

BERGEN COUNTY UTILITIES AUTHORITY

LITTLE FERRY, NEW JERSEY



RULES AND REGULATIONS  
FOR THE  
DIRECT AND INDIRECT DISCHARGE OF  
WASTEWATER TO THE  
BERGEN COUNTY UTILITIES AUTHORITY  
TREATMENT WORKS

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BERGEN COUNTY UTILITIES AUTHORITY  
FOOT OF MEHRHOF ROAD  
P.O. BOX 9  
LITTLE FERRY, NJ 07643



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## ARTICLE I

### AUTHORITY

Under authority of the Municipal and County Utilities Authority Law (*N.J.S.A. 40:14B-1 et seq.*), the following Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works (hereafter “Rules and Regulations”) are hereby promulgated by the Bergen County Utilities Authority (hereafter “Authority”) pertaining to the discharge of waters including but not limited to storm, well, river or groundwater, sewage, industrial or other wastes into the Bergen County Utilities Authority Treatment Works and local sewer systems connected thereto.

These Rules and Regulations set forth uniform requirements for users of the Bergen County Utilities Authority Treatment Works and enable the Authority to comply with all applicable state and federal laws, including the Water Pollution Control Act (*N.J.S.A. 58:10A-1 et seq.*) as amended by the Clean Water Enforcement Act (*P.L.1990, c.28*), the Federal Water Pollution Control Act (*33 U.S.C. §§1251 et seq.*), General Pretreatment Regulations for New and Existing Sources of Pollution (*40 CFR Part 403*) and the Federal Categorical Standards (*40 CFR Chapter I, Subchapter N*) which are hereby incorporated by reference, including all amendments and supplements thereto. The objectives of these Rules and Regulations are:

- A. To prevent the introduction of pollutants into the Bergen County Utilities Authority Treatment Works that will interfere with its operation;
- B. To prevent the introduction of pollutants into the Bergen County Utilities Authority Treatment Works that will pass through the Bergen County Utilities Authority Treatment Works, inadequately treated, into receiving waters, or otherwise be incompatible with the Bergen County Utilities Authority Treatment Works;
- C. To protect both Bergen County Utilities Authority Treatment Works personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- D. To promote reuse and recycling of industrial wastewater and sludge from the Bergen County Utilities Authority Treatment Works;
- E. To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the Bergen County Utilities Authority Treatment Works; and
- F. To enable the Authority to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the Bergen County Utilities Authority Treatment Works is subject.

These Rules and Regulations shall apply to all users of the Bergen County Utilities Treatment Works. The Rules and Regulations authorize the issuance of wastewater discharge permits and provide for monitoring, compliance, and enforcement activities.

The Rules and Regulations also establish administrative review procedures, require user reporting and provide for the setting of fees for the equitable distribution of costs resulting from the program established herein.

## ARTICLE II

### DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms used in these Rules and Regulations shall be as follows:

**Acute toxicity** - a lethal or severe adverse sub-lethal effect (for example, immobilization of daphnids) to an organism exposed to a toxic substance for a relatively short period of time. Acute toxicity is measured by short-term bioassays, generally of 48 or 96 hour duration.

**Approval** - the written consent of the Executive Director or his/her authorized representative. Such approval shall be subject to all existing and future requirements of applicable regulatory agencies, including the Authority.

**Authority** - the Bergen County Utilities Authority (BCUA).

**Authorized Agent** - an authorized agent/representative of an industrial user who may be:

1. A principal executive officer of at least the level of vice-president; or
2. A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or
3. A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

**Average Monthly Discharge or Monthly Average Discharge** - the average of "daily discharges" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month, divided by the number of daily discharges measured during that month.

**Average Monthly Discharge Limitation or Monthly Average Discharge Limitation** - The highest allowable average of "daily discharges" over a calendar month calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Discharge Limitation or Weekly Average Discharge Limitation** - the highest allowable average of "daily discharges" over any seven consecutive days, calculated as the sum of all daily discharges measured during any seven consecutive days, divided by the number of daily discharges measured during that period.

**Baseline Report or Baseline Monitoring Report** - a report required following promulgation of a federal categorical standard, pursuant to *40 CFR 403.12(b)*.

**Batch Discharge** - a “discharge” which occurs with interruption throughout the operating hours of the facility.

**Best Management Practices or “BMPs”** - means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Article III. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

**Biochemical Oxygen Demand or BOD** - the quantity of dissolved oxygen in milligrams per liter (mg/l) in an effluent or other water, required during stabilization of decomposable organic matter by aerobic biochemical action as determined by analytical procedures set forth in the *Manual of Methods for Chemical Analysis of Water and Wastes* (USEPA, Office of Technology Transfer, Washington, D.C., March 1983).

**Bypass** - the anticipated or unanticipated intentional diversion of wastestreams from any portion of a treatment works.

**Carbonaceous Biochemical Oxygen Demand or CBOD** - that portion of the biological oxygen depletion in an effluent or other water which is due to the oxidation of carbon containing compounds.

**Categorical Industrial User or CIU** - any industrial user regulated by a National Pretreatment Standard.

**Certified Laboratory** - a laboratory certified by the NJDEP in accordance with *N.J.A.C. 7:18*.

**Chemical Oxygen Demand or COD** - a measure of the oxygen required to oxidize all compounds in water, both organic and inorganic, in milligrams per liter (mg/l) in a waste sample under specific conditions of an oxidizing agent, temperature and time as determined by analytical procedures set forth in the *Manual of Methods for Chemical Analysis of Water and Wastes* (USEPA, Office of Technology Transfer, Washington, D.C., March 1983).

**Chlorine Demand** (expressed in milligrams per liter (mg/l)) - the difference between the amount of chlorine added to wastewater and the amount of residual chlorine remaining at the end of a twenty (20) minute contact period.

**Chlorine Produced Oxidants” or CPOs** - the sum of free and combined chlorine and bromine as measured by the methods approved under *N.J.A.C. 7:18*.

**Chronic Toxicity** - death or other adverse impacts that affect the growth, survival, or reproductive success of an organism or its progeny after a relatively long exposure period to toxic substances. Chronic toxicity is measured using intermediate-term or long-term bioassays.

**Combined Sewer Overflow** - the excess flow from a combined sewer system that is not conveyed to a domestic treatment works for treatment, but transmitted by pipe or other channel directly to surface waters.

**Combined Sewer System** - a sewer system that is designed to carry sanitary sewage at all times and that also is designed to collect and transport stormwater from streets and other sources, thus serving a combined purpose.

**Combined Waste** - a wastewater containing surface or stormwater.

**Compatible Pollutant** - BOD, suspended solids, pH and fecal coliform bacteria.

**Compliance Monitoring Report** - a report periodically submitted by a permittee to verify continued compliance. This term includes a Periodic Self-monitoring Report or any report required pursuant to these Rules and Regulations.

**Composite Sample** - a sample composed of several discrete samples combined in a known proportion. For wastewater monitoring, a composite sample is a sample composed of several discrete samples collected at equal time intervals, or proportionally to the flow rate of the discharge.

**Conservative Parameter** - any parameter that is not significantly degraded by physical, chemical or biological processes which may occur in a wastewater or other water.

**Construction** - any placement, assembly or installation of facilities, equipment or treatment works, or modification of existing buildings, structures or facilities which is necessary for the placement, assembly or installation of new source facilities, equipment or treatment works, or entering into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within reasonable time. Options to purchase or contracts that can be terminated or modified without substantial loss and contracts for feasibility, engineering and design studies do not constitute a contractual obligation for the purposes of this definition.

**Contact Cooling Water** - water discharged from any system of condensation, air conditioning, cooling, refrigeration or other source used to reduce temperature for the purpose of cooling that comes into direct contact with any raw material, intermediate product (other than heat) or finished product. Contact cooling water shall constitute a regulated wastewater under these Rules and Regulations.

**Contaminant** - any physical, chemical, biological, or radiological pollutant or matter in water.

**Continuous Discharge** - a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

**Daily** - every calendar day including weekends and holidays.

**Daily Discharge** - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

**Daily Maximum Discharge** - the highest "daily discharge" during the monitoring period.

**Daily Maximum Discharge Limitation or Maximum Daily Discharge Limitation** - the highest allowable "daily discharge" during the reporting period.

**Daily Monitoring** - monitoring conducted every calendar day on which the facility is operating, including weekends and holidays.

**Day** - an operating day or 24-hour period.

**Discharge** - an intentional or unintentional action or omission resulting in the releasing, spilling, leaking, piping, pouring, emitting, emptying, or dumping of a pollutant into the Bergen County Utilities Authority Treatment Works.

**Discharger** - any person, permittee, corporation, municipality or other entity, who causes or allows any discharge.

**Disinfection** - the removal, destruction, or inactivation of pathogenic and indicator organisms.

**Domestic Pollutant** - a pollutant which results from the discharge of household, commercial or other wastes from bathrooms, toilet facilities, home laundries and kitchens which are predominantly the result of natural human waste elimination associated with bodily function and food preparation.

**Domestic Septage** - either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives process wastewater and does not include grease removed from a grease trap.

**Domestic Sewage or Domestic Wastewater** - waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

**Domestic Treatment Works or DTW** - all publicly owned treatment works as well as any privately owned treatment works processing primarily domestic wastewater and pollutants together with any groundwater, surface water, stormwater or process wastewater that may be present.

**Draft Permit** - a publicly noticed document indicating the Authority's intent to issue, deny, modify, revoke, or reissue a permit.

**Effluent** - wastewater after some degree of treatment, flowing out of any treatment device or facilities.

**Effluent Limitation** - any restriction on quantities, quality, discharge rates and concentration of chemical, physical, thermal, biological, radiological, and other constituents of pollutants established by permit, or imposed as an interim enforcement limit pursuant to an administrative order, including an administrative consent order.

**Executive Director** - the Executive Director of the Authority or his/her duly appointed deputy, agent or representative.

**Existing Discharge** - a permitted discharge which is not a new source.

**Existing Source** - any source which is not a new source, including presently existing discharges which are not currently permitted.

**Facility or Activity** - any source or potential source of discharge to the Bergen County Utilities Authority Treatment Works or any other facility or activity subject to these Rules and Regulations.

**Federal Act** - the Clean Water Act or the Federal Water Pollution Control Act (*33 U.S.C. §§ 1251 et seq.*) including all subsequent supplements and amendments.

**Flow Proportional Composite** - a single sample that receives equal aliquots at equal flow intervals.

**Flow Rate** - the volume per time unit given to the flow of gases or fluids which emerges from an orifice, pump, or turbine or passes along a conduit or channel.

**Force Main** - a pipeline carrying flow under pressure.

**Grab sample** - an individual sample collected over a time period of less than fifteen (15) minutes.

**Grace Period** – the period of time afforded under N.J.S.A. 13:1D-125 et seq., commonly known as the Grace Period Law for a person to correct a minor violation in order to avoid imposition of a penalty that would be otherwise applicable for such violation.

**Groundwater** - that portion of water beneath the land surface that is within the saturated zone.

**Hazardous Pollutant:**

1. Any toxic pollutant; or

2. Any hazardous substance as defined by the *New Jersey Spill Compensation and Control Act (N.J.S.A. 58:10-23.11)*; or
3. Any substance regulated as a pesticide under the *Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. §§ 136 et seq.)*; or
4. Any substance the use or manufacture of which is prohibited under the *Federal Toxic Substances Control Act (15 U.S.C. §§ 2601 et seq.)*; or
5. Any substance identified as a known carcinogen by the *International Agency for Research on Cancer*; or
6. Any hazardous waste designated pursuant to the *New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.)* or the *Federal Resource Conservation and Recovery Act (42 U.S.C. §§ 6901 et seq.)*.

**Hazardous Waste** - any waste that is defined or identified as a hazardous waste pursuant to the New Jersey Solid Waste Management Act (*N.J.S.A. 13:1E-1 et seq.*) or the Federal Resource Conservation and Recovery Act (*42 U.S.C. §§ 6901 et seq.*).

**Headworks Analysis** - a mathematical method used to determine the maximum allowable loading of pollutant at the “headworks” or influent to the Bergen County Utilities Authority Treatment Works.

**Holding Tank Waste** - any waste from holding tanks such as vessels, chemical toilets, campers, trailers, mobile homes, septic tanks, industrial storage tanks, concentrated baths and tank trucks.

**Holding Time** - the length of the time from collection of the sample until the time of initiation of the analysis.

**Incompatible Pollutant** - any pollutant that is not a compatible pollutant as defined in these Rules and Regulations.

**Indirect Discharge** - the introduction of pollutants into the Bergen County Utilities Authority Treatment Works, intercepting sewers and/or local sewer systems connected thereto from any non-domestic, non-governmental source.

**Indirect User** - a source of indirect discharge.

**Industrial user** - a source of indirect discharge.

**Industrial Pollutant or Industrial Waste** - any non-domestic pollutant including but not limited to, those pollutants regulated under Section 307(a), (b) or (c) of the Federal Act.

**Industrial Pretreatment Program** - the program designed to regulate the introduction of pollutants into the Bergen County Utilities Authority Treatment Works from any non-domestic source.

**Industrial Wastewater Treatment System** - any structure or structures by means of which industrial liquid waste or sludges are subjected to any treatment process.

