3B
ENVIRONMENTAL/SOCIO-ECONOMIC
IMPACT GUIDELINES

Authority

N.J.S.A. 13:17-1 et seq., specifically 13:17-6(i),
and N.J.A.C. 19:4-6.27.

Source and Effective Date

R.1998 d.77, effective January 5, 1998.
See: 29 N.J.R. 3704(a), 30 N.J.R. 566(a).

Executive Order No. 66(1978) Expiration Date

Chapter 3B, Environmental/Socio-Economic Impact Guidelines, expires on January 5, 2003.

Chapter Historical Note

Chapter 3B, Environmental/Socio-Economic Impact Guidelines, was adopted as R.1978 d.196, effective June 14, 1978. See: 10 N.J.R. 177(c), 10 N.J.R. 307(a).

Pursuant to Executive Order No. 66(1978), Chapter 3B, Environmental/Socio-Economic Impact Guidelines, was readopted as R.1993 d.176, effective March 29, 1993. See: 24 N.J.R. 4503(a), 25 N.J.R. 1887(a).

Pursuant to Executive Order No. 66(1978), Chapter 3B, Environmental/Socio-Economic Impact Guidelines, was readopted as R.1998 d.77, effective January 5, 1998. See: Source and Effective Date.

CHAPTER TABLE OF CONTENTS

SUBCHAPTER 1. SPECIALLY PLANNED AREAS

- 19:3B-1.1 Existing environmental conditions on the site
- 19:3B-1.2 Description and justification for the proposed project
- 19:3B-1.3 Environmental/socio-economic impact assessment of the project
- 19:3B-1.4 Carrying capacity
- 19:3B-1.5 Adverse environmental impacts which cannot be avoided
- 19:3B-1.6 Techniques to minimize or eliminate adverse environmental effects of the project
- 19:3B-1.7 Alternatives to the proposed project
- 19:3B-1.8 Licenses, permits and other approval required by law
- 19:3B-1.9 Documentation

SUBCHAPTER 1. SPECIALLY PLANNED AREAS

19:3B-1.1 Existing environmental conditions on the site

(a) The inventory of the existing environmental conditions of the project site will include information in detail sufficient to enable the Commission to compare the quality of the site to that of other tracts under its jurisdiction and to evaluate any variations in quality that may occur from place to place within the site. It will characterize the site in a manner that will facilitate the Commission's examination of the potential environmental impact of the proposed plan. Specifically, the inventory will comprehend:

(b) Rules concerning location and physical character of the site are:

Note: Pertaining to information required herein, see also Section 7-301 B of NJMC Master Plan Zoning Regulations.

1. A map of the District to show the location of the entire Specially Planned Area.
2. A topographic map of the Specially Planned Area and its surroundings to a distance of 500 feet, with contour intervals not greater than 5 feet. Also to be indicated:
 - i. Existing easements on and within 1,000 feet of the project tract, with location, width, and purpose indicated.
 - ii. Existing streets and railroads on and within 500 feet of the project tract, with locations, widths, and purposes of the rights-of-way indicated.
 - iii. Utility rights-of-way, including above-ground and below ground installations, on and within 500 feet of the project tract, with locations, widths, and purposes of the right-of-way, ownerships and capacities.
 - iv. Existing structures within 100 feet of the project tract, with uses indicated.
 - v. Location, width, slope, capacity, direction of flow of all natural and man-made water courses, including ditches and drainage basin outline and water-control structures, on and within 500 feet of the project tract.
3. A tax map sheet to show block and lot numbers and corresponding acreages on and within 500 feet of the project tract.
4. Boring logs specific to the project site to show the thickness and character of unconsolidated sediments and the depth to bedrock; one boring for each 10 acres of the Specially Planned Area.
5. Boring logs from any solid waste landfills on the site to define:
 - i. Thickness and type of material included, including tests to determine the presence of toxic or combustible materials.
 - ii. State of decomposition (oxidation-reduction potential).
 - iii. Combustible gas-forming potential (% of lower explosive limit).
 - iv. Leachate analysis: Leachate sources, mapped by location, will be tested by laboratory analysis for chemical composition. Prior to the commencement of any sampling, a program must be submitted to and approved by the Commission staff.
6. Test parameters will include:

- i. A five-day Biochemical Oxygen Demand (BOD₅);
- ii. Total Suspended Solids (TSS);
- iii. pH;
- iv. Temperature;
- v. Turbidity (Jackson Turbidity Units or equivalent);
- vi. Phosphates (PO₄);
- vii. Total Nitrogen (as TKN, NO₂, NO₃);
- viii. Total Coliform Organisms (MPN);
- ix. Fecal Coliform Organisms (MPN);
- x. Chemical Oxygen Demand (COD);
- xi. Color (PCU);
- xii. Surfactants (as MBAS, LAS);
- xiii. Sulfates;
- xiv. Sulfites;
- xv. Phenols;
- xvi. Quantitative Heavy Metal Scan (Lead, Mercury, Copper, Nickel, Iron, Chromium +6 and +3, Cadmium, Zinc);
- xvii. Cyanide;
- xviii. Dissolved Oxygen (DO).

Note: Where possible, leaching life of existing sources should be estimated. Protective steps should be suggested in the Implementation section.

(c) Rules concerning vegetation are:

1. Review of characterization of the site in previous publications (see especially Wetlands Order, page 14).
2. Detailed description of current conditions:
 - i. Map of vegetation of the site;
 - ii. Planimeter measurements on the vegetation map to determine the acreage occupied by each vegetation type;
3. Standing crop (biomass) determinations will be made in 1/10th square meter patches for each wetland vegetation type on the site. Standing crop determinations also will be made in a standard test area, to be designated by the Commission staff, to provide comparative data. That standard test area shall be the basis for the calculation of biomass from the autumnal mean. As part of this requirement, a sampling plan will be submitted to the Commission staff prior to the carrying out of the actual measurements. Additionally, each wetland vegetation type of more than 1 acre in size will be inventoried for crustaceans, mud snails, grass shrimp, fiddler crabs, etc., as these are associated with the various standing crop types. Where mud flat expanses interweave the various vegetation types, this same inventory will be taken. Prior to actual measurement, however, the proposed inventory sites should be submitted as part of the sampling plan.

(d) Rules concerning wildlife are:

1. Field inspections and trapping will be employed to determine the species of mammals, birds, fish and reptiles and amphibians present on the site and to estimate the abundance of each species.
2. Species of birds nesting on the site will be determined and the approximate number and locations of nests will be given.
3. Muskrat activity on the site will be evaluated and the locations of major clusters of houses will be described.
4. A map of the above will be prepared showing data distribution.

(e) Prior to the commencement of any water quality/tidal influence sampling program, Applicant shall submit his proposed plan of study to the Commission staff for approval. That plan will be coordinated with the Commission's ongoing Water Quality Monitoring Program. In addition to the pre-approved inventory sampling outlined below, regular monitoring for the same parameters will begin during the construction period, and continue during the operational phases of the proposed development period.

1. The following parameters will be determined on 6 occasions each of high tide slack and low tide slack on major creeks in or adjacent to the Specially Planned Area. Sampling stations will be located at least 100 feet inland from the creek's discharge point into the Hackensack River. It should be noted that the 12 samplings cited above will be made according to a sampling plan approved by the Commission staff.

- i. Salinity;
- ii. Chloride;
- iii. pH;
- iv. Color;
- v. Turbidity;
- vi. Suspended Solids;
- vii. Dissolved Oxygen;
- viii. Temperature;
- ix. Nutrients-TN, TKN, NO₂, NO₃, PO₄;
- x. Oxygen Demand-TOC, COD, BOD (Note: A plot of the BOD curve for a minimum of 30 days will be presented).

2. Quantitative elemental scans will be made on water samples, collected on a 3/4 ebbing tide, the samples to be taken from the stations stipulated above.