**Industrial Water Supply** - water used for processing or cooling.

**Infiltration** - water entering the Bergen County Utilities Authority Treatment Works or local sewers from the ground, through such means as, but not limited to, defective pipes, pipe joints, connections or manhole walls. Infiltration does not include, and is distinguished from, inflow.

**Inflow** -water discharged into the Bergen County Utilities Authority Treatment Works from such sources as, but not limited to, roof leaders, cellar, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and combined sewers, catch basins, storm waters, surface run-off, street wash waters or drainage. Inflow does not include, and is distinguished from, infiltration.

**Influent** - wastewater, raw or partly treated, flowing into any wastewater treatment device or facilities.

**Intercepting Sewer** - an Authority-owned sewer which receives flow from a local sewer.

**Interfere or Interference:**

1. Inhibiting or disrupting the operation of the Bergen County Utilities Authority Treatment Works treatment process so as to contribute to, cause or increase a violation of any requirements of the Authority's NJPDES permit; or
2. Discharging industrial process wastewater at flow rates or with pollutants in excess of that allowed under the approval of the Executive Director or the Industrial Wastewater Discharge Permit or Treated Groundwater Discharge Permit; or
3. Preventing the approved use or disposal of sludge produced by the Bergen County Utilities Authority Treatment Works in accordance with Section 405 of the Federal Act and regulations, criteria or guidelines developed pursuant to the *Federal Resource Conservation and Recovery Act* of 1976 (42 U.S.C. §§ 3251, *et seq.*), the *Federal Clean Air Act* (42 U.S.C. §§ 7401, *et seq.*), the *Federal Toxic Substances Control Act* (15 U.S.C. §§ 2601, *et seq.*), the *Marine Protection, Research and Sanctuaries Act* (33 U.S.C. §§ 1431 *et seq.*), Sections 2, 4 and 6 of the State Act, and any regulations, criteria, or guidelines developed pursuant thereto, including, but not limited to, *N.J.A.C. 7:14A-20*, and the Statewide Sludge Management Plan.

**Land-based Sludge Management Criteria** - Standards established by the NJDEP in the Statewide Sludge Management Plan adopted pursuant to the *Solid Waste Management Act* (N.J.S.A. 13:1E-1 et seq.) or established pursuant to the Federal Act, or any regulation adopted pursuant thereto.

**Load Allocation** - the portion of a receiving water's total maximum daily load (TMDL) for a specific pollutant that is allocated to existing or future non-point sources of pollution.

**Local Agency** - a political subdivision of the State, or an agency or instrumentality thereof, that owns or operates a municipal treatment works.

**Local Limits** - any restriction on quantities, quality, or concentrations of pollutants discharged into a local agency's treatment works, developed to prevent upset, interference, or pass-through of pollutants to the treatment works and to protect worker health and safety, and protect or improve the quality of the sludge generated by the treatment works.

**Local Sewer** - any sewer or system of sewers which is connected to the Bergen County Utilities Authority Treatment Works and owned and/or operated by any person other than the Authority.

**Maximum Single Discharge** - the highest measured pollutant concentration as obtained by grab sample for any fifteen (15) minute period during the monitoring period.

**Maximum Single Discharge Limitation or Single Sample Limitation** - the highest allowable "maximum single discharge" during the reporting period.

**Monthly Monitoring** - monitoring conducted at a minimum of once every calendar month.

**National Pretreatment Standard or Categorical Standard** - any regulation containing pollutant discharge limits promulgated by the USEPA in accordance with Section 307 (b) and (c) of the Federal Act which applies to a specific category of indirect industrial users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5. Unless specifically noted, these standards shall be in addition to all applicable standards and requirements set forth in these Rules and Regulations.

**National Pollutant Discharge Elimination System** - the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318 and 405 of the Federal Act.

**New Jersey Pollutant Discharge Elimination System or NJPDES** - the New Jersey system for the issuance of permits pursuant to the State Act.

**New Source** - any building, structure, facility, or installation, from which there is or may be a discharge of pollutants, the construction of which commenced:

1. After the publication of the Pretreatment Standards under Section 307(c) of the Federal Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:
  - a. the building, structure, activity or installation is constructed at a site at which no other source is located; or
  - b. the building, structure, facility or installation totally replaces the process or production equipment that cause the discharge of pollutants at an existing source; or
  - c. the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
2. Construction of new source as defined under this definition has commenced if the operating entity has:
  - a. begun, or caused to begin as part of continuous onsite construction program:
    - i any placement, assembly, or installation of facilities or equipment; or
    - ii significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
    - iii entered into a binding contractual obligation for the purchase of facilities or equipment that are intended to be used in its operation within a reasonable time. Options to purchase or contracts that can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies to not constitute a contractual obligation under this definition.

**Non-Contact Cooling Water** - water discharged from any system of condensation, air conditioning, cooling, refrigeration or other source used to reduce temperature for the purpose of cooling. Such waters do not come into direct contact with any raw material, intermediate product (other than heat) or finished product. Non-contact cooling water

may however contain algaecides, or biocides to control fouling of equipment such as heat exchangers, and/or corrosion inhibitors.

**Non-Conventional Pollutant** - any pollutant not defined as a conventional pollutant or a toxic pollutant.

**Non-Point Source** - shall mean:

1. Any man-made or man-induced activity, factor, or condition, other than a point source, from which pollutants are or may be discharged;
2. Any man-made or man-induced activity, factor, or condition, other than point source, that may temporarily or permanently change any chemical, physical, biological, or radiological characteristic of surface waters from what was or is the natural, pristine condition of such waters, or that may increase the degree of such change; or
3. Any activity, factors, or condition, other than a point source, that contributes or may contribute to water pollution.

**Non-Significant Categorical Indirect User** – The Authority may determine that an Industrial User subject to categorical Pretreatment Standards under 403.6 and 40 CFR chapter I, subchapter N is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:

(i) The Industrial User, prior to the Authority finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;

(ii) The Industrial User annually submits the certification statement required in 40 CFR 403.12(q) together with any additional information necessary to support the certification statement; and

(iii) The Industrial User never discharges any untreated concentrated wastewater.

**Oil And Grease** - includes the nonpetroleum-based pollutants of animal and vegetable origin, and petroleum-based pollutants, which are analyzed by the USEPA and/or the New Jersey State Certified Laboratory approved method for oil and grease referenced in 40 CFR Part 136, as amended, including subsequent amendments, and the petroleum-based pollutants analyzed by an EPA and/or New Jersey State Certified Laboratory approved method for petroleum hydrocarbons cited in Methods for Chemical Analysis of Water and Wastes, USEPA, as amended.

**Operating Entity or Operator** - any person who alone or along with other persons has primary management and operational decision-making authority over any part of a facility.

**Owner or Operator** - the owner or operator of any facility or activity subject to these Rules and Regulations.

**Pass Through** - a discharge which exits the Bergen County Utilities Authority Treatment Works into the receiving water in quantities or concentrations which, alone or in conjunction with discharge or discharges from other sources, is a cause of a violation of any requirement of the BCUA's NJPDES permit, including an increase in the magnitude or duration of a violation.

**Periodic Self-Monitoring Report or Self-Monitoring Report** - a compliance monitoring report required pursuant to an Industrial Wastewater Discharge Permit or Treated Groundwater Discharge Permit.

**Permit** - an Industrial Wastewater Discharge Permit or Treated Groundwater Discharge Permit, or other authorization, license, or equivalent control document issued by the BCUA to implement the requirements of these Rules and Regulations. Permit does not include any permit that has not yet been the subject of final action, such as "draft permit". Permit includes a letter of agreement entered between the BCUA and a user of its treatment works, setting effluent limitations and other conditions on the user of the BCUA's treatment works.

**Permittee** - any person authorized to conduct an activity pursuant to a permit.

**Person** - any individual, firm, company, organization, partnership, corporation, association, group or society, and includes the State of New Jersey, and agencies, districts, commissions and political subdivisions created by or pursuant to State law.

**Petroleum Hydrocarbons or Petroleum-Based Oil and Grease** - includes the petroleum-based pollutants analyzed by the USEPA and/or the New Jersey State Certified Laboratory approved method for petroleum hydrocarbons cited in *Methods for Chemical Analysis of Water and Wastes*, USEPA, as amended.

**pH** - the logarithm of the reciprocal of the hydrogen ion concentration.

**Point Source** - any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

**Pollutant** - any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological material, medical wastes, radioactive substance (except those regulated under the *Atomic*

*Energy Act of 1954*, as amended (42 U.S.C. §§ 2011 *et seq.*)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, agricultural, and construction waste or runoff or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. “Pollutant” includes both hazardous and non-hazardous pollutants.

**Premises** - any parcel of real property including land, improvements or appurtenances, as buildings, ground, etc.

**Pretreatment** - the reduction in the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a domestic treatment works. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes or by other means, except by dilution. Appropriate pretreatment technology includes control equipment such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the domestic treatment works. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with 40 CFR 403.6(e) (the Combined Wastestream Formula).

**Pretreatment Requirements** - any substantive or procedural requirement related to pretreatment other than a National Pretreatment Standard imposed on an industrial user.

**Pretreatment Standard** - any limitation on quantities, quality, rates, or concentration of pollutants discharged into municipal or privately owned treatment works, adopted pursuant to the State Act, or any applicable federal, state or local regulations.

**Process Wastewater** - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater includes, but is not limited to, leachate and cooling water other than non-contact cooling water.

**Publicly Owned Treatment Works or POTW** - any device or system used in the storage and treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. Treatment works associated with potable water treatment and solid waste facilities shall be considered industrial treatment works for purposes of this chapter.

**Pumping Station** - a facility in which wastewater is conveyed from a lower hydraulic elevation to a higher hydraulic elevation using mechanical or pneumatic devices.

**Regulated Discharge or Regulated Wastewater** - indirect discharges that include industrial process wastewater, contact cooling water, contaminated groundwater, landfill

leachate, or other discharges subject to these Rules and Regulations. Regulated discharges do not include domestic sewage, non-contact cooling water and boiler blowdown.

**Regulatory Agency** - agencies such as, but not limited to, the New Jersey Department of Environmental Protection (NJDEP), the United States Environmental Protection Agency (USEPA) and the United States Army Corp of Engineers which have authority over the operation of and/or discharges from the Bergen County Utilities Authority Treatment Works.

**Representative of Industrial User** - an authorized agent of an industrial user.

**Sanitary Sewage Or Sanitary Waste** - any liquid waste containing animal or vegetable matter in suspension or solution, or the water carrying wastes resulting from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or any other source of water carrying waste of human origin or containing putrescible material. This term specifically excludes industrial, hazardous or toxic wastes and materials.

**Schedule of Compliance or Compliance Schedule** - a schedule of remedial measures including an enforceable sequence of actions and operations leading to compliance with applicable standards, effluent limitations or other limitations, prohibitions, or standards.

**Separate Sanitary Sewer System** - a sewer system that is designed to only carry sanitary sewage and not designed to collect and transport stormwater from streets and other sources.

**Septage** - the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

**Serious Violation** - an exceedance, as set forth in a permit, administrative order, or administrative consent agreement, including interim enforcement limits, as follows:

1. For effluent limitations for pollutants that are measured by concentration or mass, except for whole effluent toxicity:
  - a. Violations of an effluent limitation that is expressed as monthly average;
    - i By 20 percent or more for a hazardous pollutant; and
    - ii By 40 percent or more for a nonhazardous pollutant;
  - b. Violations of an effluent limitation that is expressed as a daily maximum or daily minimum without a monthly average;
    - i By 20 percent or more of the average of all of the daily maximum or minimum values for a hazardous pollutant; and

- ii By 40 percent or more of the average of all of the daily maximum or minimum values for a nonhazardous pollutant;
2. For effluent limitations for whole effluent toxicity as follows:
- a. For any violation of an LC<sub>50</sub> or a NOEC limit when, upon subtracting the toxicity test result from the whole effluent toxicity limit, the difference is as follows:

Whole Effluent Toxicity <u>Limit (Percent Effluent)</u>	Difference <u>(Percent Effluent)</u>
Greater than or equal to 80 and less than or equal to 100	Greater than or equal to 20
Greater than or equal to 50 and less than 80	Greater than or equal to 15
Greater than 10 and less than 50	Greater than or equal to 10
Less than or equal to 10	Greater than or equal to 9

- b. For any violation of whole effluent toxicity limitations expressed as no measurable acute toxicity (NMAT) with greater than or equal to 50 percent mortality in any test concentration, including 100 percent effluent; and
3. The greatest violation of a pH effluent range in any one calendar day which violation deviates from the midpoint of the range by at least 40 percent of the midpoint of the range excluding the excursions specifically excepted by a permit with continuous pH monitoring. For example: Assuming that a permittee's effluent limitation range for pH is 6.0 to 9.0, the midpoint would be 7.5.

If five separate readings of pH during a given day were 4.3, 5.8, 6.0 and 6.5, the reading of 4.3 would be a serious violation as follows:

$$\frac{7.5 \text{ (midpoint)} - 4.3 \text{ (greatest exceedance)} \times 100}{7.5 \text{ (midpoint)}} = 42.6\%$$

For example: Using the same information as above. Forty percent of 7.5 is 3; therefore, if the greatest violation of a pH effluent range for any calendar day has a pH of 4.5 or less or a pH of 10.5 or greater, the violation would be a "serious violation."

4. Notwithstanding the above, the Authority may utilize, on a case-by-case basis, a more stringent factor of exceedance to determine a serious violation if the Authority states the specific reasons therefore, which may include the potential for harm to human health or the environment.

**Seven Day Average** - the greatest sum of all daily discharges measured during any seven consecutive days, divided by the number of daily discharges measured during that period. Results are commonly expressed in loading (kg/day) and/or concentration (mg/L).

**Sewage or Wastewater** - any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff, that are discharged to or otherwise enter a domestic treatment works.

**Shredded Garbage** - garbage shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle having a dimension greater than 1/2 inch in any direction, excluding household garbage wastes.

**Significant Indirect User (SIU):**

1. Any user including, but not limited to, any Significant Industrial User as defined in *40 CFR 403.3 (t)* but excluding municipal collection systems, who discharges wastewater into the Bergen County Utilities Treatment Works, where:
  - a. the user is subject to Categorical Pretreatment Standards under *40 CFR 403.6* and *40 CFR Chapter I, Subchapter N*; or
  - b. the user's average volume of process wastewater exceeds 25,000 gallons per day; or
  - c. the amount of BOD, COD or Suspended Solids in the user's process wastewater discharge exceeds the mass equivalent of 25,000 gallons per day of the domestic waste of the Bergen County Utilities Authority Treatment Works; or
  - d. the volume of process wastewater in the discharge exceeds five percent or more of the average daily dry weather flow of the Bergen County Utilities Authority Treatment Works; or
  - e. the user's discharge of process wastewater contributes five percent or more of the daily mass loading of any of the pollutants listed in *N.J.A.C. 7:14A-4 Appendix A, Table II - V*; or
  - f. the user is designated as an SIU by the Authority on the basis that the user has a reasonable potential for adversely affecting the Authority's operation; or

- g. the user is designated as an SIU by the Authority on the basis that the user has been in violation of any federal, state, or local pretreatment standard or requirement, including but not limited to, significant noncompliance as defined in *40 CFR 403.8 (f)(2)(vii)*; or
  - h. The Authority determines it would be consistent with the intent of the Act or State Act to require a permit for the indirect discharger; and
2. any user where:
- a. the user is determined to be a hazardous waste facility that received a permit in accordance with *N.J.A.C. 7:26G-12*;
  - b. the user's discharge consists of landfill leachate, which is either pure, treated or diluted; or
  - c. the user's discharge consists of polluted groundwater which is pumped from the ground in order to decontaminate an aquifer; however
3. upon a finding that any user has no reasonable potential for adversely affecting the Authority's operation or for violating any federal, state, or local pretreatment standard or requirement, the Authority may at any time, on its own initiative or in response to a petition received from a user, and in accordance with *40 CFR 403.8(f)(6)*, determine that any user specified in paragraphs 1 or 2 above, unless the user is subject to Categorical Pretreatment Standards under *40 CFR 403.6* and *40 CFR Chapter I, Subchapter N*, is not an SIU.

**Significant Non-complier or SNC** - Any Industrial User in significant noncompliance if its violation meets one or more of the following criteria, unless the Authority uses, on a case-by-case basis, a more stringent frequency or factor of exceedance to determine a significant non-complier and the Authority states the specific reasons therefor, which may include the potential for harm to human health or the environment.

- 1. Violations which cause a person to become or remain a federal SNC include:
  - a. Chronic violations of wastewater discharge limits, defined here as those in which 66 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by *40 CFR 403.3(1)*;
  - b. Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by *40 CFR 403.3(1)*

multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);

- c. Any other violation of a Pretreatment Standard or Requirement as defined by 40 CFR 403.3(l) (daily maximum, long-term average, instantaneous limit, or narrative Standard) that the POTW determines has caused, alone or in combination with other Discharges, Interference or Pass Through (including endangering the health of POTW personnel or the general public);
  - d. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the Authority's exercise of its emergency authority to halt or prevent such a discharge;
  - e. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
  - f. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
  - g. Failure to accurately report non-compliance;
  - h. Any other violation or group of violations, which may include Best Management Practices, which the Authority determines will adversely affect the operation or implementation of the Industrial Pretreatment Program.
2. Violations which cause a person to become or remain a state SNC include:
- a. A serious violation for the same pollutant, at the same discharge point source, in any two months of any consecutive six month period;
  - b. Exceedance of an effluent limitation expressed as monthly average, for the same pollutant, at the same discharge point source, by any amount in any four months of any consecutive six month period;
  - c. If there is not an effluent limitation for a particular pollutant expressed as a monthly average, exceedance of the monthly average of the daily maximums for the effluent limitation, for the same pollutant, at the same discharge point source, by any amount in any four months of any consecutive six month period;

- d. Any exceedance of an effluent limitation for pH by any amount, excluding the excursions specifically excepted by a permit with continuous pH monitoring, at the same discharge point source in any four months of any consecutive six month period; or
- e. Failure to submit a completed discharge monitoring report in any two months of any consecutive six month period.

**Sludge** - the solid residue and associated liquid resulting from the physical, chemical or biological treatment of domestic or industrial wastewaters.

**Slug Discharge** - any discharge of a non-routine, episodic nature, including but not limited to, an accidental spill or a non-customary batch discharge.

**Statewide Sludge Management Plan (SSMP)** - the most recent version of the document which has been adopted by the NJDEP under the authority of *N.J.S.A. 13:1E-46*, as the component of the State Solid Waste Management Plan and the Statewide Water Quality Management Plan that establishes the objectives, criteria, and standards for the management of sewage sludge and domestic septage in New Jersey. The SSMP includes district and directed generator sludge management plans approved by the NJDEP.

**Storm Sewer** - a sewer that carries storm and surface waters and drainage, but excludes sewage and industrial waste other than unpolluted cooling water.

**Stormwater** - stormwater runoff, snow melt runoff, and surface runoff and drainage.

**Suspended Solids or Total Suspended Solids or TSS** - the total non-filterable residue as determined by analytical procedures set forth in the *Manual of Methods for Chemical Analysis of Water and Wastes* (USEPA Office of Technology Transfer, Washington, D.C. March 1983).

**Toxic Pollutant or Toxic Substance** - any pollutant identified pursuant to the Federal Act, or any pollutant or combination of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly or indirectly by ingestion available to the NJDEP, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction or physical deformation, in such organisms or their offspring. Toxic pollutants shall include but not be limited to those pollutants identified pursuant to Section 307 of the Federal Act or Section 4 of the State Act, or in the case of "sludge use or disposal practices," any pollutant identified pursuant to Section 405(d) of the Federal Act.

**Treatment Works** - the structures, equipment, devices, systems and processes required to collect, transport and treat wastewater and dispose of the effluent and accumulated residual solids. Treatment works include, among other things, sewage treatment facilities, sewage systems, pumping facilities, and all appurtenance additions and alterations thereof.

**24-Hour Composite Sample** -a combination of individual aliquots obtained at a minimum frequency of one aliquot at hourly intervals over a 24-hour period.

**Unpolluted Water** - water to which no constituent has been added.

**Unshredded Garbage or Garbage** - the organic solid waste from the preparation, cooking and dispensing of food or food products and from the handling, storing and sale of produce.

**Upset** - an exceptional incident in which there is unintentional and temporary noncompliance with an effluent limitation because of an event beyond the reasonable control of the industrial user, including fire, riot, sabotage, or a flood, storm event, natural cause, or other act of God, or other similar circumstance, which is the cause of the violation. “Upset” also includes noncompliance consequent to the performance of maintenance operations for which a period exception has been granted by NJDEP or the Authority. An upset does not include noncompliance to the extent caused by operational error, improperly designed facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**User** - any person discharging, causing or permitting the discharge of wastewater, directly or indirectly, into the Bergen County Utilities Authority Treatment Works or a local sewer system.

**Wasteload Allocation or WLA** - the portion of a receiving water’s total maximum daily load for a specific pollutant that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

**Water Quality Based Effluent Limitations** - effluent limitations established so that the quality of the waters receiving a discharge will meet the Surface Water Quality standards of *N.J.A.C. 7:0B*, after the introduction of the effluent.

**Water Quality Criteria** - a designated concentration of a constituent that, when not exceeded, will protect an organism, an organismic community or a prescribed water use or quality.

**Wet Weather Event** - a rainfall resulting in accumulation of greater than one (1) inch during less than one twenty-four (24) hour period, or rainfall of any amount of a duration greater than one twenty four (24) hour period.

**Whole Effluent Toxicity or WET** - the aggregate toxic effect of an effluent measured by a toxicity test.



## **ARTICLE III**

### PROHIBITIONS AND LIMITATIONS ON WASTEWATER DISCHARGES

- A. No person shall discharge, or allow to be discharged, directly or indirectly into the Authority Treatment Works or local sewer system connected thereto any pollutants or wastewater which:
1. causes or would cause the influent at the Authority's treatment plant to exceed the Influent Limitations in Article III, Section H; or
  2. contain prohibited material or substances as specified under these Rules and Regulations, except upon approval of the Authority, or except as otherwise expressly permitted by Federal or State laws and regulations; or
  3. are not in conformance with the Industrial Wastewater Discharge Permit, Treated Groundwater Discharge Permit, administrative order, administrative consent agreement, including interim enforcement limits or other approval issued by the Authority; or
  4. exceed the limitations set forth by EPA pursuant to Section 307 of the Act, or the NJDEP pursuant to Section 4 of the State Act.

When the influent at the Authority's treatment plant exceeds the Influent Limitations for one or more pollutants:

- a. the cause of this condition shall be attributed to the user or users which discharge the pollutant or pollutants in excess of that stipulated in their Industrial Wastewater Discharge Permit, Treated Groundwater Discharge Permit, or other approval issued by the Authority; or
- b. when no user has been or is determined to be discharging in excess of the stipulations in their Treated Groundwater Discharge Permit or Industrial Wastewater Discharge Permit, or where the achieving of compliance by all such dischargers is anticipated to not reduce the influent concentration below the Influent Limitations, then the Authority, at its discretion, may determine and designate which user or users are to be required to reduce their discharges sufficiently to allow the influent at the Authority's treatment plant to be at or below the Influent Limitations.

In no case shall a user have a maximum single discharge that contains a concentration of pollutants or flow that exceeds for any fifteen (15) minute period, more than five (5) times the approved daily maximum concentration, flow or mass discharge during normal operation as stated in their Industrial Wastewater Discharge Permit or Treated Groundwater Discharge Permit.

- B.** No person shall discharge directly or indirectly into the local sewer system or Authority Treatment Works, any wastes or wastewater which cause, threaten to cause, or are capable of causing either alone or by interaction with other substances:
1. a fire or explosion hazard, including but not limited to, wastestreams with a close cup flash point of less than 140 degrees F or 60 degrees C using the test methods specified in *40 CFR 261.21*;
  2. obstruction of flow or injury to the local sewer system or the Authority Treatment Works;
  3. toxic gases, vapors or fumes that may cause acute health or safety problems for personnel operating or maintaining the system or to the public;
  4. prevention of the effective operation or maintenance of the local sewer system or the Authority Treatment Works;
  5. a strong offensive odor or air pollution by the release of toxic or malodorous gases or malodorous gas-producing substances;
  6. interference with the Authority's treatment plant;
  7. the Authority's effluent or any other product of the treatment process, residues, sludges, or scums, to be unsuitable for reclamation and reuse or disposal or to interfere with the reclamation and/or disposal process;
  8. a detrimental environmental impact or a nuisance in the waters of the State or a condition unacceptable to any public agency having regulatory jurisdiction over same or the right to withhold funds as a result thereof;
  9. discoloration or any other condition in the quality of the Authority Treatment Works effluent such that receiving water quality requirements established by law cannot be met;
  10. conditions at or near the Authority Treatment Works which violate any statute or any rule, regulation, or ordinance of any public agency, federal, state, county or local regulatory body; or
  11. the Authority Treatment Works to be overloaded or cause excessive Authority collection or treatment costs.
- C.** No person shall discharge storm water, groundwater, rain water, street drainage, subsurface drainage, floor or yard drainage, or unpolluted water to any new direct or indirect connections to any separate sanitary sewer in the local sewer system or to the Authority Treatment Works.

- D.** No person shall discharge storm water, groundwater, rain water, street drainage, subsurface drainage, floor or yard drainage, or unpolluted water through any new direct or indirect connection to any combined sewer system in a local sewer system unless approval is granted by the Authority prior to such discharge. Approval shall be granted when no reasonable alternate method of disposal is available.
- E.** No person shall discharge or cause to be discharged, any radioactive material directly or indirectly into the local sewer system or the Authority Treatment Works except:
1. when the person is authorized to use radioactive materials by the New Jersey Department of Environmental Protection, the United States Nuclear Regulatory Commission or other governmental agency empowered to regulate the use of radioactive materials; and
  2. when the waste is discharged in strict conformity with current New Jersey Department of Environmental Protection and United States Nuclear Regulatory Commission regulations and recommendations for safe disposal, and
  3. when the person is in compliance with all rules and regulations of all other applicable regulatory agencies.
- F.** No person shall discharge waste from garbage grinders directly or indirectly to the local sewer system or the Authority Treatment Works through any new connection except:
1. wastes generated in preparation of food normally consumed on the premises; or
  2. where the user has obtained approval for that specific use from the Authority and agrees to undertake whatever self-monitoring is required to enable the Authority to equitably determine the charges and fees based on the waste constituents and characteristics. An approved access point for monitoring and sampling sewage must be made available by the user.

Such grinders must shred the waste to a degree that the discharge is shredded so that all particles will be carried freely under normal flow conditions prevailing in the local sewer system or the Authority Treatment Works.

Plastic, glass, rags, paper or wood products, inert materials, garden refuse or any other commercial or industrial solid wastes shall not be discharged through a garbage grinder directly or indirectly to the local sewer system or the Authority Treatment Works.

- G.** No person shall make any new connections to the local sewer system or discharge any wastes directly or indirectly to the local sewer system through any new connection unless such connection has been approved by the Executive Director except indirect 4" residential lateral connections. No person shall discharge any substances directly into a manhole or other opening leading to the local sewer system or the Authority

Treatment Works that was not designed or intended to receive such wastes, unless the Authority approves such discharge and the discharge location.

- H.** No person shall discharge any holding tank wastes directly or indirectly to the local sewer system or the Authority Treatment Works through any connection unless he has received approval from the Authority. Unless otherwise allowed by the Authority under the terms and conditions of the approval, a separate approval must be secured for each separate discharge. This approval will state the specific location and rate of discharge, the time of day the discharge is to occur, the volume of the discharge and the wastewater constituents and characteristics. If approval is granted for the direct or indirect discharge of such waste into the local sewer system or the Authority Treatment Works, the user shall pay the applicable charges and fees and shall meet such other conditions that the Authority may reasonably require. No approval will be required, however, for the discharge of domestic wastes from camper, trailer or mobile home holding tanks provided that such discharges are made into a facility to receive wastes of this nature.

The daily maximum influent limitations for the Authority's Little Ferry treatment plant shall be:

0.002 mg/l	Arsenic
0.006 mg/l	Cadmium
0.132 mg/l	Chromium, total
0.151 mg/l	Copper
0.189 mg/l	Lead
0.002 mg/l	Mercury
0.138 mg/l	Nickel
0.100 mg/l	Silver
0.328 mg/l	Zinc
0.771 mg/l	Phenol
(Reserved)	Total Kjeldahl Nitrogen
(Reserved)	Ammonia Nitrogen

The daily maximum influent limitations for the Authority's Edgewater treatment plant shall be:

7,656 lb/day	CBOD <sub>5</sub>
8,006 lb/day	TSS
0.57 lb/day	Arsenic
0.36 lb/day	Cadmium
2.19 lb/day	Copper
3.06 lb/day	Lead
0.07 lb/day	Mercury
6.22 lb/day	Nickel
1.24 lb/day	Selenium
7.67 lb/day	Zinc

- I.** No person shall discharge directly or indirectly to the local sewer system or the Authority Treatment Works any wastewaters containing a B.O.D. or a S.S. concentration in excess of 350 mg/L without first obtaining approval from the Authority.
- J.** No person shall discharge directly or indirectly to the local sewer system or the Authority Treatment Works any wastes or wastewater:
1. having heat in amounts which will inhibit the biological activity at the Authority's Treatment Plant, but in no case shall the wastewater temperature at the Treatment Plant exceed 40 degrees C (104 degrees F);
  2. containing more than 200 mg/l of oil or grease of non-petroleum origin;
  3. containing, on an average monthly basis, more than 100 mg/l of oil or grease of petroleum origin, nor shall the concentration in any single sample exceed 150 mg/l;
  4. having a pH lower than 5.5 or higher than 9.5;
  5. containing concentrations of the following parameters in excess of the prohibition concentration:

Prohibition Concentration

Parameter	mg/l	Parameter	mg/l
Acrolein	0.30	1,2-Trans Dichloroethylene	17.00
Acrylonitrile	8.40	1,2-Dichloropropane	21.20
Benzene	0.85	Ethyl Benzene	9.30
Bromoform	1.00	Methylene Chloride	17.00
Carbon Tetrachloride	0.15	1,1,2,2-Tetrachloroethane	3.85
Chlorobenzene	10.60	Tetrachloroethylene	1.80
Chloroethane	21.50	Toluene	8.10
Chloroform	1.75	1,1,1-Trichloroethane	65.00
1,2-Dichlorobenzene	21.60	1,1,2-Trichloroethane	8.60
1,4-Dichlorobenzene	26.30	Trichloroethylene	3.30
1,1-Dichloroethane	19.40	Trichlorofluoromethane	6.25
1,2-Dichloroethane	4.50	Vinyl Chloride	0.00024*
1,1-Dichloroethylene	0.14		

\*Limit to be set at current detection limit of 0.005 mg/l.

6. containing any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the Authority Treatment Works or its operation. At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (standard methane calibration);
  7. containing more than 0.5 mg/l of cyanide;
  8. containing more than 1.0 mg/l of copper; and
  9. containing more than the allowable loading (lbs/day) of cadmium that is allocated to each user of cadmium as determined by the Authority on a case by case basis based on the users average daily flow and an allowable concentration of 2.70 mg/l.
- K.** All measurements, tests and analysis of the characteristics of wastewaters to which reference is made in these Rules and Regulations shall be determined in accordance with methods kept on file at the Authority, which methods shall not be inconsistent with those set forth in 40 CFR Part 136. All laboratory analyses shall be performed by NJDEP or EPA certified laboratories.
- L.** Any effluent limitations and other requirements promulgated by the United States Environmental Protection Agency, the New Jersey Department of Environmental Protection, or any other governmental entity having jurisdiction shall apply in any instance where they are more stringent than those set forth in these Rules and Regulations. The Authority may also supplement these Rules and Regulations with more stringent requirements if it determines that these Rules and Regulations:
1. may not be sufficient to enable the Authority to comply with the standards and limitations specified in the Authority's National or New Jersey Pollutant Discharge Elimination System Permit; or
  2. may not adequately limit the wastes received into the Authority Treatment Works so as to prevent interference, pass through, or impeding of operations or so as to allow the disposal or sales of solids or sludges or the recovery of by-products or energy therefrom.
- M.** When the Authority shall prohibit, establish pretreatment standards, or otherwise limit the discharge of any substance or pollutant, users will be required to modify the discharge of the substances to the sewers to the levels so prescribed.

No user shall ever increase the use of process or cooling water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the National Categorical Pretreatment Standards, or in any other pollutant-specific limitation developed by the

Authority or NJDEP. The Authority may impose mass limitations on users that are using dilution to meet applicable Pretreatment Standards, or in any other pollutant-specific limitation developed by the Authority or NJDEP.

- N. Connections to the local sewer system shall be designed and constructed to conform to the requirements and procedures set forth in the Authority's "Standards for Connection to Authority Sewers and Related Requirements" (Appendix A) and all applicable State and local building and plumbing codes. All such connections shall be subject to the inspection and approval of the Authority.
- O. A User shall have an affirmative defense in any action brought against it alleging a violation of the general prohibitions established in this section where the User can demonstrate that:
  - 1. It did not know or have reason to know that its discharge, alone or in conjunction with a discharge or discharges from other sources, would cause pass through or interference; and
  - 2. A local limit designed to prevent pass through and/or interference, as the case may be, was developed for each pollutant in the User's discharge that caused pass through or interference, and the User was in compliance with each such local limit directly prior to and during the pass through or interference; or
  - 3. If a local limit designed to prevent pass through and/or interference, as the case may be, has not been developed for the pollutant(s) that caused the pass through or interference, the User's discharge directly prior to and during the pass through or interference did not change substantially in nature or constituents from the User's prior discharge activity when the Authority was regularly in compliance with the Authority's NPDES permit requirements and, in the case of interference, applicable requirements for sewage sludge use or disposal.



## ARTICLE IV

### CONTROL OF PROHIBITED WASTES

- A. Regulatory Actions** – If wastewaters containing any substance described in Article III of these Rules and Regulations are discharged or proposed to be discharged into the local sewer system or into the Authority Treatment Works, the Executive Director may take any action necessary to:
1. Prohibit the discharge of such wastewater;
  2. Require a user to demonstrate that their in-plant modifications will reduce or eliminate the discharge of such substances so the discharge will be in conformity with these Rules and Regulations;
  3. Require pretreatment, including storage facilities, or flow equalization necessary to reduce or eliminate the objectionable characteristics or substances so that the discharge will not violate these Rules and Regulations;
  4. Require the person making, causing or allowing the discharge to pay any additional cost or expense incurred by the municipality and the Authority for handling and treating excess loads imposed on the local sewer system and the Authority Treatment Works;
  5. Take such other remedial action as may be deemed to be desirable or necessary to achieve the purpose of these Rules and Regulations.
- B. Submission of Plans** – Where pretreatment or equalization of wastewater flows prior to discharge into the local sewer system or the Authority Treatment Works is required, plans, specifications, and other pertinent data or information relating to such pretreatment or flow-control facilities shall first be submitted to the Authority for review and approval. Such approval shall not exempt the discharge of such facilities from compliance with any applicable code, ordinance, rule, regulation or order of any governmental authority. Any subsequent alterations or additions to such pretreatment or flow-control facilities shall not be made without due notice to and prior approval of the Authority.
- C. Pretreatment Facilities Operations** – If pretreatment or control of waste flows is required, such facilities shall be maintained continuously in satisfactory and effective operation by the owner or operator at his expense, subject to the requirements of these Rules and Regulations and all other applicable codes, ordinances and laws.
- D. Admission to Property** – Representatives of the Authority, upon presentation of proper credentials, shall have the right to enter and inspect the subject premises, for the purposes of insuring compliance with these Rules and Regulations, and other applicable laws and regulations. Persons or occupants of premises where wastewater

is created and/or discharged shall allow the representatives ready access to all parts of the premises for the purposes of inspection, sampling, records examination or in the performance of any of their duties. All inspections shall be conducted in accordance with these Rules and Regulations. The Authority, Municipality, NJDEP and the EPA shall have the right to set upon the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations. Where a user has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the Authority, Municipality, NJDEP and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities and the user shall advise the Authority of the arrangements and procedures. All routine sampling and inspections shall be conducted during the time of wastewater flow provided, however, that sampling and inspections may be conducted at other times if the Authority has reasonable cause to believe that an immediate danger to life, limb or property exists, or during a time when a violation is occurring or there is reason to believe a violation is occurring, or if permission is given by an owner or his agent. No person shall accompany the representatives on any inspection, unless his presence is necessary for the enforcement of these Rules and Regulations, or unless consent is given by the owner or his agent.

**E. Protection from Accidental Discharge** – Each industrial user shall provide protection from accidental discharge of prohibited materials or other regulated wastes. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or operator's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the Executive Director for review, and shall be approved by him before construction of the facility. Review and approval of such plans and operating procedures shall not relieve the industrial user from the responsibility to modify his facility as necessary to meet the requirements of these Rules and Regulations. In addition, the Authority will evaluate the need, and require when deemed appropriate, the submission of a Slug Discharge Control Plan. For purposes of this subsection, a Slug Discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause interference or pass through, or in any other way violate the Authority regulations, local limits or permit conditions. The foregoing shall not detract from the obligation of each Industrial User to prepare and submit to the Authority a Slug Discharge Control Plan if reasonably necessary to prevent slug discharges regardless of whether or not the Authority has independently reviewed the need for same.

In addition, the Authority shall evaluate whether each Significant Industrial User needs a plan or other action to control Slug Discharges. Each Significant Industrial User will be evaluated within 1 year of being designated a Significant Industrial User. The results of such activities shall be available to the Approval Authority upon

request. Significant Industrial Users are required to notify the Authority immediately of any changes at its facility affecting potential for a Slug Discharge.

If the Authority decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

1. Description of discharge practices, including non-routine batch Discharges;
2. Description of stored chemicals;
3. Procedures for immediately notifying the Authority of Slug Discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b) with procedures for follow-up written notification within five days;
4. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

**F. Reporting of Accidental and/or Non-Compliance Discharge** – If, for any reason, a user does not comply with or will be unable to comply with any prohibition or limitation in these Rules Regulations, the user responsible for such discharge shall immediately notify the Executive Director, or his designated appointee, so that corrective action may be taken to protect the treatment works. The notification shall include the specific location of the discharge, type of waste, concentration of volume and any corrective actions to be taken. The user shall also comply with the notice and increased self monitoring requirements set forth in Article VI, Section B of these Rules and Regulations. In addition, a written report addressed to the Executive Director, or his designated appointee, detailing the date, time and cause of the accidental and/or non-compliance discharge, the action taken to prevent future discharges, shall be filed by the responsible industrial facility within five (5) days of the occurrence of the accidental or non-complying discharge. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage to the Authority Treatment Works or local sewer system, fish kills or any other damage to person or property; nor shall such notification relieve the user of any enforcement action, including fine, civil administrative penalties or other liability which may be imposed in accordance with applicable regulations and laws.

**G. Employees' Notice** – A notice shall be permanently posted on the user's bulletin board or other prominent place advising all employees of the responsible person to call in the event of an accidental or non-compliance discharge. This person shall be responsible for initiating emergency notification procedures in accordance with Section F above. Employers shall insure that all employees, who could cause such an accidental or non-compliance discharge to occur, are advised of the emergency notification procedure.

- H. Refusal of Discharge** – Nothing under this Article shall be construed to reduce in any manner the power of the Executive Director to refuse the acceptance of a discharge if, in his opinion, there is not compliance with the provisions of any section of these Rules and Regulations.
- I. Notification of Discharge Changes** – All industrial users shall promptly notify the Authority in advance of any substantial change in the volume or character of pollutants in their discharge.
- J. Best Management Practices in lieu of local limits** - The Authority may develop Best Management Practices (BMPs) to implement the local limits noted in Article III. Such BMPs shall be considered local limits and Pretreatment Standards for the purposes of this part and section 307(d) of the Act.

## ARTICLE V

### ADMINISTRATION

- A. Powers** – The Executive Director of the Authority, or his designee, shall be empowered to make all determinations, issue all permits and approvals and take all actions herein required or allowed of the Authority, except any actions which are specifically reserved to the Commissioners of the Authority or other specified persons. The Executive Director shall promulgate such additional procedures and guidelines as may be necessary to assure the proper administration and effectuation of these Rules and Regulations.
- B. Permits** – No existing or new user shall discharge wastewater, directly or indirectly, to the Authority Treatment Works or local sewer system without first obtaining a Treated Groundwater or Industrial Wastewater Discharge Permit from the Authority.

The building inspector or construction official in each municipality shall notify the Authority, in writing, prior to the issuance of a Certificate of Occupancy to any user discharging, or proposing to discharge, directly or indirectly, to the Authority Treatment Works. The applications for Treated Groundwater or Industrial Wastewater Discharge Permits shall be supplemented by any plans, specifications or other information considered pertinent by the Authority. The application shall also include the fee as designated by the Treated Groundwater or Industrial Wastewater Discharge Permit Application Fee Schedule.

1. In support of these applications, the applicant shall submit:
  - a. all information required by the permit application issued by the Authority;
  - b. all information required to complete a questionnaire or other form determined to be appropriate by the Authority;
  - c. all information necessary and appropriate to determine compliance with National Categorical Pretreatment Standards, including information necessary to determine classification under such standards;
  - d. current sampling and analysis data and design data descriptive of each of the wastewaters to be discharged; and
  - e. all other information necessary to the determination of compliance with these Rules and Regulations.

- f. existing users shall also submit a statement and supporting data regarding whether or not the requirements of these Rules and Regulations and of the pertinent National Categorical Pretreatment Standards are being met and, if not, how they will be met by process modification, additional operation and maintenance (O & M) or additional pretreatment.
2. If process modification, additional pretreatment or additional O & M will be required to meet the applicable standards, the user shall submit the shortest compliance schedule by which the user will provide them. The completion date in this schedule shall not be later than the compliance date established for the applicable standards. The following conditions shall apply to the compliance schedule:
    - a. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of facilities required for the user to meet the applicable standards (e.g., starting, planning and design, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.);
    - b. No increment referred to in paragraph (a) above shall exceed two hundred seventy (270) days; and
    - c. Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the Authority including, as a minimum, compliance with the increment of progress to be met on such date and, if not in compliance, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the user to return to the schedule established. In no event shall more than two hundred seventy (270) days elapse between such progress reports to the Authority.

Any other information as may be deemed by the Authority to be necessary to evaluate a permit application shall be submitted as part of the application.

- C. **Permit Modifications** – Within one hundred eighty (180) days of the promulgation or revision of a previously promulgated National Categorical Pretreatment Standard, the Industrial Wastewater Discharge Permits of users subject to such Standard will be revised by the Authority to require compliance with such Standard within the time frame prescribed. The user shall submit to the Authority the information required to complete the revision within sixty (60) days of the request for such information. However, it shall be the responsibility of each user to comply with all requirements of such Standard and to advise the Authority of changes and proposed changes in its discharge resulting from the issuance of such Standard whether or not the Authority requests such information or otherwise notifies the user.

**D. Concentration and Mass Limits** - Pollutant discharge limits in categorical Pretreatment Standards will be expressed either as concentration or mass limits. Wherever possible, where concentration limits are specified in standards, equivalent mass limits will be provided so that local, State or Federal authorities responsible for enforcement may use either concentration or mass limits. Limits in categorical Pretreatment Standards shall apply to the effluent of the process regulated by the Standard, or as otherwise specified by the standard.

- (1) When the limits in a categorical Pretreatment Standard are expressed only in terms of mass of pollutant per unit of production, the Authority may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual Industrial Users.
- (2) The Authority when calculating equivalent mass-per-day limitations under D(1) of this section shall calculate such limitations by multiplying the limits in the Standard by the Industrial User's average rate of production. This average rate of production shall be based not upon the designed production capacity but rather upon a reasonable measure of the Industrial User's actual long-term daily production, such as the average daily production during a representative year. For new sources, actual production shall be estimated using projected production.
- (3) The Authority when calculating equivalent concentration limitations under D(1) of this section shall calculate such limitations by dividing the mass limitations derived under D(2) of this section by the average daily flow rate of the Industrial User's regulated process wastewater. This average daily flow rate shall be based upon a reasonable measure of the Industrial User's actual long-term average flow rate, such as the average daily flow rate during the representative year.

**E. Equivalent Concentration Limits** - The Authority may convert the mass limits of the categorical Pretreatment Standards at 40 CFR Parts 414, 419, and 455 to concentration limits for purposes of calculating limitations applicable to individual Industrial Users. When converting such limits to concentration limits, the Authority will use the concentrations listed in the applicable subparts of 40 CFR parts 414, 419, and 455 and document that dilution is not being substituted for treatment as prohibited by Article III Section M of these Rules and Regulations.

**F. Equivalent Mass Limits** - When the limits in a categorical Pretreatment Standard are expressed only in terms of pollutant concentrations, an Industrial User may request that the Authority convert the limits to equivalent mass limits. The determination to convert concentration limits to mass limits is within the discretion of the Authority. The Authority may establish equivalent mass limits only if the Industrial User meets all the following conditions in paragraph (i)(A) through (i)(E) of this section.

- (i) To be eligible for equivalent mass limits, the Industrial User must:

- (A) Employ, or demonstrate that it will employ, water conservation methods and technologies that substantially reduce water use during the term of its permit;
- (B) Currently use control and treatment technologies adequate to achieve compliance with the applicable categorical Pretreatment Standard, and not have used dilution as a substitute for treatment;
- (C) Provide sufficient information to establish the facility's actual average daily flow rate for all wastestreams, based on data from a continuous effluent flow monitoring device, as well as the facility's long-term average production rate. Both the actual average daily flow rate and long-term average production rate must be representative of current operating conditions;
- (D) Not have daily flow rates, production levels, or pollutant levels that vary so significantly that equivalent mass limits are not appropriate to control the Discharge; and
- (E) Have consistently complied with all applicable categorical Pretreatment Standards during the period prior to the Industrial User's request for equivalent mass limits.

(ii) An Industrial User subject to equivalent mass limits must:

- (A) Maintain and effectively operate control and treatment technologies adequate to achieve compliance with the equivalent mass limits;
- (B) Continue to record the facility's flow rates through the use of a continuous effluent flow monitoring device;
- (C) Continue to record the facility's production rates and notify the Authority whenever production rates are expected to vary by more than 20 percent from its baseline production rates determined in paragraph (i)(C) of this section. Upon notification of a revised production rate, the Authority will reassess the equivalent mass limit and revise the limit as necessary to reflect changed conditions at the facility; and
- (D) Continue to employ the same or comparable water conservation methods and technologies as those implemented pursuant to paragraph (i)(A) of this section so long as it discharges under an equivalent mass limit.

(iii) Where the Authority chooses to establish equivalent mass limits, it will:

- (A) Calculate the equivalent mass limit by multiplying the actual average daily flow rate of the regulated process(es) of the Industrial User by the concentration-based daily maximum and monthly average Standard for the

applicable categorical Pretreatment Standard and the appropriate unit conversion factor;

(B) When notified of a revised production rate, reassess the equivalent mass limit and recalculate the limit as necessary to reflect changed conditions at the facility; and

(C) Retain the same equivalent mass limit in subsequent permit terms if the Industrial User's actual average daily flow rate was reduced solely as a result of the implementation of water conservation methods and technologies, and the actual average daily flow rates used in the original calculation of the equivalent mass limit were not based on the use of dilution as a substitute for treatment pursuant to Article III Section M of these Rules and Regulations. The Industrial User must also be in compliance with 40 CFR Part 403.17 (regarding the prohibition of bypass).

(iv) The Authority may not express limits in terms of mass for pollutants such as pH, temperature, radiation, or other pollutants which cannot appropriately be expressed as mass.

1. Equivalent limitations calculated in accordance with this section are deemed Pretreatment Standards for the purposes of section 307(d) of the Act and this part. Once incorporated into its permit, the Industrial User must comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived. Many categorical Pretreatment Standards specify one limit for calculating maximum daily discharge limitations and a second limit for calculating maximum monthly average, or 4-day average, limitations. Where such Standards are being applied, the same production or flow figure shall be used in calculating both the average and the maximum equivalent limitation.
2. Any Industrial User operating under a permit incorporating equivalent mass or concentration limits calculated from a production based standard shall notify the Authority within two (2) business days after the User has a reasonable basis to know that the production level will significantly change within the next calendar month. Any User not notifying the authority of such anticipated change will be required to meet the mass or concentration limits in its permit that were based on the original estimate of the long term average production rate.

**G. Treated Groundwater or Industrial Wastewater Discharge Permit Conditions** – Treated Groundwater or Industrial Wastewater Discharge Permits shall be subject to all provisions of these Rules and Regulations and all other applicable regulations, user charges and fees established by the Authority. Permits shall contain the following:

1. Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in 40 CFR Part 403, categorical Pretreatment Standards, local limits, and State and local law;
2. Limits on average and peak flow rates and times of discharge and/or requirements for flow regulation and equalization;
3. Requirements for installation, maintenance and operation of inspection, metering and sampling facilities;
4. Requirements for user self-monitoring, sampling, reporting, notification and recordkeeping, including an identification of the pollutants to be monitored (including the process for seeking a waiver for a pollutant neither present or expected to be present in the discharge in accordance with Article V K 3, or specific waived pollutant), sampling locations, frequency of sampling, number, types and standards for tests and reporting contents and schedules;
5. Compliance schedules;
6. Requirements for submission of technical reports and/or discharge reports;
7. Requirements for maintaining and retaining records relating to wastewater discharge as specified by the Authority, the NJDEP or EPA, and affording access thereto;
8. Requirements for notifying the Authority of any new introduction of wastewater constituents or of any change in the volume or character of the wastewater constituents being introduced into the Authority Treatment Works or local sewer system;
9. Annual fees as designated by the Authority's Treated Groundwater or Industrial Wastewater Discharge Permit Annual Fee Schedule;
10. Requirements to control Slug Discharges, if determined by the Authority to be necessary.
11. Other conditions as deemed appropriate by the Authority to ensure compliance with these Rules and Regulations and other regulations; and,
12. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements.

For all Treated Groundwater or Industrial Wastewater Discharge Permit applications for new discharges or for increases in existing discharges, the approval for discharge of pollutants shall be limited to that maximum daily amount which will utilize no more than twenty (20%) percent of the remaining capacity for that pollutant at the

Authority's treatment plant. The remaining capacity shall be the difference between the existing lower influent pollutant concentration and the Influent Limitation. The permit approval may provide for more than the aforesaid twenty (20%) percent when the user demonstrates to the satisfaction of the Authority that such additional discharge is appropriate based upon technological considerations, economics, industry practice and such other matters as the Authority deems pertinent. In no case shall approval be granted which would cause the influent concentration to exceed the Influent Limitation.

**H. Permit Duration** – Treated Groundwater or Industrial Wastewater Discharge Permits shall be issued for a specified time period, not to exceed five (5) years. The terms and conditions of the permit may be subject to modification by the Authority during the term of the permit as limitations or requirements are modified or other just cause exists.

The user shall apply for permit re-issuance of a minimum of one hundred eighty (180) days prior to the expiration of the user's existing permit. The user shall be informed of any proposed changes in his permit at least thirty (30) days prior to the effective date of the change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

**I. Permit Transfer** – Treated Groundwater or Industrial Wastewater Discharge Permits will be issued for a specific operation. A permit shall not be reassigned or transferred, sold to a new owner, new user, different premises or a new or changed operation without prior written approval of the Authority. If, upon application, the Authority decides that the existing permit can be transferred with no modifications, the succeeding owner or user shall comply with the terms and conditions of the existing permit for the balance of the permit's duration.

**J. Permit Fees** – The Authority may establish and amend the Treated Groundwater or Industrial Wastewater Discharge Permit Fee Schedule as necessary to insure adequate funding of the Industrial Pretreatment Program. All applications for Treated Groundwater or Industrial Wastewater Discharge Permits are to include the appropriate application fee as designated in the schedule for application fees. Each permittee possessing a Treated Groundwater or Industrial Wastewater Discharge Permit shall pay the annual fee prior to the issuance of the permit and then annually prior to the anniversary date of the permit issuance, until said permit expires. Failure to submit the annual fee within thirty (30) days after the anniversary date shall be considered a violation of these Rules and Regulations, and shall be sufficient cause for revocation of the Treated Groundwater or Industrial Wastewater Discharge Permit without hearing and for imposition of other procedures and penalties for non-compliance consistent with these Rules and Regulations.

**K. Periodic Compliance or Self-Monitoring Reports** – To assure continued compliance with these Rules and Regulations, Periodic Compliance or Self-Monitoring

Reports shall be submitted to the Authority. Any user subject to Pretreatment Standard or National Categorical Pretreatment Standard (except a Non-Significant Categorical User), after the compliance date of such standard, or, in the case of a New Source, after commencement of the discharge, shall submit to the Authority on a semi-annual basis, unless required more frequently in the applicable standard or by the Authority, a report indicating the nature and concentration of pollutants in the effluent which are limited by such standards. Where the Authority has determined that an Industrial User meets the criteria for classification as a Non-Significant Categorical Industrial User, the Authority will evaluate, at least once per year, whether an Industrial User continues to meet the criteria for Non-Significant Categorical Industrial User as defined in Article II.

Minimum Compliance and/or Self-Monitoring Report submittal are to be made as follows:

1. Normal Reporting

The minimum frequency of reporting for all users (except a Non-Significant Categorical Industrial User) and all pollutant parameters regulated by the Treated Groundwater or Industrial Wastewater Discharge Permit shall be once per year. Significant Indirect Users (SIU) shall report monitoring results monthly. In the case of a SIU, those pollutant parameters to be reported upon monthly shall be so noted in the Treated Groundwater or Industrial Wastewater Discharge Permit issued by the Authority. In addition, this report shall include a record of all flows, pollutant concentrations and mass, which during the monitoring period exceeded the flows and concentration, mass or other conditions permitted.

This sampling and analysis may be performed by the Authority in lieu of the Industrial User. Where the Authority performs the required sampling and analysis in lieu of the Industrial User, the User will not be required to submit the compliance certification required under this section. In addition, where the Authority itself collects all the information required for the report, including flow data, the Industrial User will not be required to submit the report.

In cases where the Pretreatment Standard requires compliance with a Best Management Practice (or pollution prevention alternative), the User shall submit documentation required by the Control Authority or the Pretreatment Standard necessary to determine the compliance status of the User. At the discretion of the Authority and in consideration of the factors as seasonal operations, holidays, budget cycles, etc., the Authority may elect or agree to alter the months during which the Reports, excluding SIU monthly Reports, are to be submitted by each user. Significant Non-categorical Industrial Users must submit to the Control Authority at least once every six months (on dates specified by the Control Authority) a description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority. In cases where a local limit requires compliance with a Best Management Practice or pollution prevention alternative, the User must submit documentation required by the Control Authority to determine the compliance status of the User. These reports must be

based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in part 136 and amendments thereto. This sampling and analysis may be performed by the Control Authority in lieu of the significant non-categorical Industrial User.

An industrial user determined to be a Non-Significant Categorical Industrial User pursuant to Article II must annually submit the following certification statement, signed in accordance with the signatory requirements in Section O of Article V. This certification must accompany any alternative report required by the Authority:

Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR \_\_\_\_, I certify that, to the best of my knowledge and belief that during the period from \_\_\_\_\_, to \_\_\_\_\_, \_\_\_\_ [month, days, year]:(a) The facility described as \_\_\_\_\_ [facility name] met the definition of a non-significant categorical Industrial User as described in Article II; (b) the facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and (c) the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period. This compliance certification is based upon the following information: \_\_\_\_\_

2. Non-Compliance Reporting

In addition to reporting requirements stipulated in the Treated Groundwater or Industrial Wastewater Discharge Permit the user shall be required to file monthly Compliance Reports with the Authority if the user:

- a. in any month commits a serious violation or fails to submit a completed Compliance Report with the Authority; or
- b. is determined by the Authority to be a Significant Non-Complier.

3. Sampling Waivers for Categorical Pollutants

- 1) The Authority may authorize the Industrial User subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the Discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. This authorization is subject to the following conditions:

- (i) The Authority may authorize a waiver where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical Standard and otherwise includes no process wastewater.
- (ii) The monitoring waiver is valid only for the duration of the effective period of the Industrial Wastewater Discharge Permit, but in no case longer than 5 years. The User must submit a new request for the waiver before the waiver can be granted for each subsequent permit.
- (iii) In making a demonstration that a pollutant is not present, the Industrial User must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewater from all processes.

The request for a monitoring waiver must be signed in accordance with Article V N and include the certification statement “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.

- (iv) Any grant of the monitoring waiver by the Authority must be included as a condition in the User's permit. The reasons supporting the waiver and any information submitted by the User in its request for the waiver will be maintained by the Authority for 5 years after expiration of the waiver.
- (v) Upon approval of the monitoring waiver and revision of the User's permit by the Industrial User must certify on each report with the statement below, that there has been no increase in the pollutant in its wastestream due to activities of the Industrial User:

Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR \_\_\_\_\_ [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of \_\_\_\_\_ [list pollutant(s)] in the wastewaters due to the activities at the facility since filing of the last periodic report under Article V Section K.

- (vi) In the event that a waived pollutant is found to be present or is expected to be present based on changes that occur in the User's operations, the User must immediately: Comply with the monitoring requirements of 40 CFR Part 403.12(e)1 or other more frequent monitoring requirements imposed by the Authority; and notify the Authority.
- (vii) This provision does not supersede certification processes and requirements established in categorical Pretreatment Standards, except as otherwise specified in the categorical Pretreatment Standard.

**L. Monitoring Facilities** – The user shall provide, maintain and operate at the user's own expense, monitoring facilities to allow inspection, sampling and flow measurement of the sewer connection. The monitoring facility should normally be situated on the user's premises, but, when such a location would be impractical or cause undue hardship on the user, the Authority may allow the facility to be constructed in the public street or sidewalk area, in strict accordance with all local requirements and subject to receipt of local approvals, and located so that it will not be obstructed by landscaping or parked vehicles.

There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition by the user and kept secure from unauthorized tampering and accessible to authorized personnel at all times. When more than one user can discharge into a common sewer, the Authority may require installation of separate monitoring equipment for each user. When there is a significant difference in wastewater constituents and characteristics produced by different operations of a single user, the Authority may require that separate facilities be installed for each discharge.

Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the Authority's requirements and all applicable local construction standards and specifications. Plans and specifications for such facilities shall be submitted to the Authority at least thirty (30) days before construction and shall not be constructed without prior Authority approval.

**M. Confidential Information** – Information and data on a user obtained from reports, questionnaires, permit applications, permits, monitoring programs and from inspections shall be available to the public or governmental agencies without restriction unless the user specifically requests confidentiality on the basis that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user or due to reasons of business confidentiality as that term is defined and applied in 40 CFR Part 2. However, information on wastewater volume constituents and character will not under any circumstances be recognized as confidential information.

When so requested by the person furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public. When information accepted by the Authority as confidential is requested by the EPA, NJDEP or other governmental agencies for uses related to these Rules and Regulations, NPDES or NJPDES permits, Federal pretreatment programs, etc., the Authority shall refer these requests to the user who furnished the information in question. Non-confidential information will be made available for inspection by the public at the Authority's office during normal business hours. There will be a charge for copies at the rate determined by the Authority. Requests for such review are to be made in writing and appointments will be required.

**N. Signature** – All Treated Groundwater or Industrial Wastewater Discharge Permit conditioned submittals, including but not limited to Compliance or Self Monitoring Reports and Compliance Schedule Reports shall be signed:

- (1) By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
  - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
  - (ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) By a general partner or proprietor if the Industrial User submitting the reports required by paragraphs (b), (d), and (e) of this section is a partnership, or sole proprietorship respectively.
- (3) By a duly authorized representative of the individual designated in paragraph (1)(1) or (1)(2) of this section if:
  - (i) (i) The authorization is made in writing by the individual described in paragraph (1)(1) or (1)(2);
  - (ii) (ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of

plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and (iii)(iii) the written authorization is submitted to the Authority.

- (4) If an authorization under paragraph (1)(3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph (1)(3) of this section must be submitted to the Authority prior to or together with any reports to be signed by an authorized representative.

**O. Relaxation of Standards or Limitations** – No Treated Groundwater or Industrial Wastewater Discharge Permit may be issued, renewed or modified by the Authority so as to relax any water quality standard or effluent limitation until the applicant, or permit holder, as the case may be, has paid all fees, penalties or fines due and owing pursuant to these Rules and Regulations or P.L. 1977.c.74, or has entered into an agreement with the Authority or NJDEP establishing a payment schedule.

1. The Authority shall afford an opportunity to the public to comment on a proposed Treated Groundwater or Industrial Wastewater Discharge Permit prior to final adoption if the Treated Groundwater or Industrial Wastewater Discharge Permit would establish interim enforcement limits that would relax effluent limitations established in a permit or a prior enforcement action. The Authority shall provide public notice of the proposed Treated Groundwater or Industrial Wastewater Discharge Permit, and announce the length of the comment period, which shall be not less than 30 days, commencing from the date of publication of the notice. A notice shall also include a summary statement describing the nature of the violation necessitating the revised Treated Groundwater or Industrial Wastewater Discharge Permit and its terms and conditions; shall specify how additional information on the revised Treated Groundwater or Industrial Wastewater Discharge Permit may be obtained; and shall identify to whom written comments are to be submitted. At least three days prior to publication of the notice, a written notice, containing the same information to be provided in the public notice, shall be mailed to the mayor and governing body of the municipality and county in which the violation occurred, and to any other persons who have expressed an interest in the public notice, including any other governmental agencies. The Authority shall consider the written comments received during the comment period prior to final adoption of the Treated Groundwater or Industrial Wastewater Discharge Permit. Not later than the date that final action is taken on the proposed Treated Groundwater or Industrial Wastewater Discharge Permit, the Authority shall notify each person or group having submitted written comments of the main provisions of the approved Treated Groundwater or Industrial Wastewater Discharge Permit and respond to the comments received therefrom.

2. The Authority, on its own initiative or at the request of any person submitting written comments pursuant to Subsection 1 of this section, may hold a public hearing on a proposed Treated Groundwater or Industrial Wastewater Discharge Permit, prior to final adoption if the Treated Groundwater or Industrial Wastewater Discharge Permit would establish interim enforcement limits that would relax for more than 24 months effluent limitations established in a permit or a prior administrative order or administrative consent order. Public notice for the public hearing to be held pursuant to this subsection shall be published not more than 30 and not less than 15 days prior to the holding of the hearing. The hearing shall be held in the municipality in which the violation, necessitating the consent order, occurred. The Authority may recover all reasonable costs directly incurred in scheduling and holding the public hearing from the person requesting or requiring the interim enforcement limits.

**P. Public Notification of Proposed Permit Issuance, Reissuance, Modification, or Revocation** – The Authority shall publish in the newspaper a list of any proposed new, renewed, modified, or revoked permit. Written comments on any proposed permit, permit conditions, or permit revocation, shall be submitted within thirty (30) days of the Public Notification. Any person who believes that any condition of a proposed permit is inappropriate or that the Authority's decision to issue or revoke a permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the comment period.

**Q. Appeal of Final Permit Decisions and Requirements for Properly Requesting an Adjudicatory Hearing by Permittees** – Permittees may submit to the Authority an appeal and request for an adjudicatory hearing by the New Jersey Office of Administrative Law to contest the Authority's final decision on permit conditions. If the appeal request is acceptable, the Authority will grant the hearing request and send all pertinent information to the Office of Administrative Law, with copies to the NJDEP's Office of Legal Affairs, the Bureau of Pretreatment and Residuals, and the Division of Law.

Permittees appeals or requests for a hearing shall be submitted within thirty (30) days following the receipt of the Authority's notification of a final permit decision and shall include an adjudicatory hearing request tracking form which shall contain the following information:

1. The facility name and permit number;
2. The date that the notification of the final permit decision was received by the permittee;
3. A list of the specific contested permit condition(s) and the legal or factual question(s) at issue for each condition, including the basis of any objection;

4. A statement as to whether the permittee raised the legal and/or factual issues during the public comment period;
5. The relevance of the legal and/or factual issues to the permit decision;
6. Suggested revised or alternative permit conditions and how they meet the requirements of the State or Federal Act;
7. A request, if necessary, for a barrier-free hearing location for disabled persons;
8. An estimate for the amount of time required for the hearing;
9. The name, mailing address and telephone number of the person making the request;
10. The name(s) and address(es) of the person(s) whom the requester represents, and
11. Information supporting the request or other written documents relied upon to support the request, unless this information is already in the administrative record, in which case such information shall be specifically referenced in the request.

**R. Appeal of Final Permit Decisions and Requirements for Properly Requesting an Adjudicatory Hearing by a Person other than the Permittee** - A person other than the permittee may seek to be qualified to be considered a party to the action and submit to the Authority an appeal and request for an adjudicatory hearing by the New Jersey Office of Administrative Law to contest the Authority's final decision on permit conditions. A person shall be considered to be a part to the action only if:

1. The person's objection(s) to the Authority's decision were raised by that person in the public hearing and/or in a written submission within the public comment period;
2. The person demonstrates the existence of a significant issue of law or fact;
3. The person shows that the significant issue of law or fact is likely to affect the permit decision; and
4. The person can show an interest, including an environmental, aesthetic, or recreational interest, which is or may be affected by the permit decision and that the interest can be fairly traced to the challenged action and is likely to be redressed by a decision favorable to that person. An organization may contest a permit decision on behalf of one or more of its members if the organization's member or members could otherwise be a party to the action in their own right, and the interests the organization seeks to protect are germane to the organization's purpose.

If the appeal request is acceptable, the Authority will grant the hearing request and send all pertinent information to the Office of Administrative Law, with copies to the NJDEP's Office of Legal Affairs, the Bureau of Pretreatment and Residuals, and the Division of Law. A person seeking consideration as a party to the action shall submit appeals or requests for a hearing to the Authority, with a copy to the permittee, within thirty (30) days following receipt of the Authority's notification of a final permit decision and shall include the following information:

1. The facility name and permit number;
2. A statement setting forth each legal or factual question alleged to be at issue, whether the legal or factual issue was raised by that person during the public comment period, the relevance of the legal or factual issue to the permit decision together with a designation of the specific factual areas to be adjudicated, and an estimate of the amount of time required for the hearing;
3. The date that notification of the final permit decision was received by the person making the hearing request;
4. The name, mailing address, and telephone number of the person making the request;
5. A clear and concise factual statement of the nature and scope of the interest of the requester;
6. The names and addresses of all persons whom the person making the hearing request represents;
7. A request, if necessary, for a barrier-free hearing location for disabled persons;
8. A statement by the person making the hearing request that, upon motion by any party granted by the administrative law judge, or upon order of the administrative law judge's initiative, such person shall make available to appear and testify at the administrative hearing, if granted, the following persons:
  - i. The person making the hearing request;
  - ii. All persons represented by the person making the hearing request;
  - iii. All officer, directors, employees, consultants, and agents of the person making the hearing request;

9. Specific references to the contested permit conditions, as well as suggested revised, or alternative permit conditions, including permit denials, which, in the judgment of the person making the hearing request, would be required to implement the purposes of the State or Federal Act;
10. Identification of the basis for any objection to the application of control or treatment technologies, if identified in the basis or fact sheets, and the alternative technologies or combination of technologies which, in the judgment of the person making the hearing request are necessary to satisfy the requirement of the State or Federal Act; and
11. A completed adjudicatory hearing request tracking form.

**S. Table of Minor and Non-minor violations; Grace periods**

1. Table 1 below identifies particular violations of the Authority's Rules and Regulations, as minor or non-minor for purposes of a grace period, and identifies the duration of the grace period for minor violations. The descriptions of the violations set forth in the table in this section are provided for informational purposes only. In the event that there is a conflict between a violation description in the table and the rule to which the violation description corresponds, the rule shall govern.
2. The Authority may assess a civil administrative penalty for a violation of the Authority's Rules and Regulations and/or for a violation of any rule, consent agreement or administrative order adopted or issued pursuant thereto, that is not listed in Table 1, following the procedure under (c) below.
3. For violations not listed in Table 1, the Authority shall determine whether the violation is a minor violation and subject to a grace period or whether the violation is non-minor and not subject to a grace period as follows:
  - a) If, pursuant to 4 below, the violation is comparable to a violation listed in Table 1 and the comparable violation in Table 1 is minor, then the violation under this section is also minor, provided the criteria at Article VI Section Q 3 are also met. The minor violation shall be subject to the grace period set forth in Table 1 for the comparable violation.
  - b) If the violation is not comparable to a violation listed in Table 1 and the violation meets all of the criteria at Article VI Section Q 3, then the violation under this section is minor. The minor violation shall be subject to a grace period of 30 days.
  - c) If, pursuant to 4 below, the violation is comparable to a violation listed in Table 1 and the comparable violation in Table 1 is non-minor, then the violation under this section is also non-minor and the penalty shall be assessed in accordance with Article VI Section Q 3.
  - d) If the violation is not comparable to a violation listed in Table 1 and the violation does not meet the requirements Article VI Section Q 3 above, the violation is non-minor and the penalty shall be assessed in accordance with Article VI Section Q 3.

4. Comparability of a violation under 3 above with a violation listed in Table 1 is based upon the nature of the violation (for example, a violation of record keeping, permit limitation, or monitoring).

TABLE 1

Rule Citation		Type of Violation	Grace Period
Article III A 1	Discharging any pollutants or wastewater which causes or would cause the influent at the Authority's treatment plant to exceed the Influent Limitations in Article III, Section H	NM	
Article III A 2	Discharging any pollutants or wastewater which contain prohibited material or substances as specified under these Rules and Regulations, except upon approval of the Authority, or except as otherwise expressly permitted by Federal or State laws and regulations	NM	
Article III A 3	Discharging any pollutants or wastewater which are not in conformance with the Industrial Wastewater Discharge Permit, Treated Groundwater Discharge Permit, administrative order, administrative consent agreement, including interim enforcement limits or other approval issued by the Authority	NM	
Article III A 4	Discharging any pollutants or wastewater which exceed the limitations set forth by EPA pursuant to Section 307 of the Act, or the NJDEP pursuant to Section 4 of the State Act	NM	
Article III B 1	Discharging any pollutants or wastewater which cause a fire or explosion hazard, including but not limited to, wastestreams with a close cup flash point of less than 140 degrees F or 60 degrees C using the test methods specified in <i>40 CFR 261.21</i>	NM	
Article III B 2	Discharging any pollutants or wastewater which cause obstruction of flow or injury to the local sewer system or the Authority Treatment Works	NM	
Article III B 3	Discharging any pollutants or wastewater which cause toxic gases, vapors or fumes that may cause acute health or safety problems for personnel operating or maintaining the system or to the public	NM	
Article III B 4	Discharging any pollutants or wastewater which cause a prevention of the effective operation or maintenance of the local sewer system or the Authority Treatment Works	NM	
Article III B 5	Discharging any pollutants or wastewater which cause a strong offensive odor or air pollution by the release of toxic or malodorous gases or malodorous gas-producing substances	NM	
Article III B 6	Discharging any pollutants or wastewater which cause interference with the Authority's treatment plant	NM	
Article III B 7	Discharging any pollutants or wastewater which cause the Authority's effluent or any other product of the treatment process, residues, sludges, or scums, to be unsuitable for reclamation and reuse or disposal or to interfere with the reclamation and/or disposal process	NM	
Article III B 8	Discharging any pollutants or wastewater which cause a detrimental environmental impact or a nuisance in the waters of the State or a condition unacceptable to any public agency having regulatory jurisdiction over same or the right to withhold funds as a result thereof	NM	
Article III B 9	Discharging any pollutants or wastewater which causes a discoloration or any other condition in the quality of the Authority Treatment Works effluent such that receiving water quality requirements established by law cannot be met	NM	
Article III B 10	Discharging any pollutants or wastewater which cause conditions at or near the Authority Treatment Works which violate any statute or any rule, regulation, or ordinance of any public agency, federal, state, county or local regulatory body	NM	

Rule Citation		Type of Violation	Grace Period
Article III B 11	Discharging any pollutants or wastewater which causes the Authority Treatment Works to be overloaded or cause excessive Authority collection or treatment costs	NM	
Article III C	Discharging storm water, groundwater, rain water, street drainage, subsurface drainage, floor or yard drainage, or unpolluted water to any new direct or indirect connections to any separate sanitary sewer in the local sewer system or to the Authority Treatment Works	NM	
Article III E	Discharging or cause to be discharged, any radioactive material directly or indirectly into the local sewer system or the Authority Treatment Works	NM	
Article III F	Discharging waste from garbage grinders directly or indirectly to the local sewer system or the Authority Treatment Works through any new connection	NM	
Article III G	Discharging any substances directly into a manhole or other opening leading to the local sewer system or the Authority Treatment Works that was not designed or intended to receive such wastes, unless the Authority approves such discharge and the discharge location	NM	
Article III H	Discharging holding tank wastes directly or indirectly to the local sewer system or the Authority Treatment Works through any connection unless he has received approval from the Authority	NM	
Article III I	Discharging directly or indirectly to the local sewer system or the Authority Treatment Works any wastewaters containing a B.O.D. or a S.S. concentration in excess of 350 mg/L without first obtaining approval from the Authority	NM	
Article III J 1	Discharging any pollutants or wastewater having heat in amounts which will inhibit the biological activity at the Authority's Treatment Plant, but in no case shall the wastewater temperature at the Treatment Plant exceed 40 degrees C (104 degrees F)	NM	
Article III J 2	Discharging any pollutants or wastewater containing more than 200 mg/l of oil or grease of non-petroleum origin	NM	
Article III J 3	Discharging any pollutants or wastewater containing, on an average monthly basis, more than 100 mg/l of oil or grease of petroleum origin, nor shall the concentration in any single sample exceed 150 mg/l;	NM	
Article III J 4	Discharging any pollutants or wastewater having a pH lower than 5.5 or higher than 9.5	NM	
Article III J 5	Discharging any wastewater containing concentrations of Acrolein in excess of 0.30 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Acrylonitrile in excess of 8.40 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Benzene in excess of 0.85 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Bromoform in excess of 1.00 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Carbon Tetrachloride in excess of 0.15 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Chlorobenzene in excess of 10.60 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Chloroethane in excess of 21.50 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Chloroform in excess of 1.75 mg/l	NM	

Rule Citation		Type of Violation	Grace Period
Article III J 5	Discharging any wastewater containing concentrations of 1,2-Dichlorobenzene in excess of 21.60 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,4-Dichlorobenzene in excess of 26.30 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,1-Dichloroethane in excess of 19.40 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,2-Dichloroethane in excess of 4.50 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,1-Dichloroethylene in excess of 0.14 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,2-Trans- Dichloroethylene in excess of 17.00 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,2-Dichloropropane in excess of 21.20 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Ethyl Benzene in excess of 9.30 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Methylene Chloride in excess of 17.00 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,1,2,2-Tetrachloroethane in excess of 3.85 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Tetrachloroethylene in excess of 1.80 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Toluene in excess of 8.10 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,1,1-Trichloroethane in excess of 65.00 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of 1,1,2-Trichloroethane in excess of 8.60 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Trichloroethylene in excess of 3.30 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Trichlorofluoromethane in excess of 6.25 mg/l	NM	
Article III J 5	Discharging any wastewater containing concentrations of Vinyl Chloride in excess of 0.00024 mg/l	NM	
Article III J 6	Discharging any wastewater containing any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the Authority Treatment Works or its operation	NM	
Article III J 6	Discharging any wastewater with two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) by more than five percent (5%) or any single reading over ten percent (10%) of the Lower Explosive Limit (standard methane calibration)	NM	
Article III J 7	Discharging any wastewater containing more than 0.5 mg/l of cyanide	NM	
Article III J 8	Discharging any wastewater containing more than 1.0 mg/l of copper	NM	
Article III J 9	Discharging any wastewater containing more than the allowable loading (lbs/day) of cadmium that is allocated to each user of cadmium as determined by the Authority on a case by case basis based on the users average daily flow and an allowable concentration of 2.70 mg/l.	NM	

Rule Citation		Type of Violation	Grace Period
Article III K	Failure to provide laboratory analyses performed by a NJDEP or EPA certified laboratory	NM	
Article III M	Discharging increased process or cooling water to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the National Categorical Pretreatment Standards, or any other pollutant-specific limitation developed by the Authority or NJDEP	NM	
Article III N	Failure to design and construct connections to the local sewer system to conform to the requirements and procedures set forth in the Authority's "Standards for Connection to Authority Sewers and Related Requirements" (Appendix A) and all applicable State and local building and plumbing codes	NM	
Article IV A 2	Failure to demonstrate that in-plant modifications will reduce or eliminate the discharge of such substances so the discharge will be in conformity with these Rules and Regulations	NM	
Article IV A 3	Failure to install pretreatment, including storage facilities, or flow equalization necessary to reduce or eliminate objectionable characteristics or substances so that the discharge will not violate the Rules and Regulations	NM	
Article IV A 4	Failure to pay any additional cost or expense incurred by the municipality and the Authority for handling and treating excess loads imposed on the local sewer system and the Authority Treatment Works	M	30 days
Article IV A 5	Failure to take remedial action as may be deemed to be desirable or necessary to achieve the purpose of the Rules and Regulations	NM	
Article IV B	Failure to provide for review and approval where pretreatment or equalization of wastewater flows prior to discharge into the local sewer system or the Authority Treatment Works is required, plans, specifications, and other pertinent data or information relating to such pretreatment or flow-control facilities	NM	
Article IV B	Failure to obtain prior approval from the Authority for any subsequent alterations or additions to pretreatment or flow-control facilities	NM	
Article IV C	Failure to maintain pretreatment facilities continuously in satisfactory and effective operation by the owner or operator at his expense, subject to the requirements of these Rules and Regulations and all other applicable codes, ordinances and laws	NM	
Article IV D	Failure to allow representatives of the Authority, upon presentation of proper credentials, the right to enter and inspect the subject premises, for the purposes of insuring compliance with the Rules and Regulations, and other applicable laws and regulations	NM	
Article IV D	Failure to allow the representatives of the Authority ready access to all parts of the premises for the purposes of inspection, sampling, records examination or in the performance of any of their duties.	NM	
Article IV D	Failure to allow the Authority, Municipality, NJDEP and the EPA the right to set upon the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations	NM	
Article IV E	Failure to provide protection from accidental discharge of prohibited materials or other regulated wastes	NM	
Article IV E	Failure to provide to the Executive Director for review and approval, detailed plans showing facilities and operating procedures to provide protection from accidental discharge before construction of the facility	NM	

Rule Citation		Type of Violation	Grace Period
Article IV E	Failure to provide submission of a Slug Discharge Control Plan if needed	NM	
Article IV F	Failure to report an accidental and/or non-compliance discharge	NM	
Article IV G	Failure to permanently post on the permittee's bulletin board or other prominent place advising all employees of the responsible person to call in the event of an accidental or non-compliance discharge	NM	
Article IV G	Failure to insure that all employees, who could cause such an accidental or non-compliance discharge to occur, are advised of the emergency notification procedure.	NM	
Article IV I	Failure to promptly notify the Authority in advance of any substantial change in the volume or character of pollutants in their discharge	NM	
Article V B	Failure to obtain a Treated Groundwater or Industrial Wastewater Discharge Permit from the Authority	NM	
Article V B	Failure to provide any supplemental information for the applications for Treated Groundwater or Industrial Wastewater Discharge Permits such as plans, specifications or other information considered pertinent by the Authority	M	30 days
Article V B	Failure to provide the application fee as designated by the Treated Groundwater or Industrial Wastewater Discharge Permit Application Fee Schedule	M	30 days
Article V B 1 a	Failure to provide all information required by the permit application issued by the Authority	M	30 days
Article V B 1 b	Failure to provide all information required to complete a questionnaire or other form determined to be appropriate by the Authority	M	30 days
Article V B 1 c	Failure to provide all information necessary and appropriate to determine compliance with National Categorical Pretreatment Standards, including information necessary to determine classification under such standards	NM	
Article V B 1 d	Failure to provide current sampling and analysis data and design data descriptive of each of the wastewaters to be discharged	NM	
Article V B 1 e	Failure to provide all other information necessary to the determination of compliance with these Rules and Regulations	NM	
Article V B 1 f	Failure to submit a statement and supporting data regarding whether or not the requirements of the Rules and Regulations and of the pertinent National Categorical Pretreatment Standards are being met and, if not, how they will be met by process modification, additional operation and maintenance (O & M) or additional pretreatment	NM	
Article V B 2	Failure to submit the shortest compliance schedule for process modification, additional pretreatment or additional O & M if required to meet the applicable standards	NM	
Article V B 2 c	Failure to submit a progress report including, at a minimum, compliance with the increment of progress to be met on such date and, if not in compliance, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the user to return to the schedule established	NM	
Article V C	Failure to comply with the promulgation or revision of a previously promulgated National Categorical Pretreatment Standard with 180 days	NM	
Article V C	Failure to submit to the Authority the information required to complete the revision within sixty (60) days of the request for such information	NM	

Rule Citation		Type of Violation	Grace Period
Article V C	Failure to advise the Authority of changes and proposed changes in its discharge resulting from promulgation or revision of such Standard whether or not the Authority requests such information or otherwise notifies the user	NM	
Article V D	Failure to comply with equivalent concentration limits	NM	
Article V E	Failure to comply with equivalent mass limits	NM	
Article V H	Failure to apply for a permit re-issuance prior to the expiration of the permittee's existing permit	NM	
Article V I	Failure to obtain prior written approval of the Authority for reassigning or transferring a Treated Groundwater or Industrial Wastewater Discharge Permit	NM	
Article V J	Failure to pay the annual Treated Groundwater or Industrial Wastewater Discharge Permit fee	NM	
Article V K	Failure to submit Periodic Compliance or Self-Monitoring Reports on a semi-annual basis, unless required more frequently	NM	
Article V L	Failure to maintain and operate monitoring facilities to allow inspection, sampling and flow measurement of the sewer connection	NM	
Article V L	Failure to maintain at all times the safe and proper operating condition of monitoring facilities and kept secure from unauthorized tampering and accessible to authorized personnel	NM	
Article V L	Failure to construct sampling and monitoring facilities in accordance with the Authority's requirements and all applicable local construction standards and specifications	NM	
Article V L	Failure to submit for approval by the Authority all plans and specifications for sampling and monitoring facilities before construction	NM	
Article V N	Failure to submit all Treated Groundwater or Industrial Wastewater Discharge Permit conditioned submittals, including but not limited to Compliance or Self Monitoring Reports and Compliance Schedule Reports signed by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility, who may, in his absence, authorize another responsible high ranking official who shall, however, be liable in all instances for the accuracy of all the information provided on the Report	NM	
Article V N	Failure to provide amendments to the Report to which the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility was not a signatory	NM	
Article VI K 1	Failure to report an effluent limitation that causes injury to persons, or damage to the environment, or poses a threat to human health or the environment, within two (2) hours of the occurrence, or of the Person becoming aware of the occurrence.	NM	
Article VI K 1	Failure to provide within twenty-four (24) hours thereof, or within twenty-four (24) hours of an exceedance, or of becoming aware of an exceedance, of a toxic pollutant, such additional information on the discharge as may be required by the Industrial Pretreatment Program Coordinator, including an estimate of the danger posed by the discharge to the environment, whether the discharge is continuing, and the measures taken or being taken to remediate the problem and any damage to the environment, and to avoid a repetition of the problem.	NM	

Rule Citation		Type of Violation	Grace Period
Article VI K 2	Failure to report any serious violation (as defined by N.J.S.A 8:10A-3(v)) within thirty (30) days of the violation and provide a statement indicating that the Person understands the civil administrative penalties required to be assessed for serious violations, and explaining the nature of the serious violation and the measures taken to remedy the cause or prevent a recurrence of the serious violation	NM	
Article VI K 3	Failure to submit whenever any Person in any month commits a serious violation (as defined by N.J.S.A. 58:10A-3(v)), a completed discharge monitoring report, or exceeds an effluent limitation for the same pollutant at the same discharge point source by any amount for four out of six (6) consecutive months, that Person shall file monthly reports with the Authority's Industrial Pretreatment Program Coordinator.	NM	
Article VI K 5	Failure to submit increased self-monitoring and reporting by any Person who has violated or is violating these Rules and Regulations, or a permit or agreement issued hereunder, to the extent that such increased self- monitoring and reporting is reasonably related to monitoring the degree of such violation and/or confirming that the violation has been corrected and is not recurring.	NM	
Article VI O 2	Failure of a person asserting an Upset as an affirmative defense, except in the case of an approved maintenance operation, notifying the Authority of an Upset within 24 hours of the occurrence, or of becoming aware of the occurrence, and, within five (5) days thereof, submitting written documentation, including properly signed, contemporaneous operating logs, or other relevant evidence, on the circumstances of the violation, and demonstrating, as applicable, that: the Upset occurred, including the cause of the Upset and, as necessary, the identity of the person causing the Upset; the permitted facility was at the time being properly operated; the person submitted notice of the Upset as required pursuant to this section, or, in the case of an Upset resulting from the performance by the permittee of maintenance operations, the permittee provided prior notice and received an approval therefore from the Authority; and the person complied with any remedial measures required by the Authority.	NM	

Rule Citation		Type of Violation	Grace Period
Article VI O 3	Failure of a person asserting an unanticipated Bypass as an affirmative defense to notify the Authority of the unanticipated Bypass within 24 hours of its occurrence, and, within five (5) days thereof, submitting written documentation, including properly signed, contemporaneous operation logs, or other relevant evidence, on the circumstances of the violation, and demonstrating that: the unanticipated Bypass occurred, including the circumstances leading to the Bypass; the permitted facility was at the time being properly operated; the person submitted notice of the Bypass as required pursuant to this section; the person complied with any remedial measures required by the Authority; the Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and there was no feasible alternative to the Bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime, except that the provisions of this paragraph shall not apply to a Bypass occurring during normal periods of equipment downtime or preventive maintenance if, on the basis of the reasonable engineering judgement of the Authority, back-up equipment should have been installed to avoid the need for a bypass.	NM	
Appendix D Section II D 2(a)	Failure to submit Self-Monitoring Reports required by a discharge permit issued by the Authority.	NM	
Appendix D Section II D 2(a)	Failure to submit, for existing sources of discharge, a Baseline Report within 180 days after the effective date of a Categorical Pretreatment Standard, or 180 days after the final administrative decision made upon a category determination submission under 40 CFR Part 403.6 (a) (4), whichever is later.	NM	
Appendix D Section II D 2(a)	Failure to submit, for new sources of discharge and sources that become Industrial Users subsequent to the promulgation of an applicable Categorical Standard, a Baseline Monitoring Report.	NM	
Appendix D Section II D 2(a)	Failure to submit a Report on Compliance with Categorical Pretreatment Standard Deadline within 90 days following the date for final compliance with applicable Categorical Pretreatment Standards, or in the case of a new source, following commencement of the introduction of wastewater into the Authority's treatment works, interceptor sewers or local sewers connected thereto.	NM	
Appendix D Section II D 2(a)	Failure to submit Periodic Reports on Continued Compliance for Industrial Users Subject to Categorical Pretreatment Standards during the months of June and December unless required more frequently in the pretreatment standard or by the Authority or NJDEP	NM	
Appendix D Section II D 2(a)	Failure to notify the Authority immediately of all discharges that could cause problems to the Authority's treatment works, including any slug loadings.	NM	

Rule Citation		Type of Violation	Grace Period
Appendix D Section II D 2(a)	Failure to submit monitoring and analysis to demonstrate continued compliance including the flow and the nature and concentration, or production and mass where requested by the Authority, of pollutants contained therein which are limited by the applicable Pretreatment Standards. If sampling performed by a user indicates a violation, the user shall notify the Authority within 24 hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Authority within 30 days after becoming aware of the violation, except the user is not required to resample if the Authority performs sampling at the user at a frequency of at least once per month, or the Authority performs sampling at the user between the time when the user performs its initial sampling and the time when the user receives the results of this sampling.	NM	
Appendix D Section II D 2(a)	Failure to submit appropriate reporting from those users with discharges that are not subject to Categorical Pretreatment Standards.	NM	
Appendix D Section II D 2(a)	Failure of any user subject to reporting requirements to retain for a minimum of 5 years any records of monitoring activities and results (whether or not such monitoring activities are required) and shall make such records available for inspection and copying by the Authority and NJDEP. This period of retention shall be extended during the course of any unresolved litigation regarding a user or when requested by the Authority or NJDEP.	NM	
Appendix D Section II D 2(a)	Failure to notify the Authority, the USEPA Regional Waste Management Division Director, and NJDEP in writing of any discharge into the Authority's treatment works, intercepting sewer or local sewer of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.	NM	
Appendix D Section II D 2(b)	Failure to provide additional self-monitoring reports for any exceedance of an effluent limitation that causes injury to persons, or damage to the environment, or poses a threat to human health or the environment, within two (2) hours of its occurrence, or of the permittee becoming aware of its occurrence. Within twenty-four (24) hours of an event described above, or of an exceedance, or of becoming aware of an exceedance of an effluent limitation for a toxic pollutant, a permittee shall provide such additional information on the discharge as may be required by the Authority, including an estimate of the danger posed by the discharge to the environment, whether the discharge is continuing, and the measures taken, or being taken, to remediate the problem and any damage to the environment, and to avoid a repetition of the problem.	NM	
Appendix D Section II D 2(b)	Failure to file monthly reports if the permittee in any month commits a Serious Violation or fails to submit a completed discharge monitoring report and such failure to report continues unabated following thirty (30) days notice from the Authority; or exceeds an effluent limitation for the same pollutant at the same discharge point source by any amount for four (4) out of six (6) consecutive months (in the case of a permittee who files monthly reports).	NM	
Appendix D Section II D 2(b)	Failure to report to the Authority any Serious Violation within thirty (30) days of the violation, together with a statement explaining the nature of the serious violation and the measures taken to remedy the cause or prevent a recurrence of the serious violation.	NM	

Rule Citation		Type of Violation	Grace Period
Appendix D Section II D 2(b)	Failure to notify the Authority in advance of the quality and quantity of all new introductions of pollutants into the Authority's treatment works or a local sewer system and of any substantial change in the pollutants introduced into a facility by an existing user of the facility. The notification shall estimate the effects of the changes on the effluents to be discharged into the facility	NM	
Appendix D Section II E	Failure to provide the right of entry to all premises in which a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept, for purposes of inspection, sampling, copying or photographing.	NM	

## ARTICLE VI

### ENFORCEMENT

#### **A. General Provisions**

The Authority may take any and all actions and pursue any and all remedies permitted by federal law and the laws of the state of New Jersey, including without limitation, the Act and the State Act, to enforce the provisions of these Rules and Regulations. These actions and remedies shall include, but not necessarily be limited to, those set forth in this Article VI. Wherever in this Article VI reference is made by title to any official or employee of the Authority, it shall be understood that such official or employee shall act as the duly appointed representative of the Executive Director. The Executive Director shall at all times have the right to undertake any action delegated to such official or employee or authorize other authority officials or employees to undertake such delegated duties as well.

#### **B. Available Enforcement Actions**

Enforcement Actions available to the Authority include, but are not necessarily limited to, the following:

1. Issue an order to comply in accordance with the provisions of Section 10 of P.L. 1977, c.74 (N.J.S.A. 58:10A-10);
2. Bring a civil action in accordance with the provisions of Section 10 of P.L. 1977, c.74 (N.J.S.A. 58:10A-10);
3. Issue a summons in accordance with the provisions of Section 1 of P.L. 1991, c.8 (N.J.S.A. 58:10A-10.4);
4. Issue a civil administrative penalty in accordance with the provisions of Section 2 of P.L. 1991, c.8 (N.J.S.A. 58:10A-10.5);
5. Bring an action for a civil penalty in accordance with the provisions of Section 10 of P.L. 1977, c.74 (N.J.S.A. 58:10A-10);
6. Petition for the commencement of a criminal action in accordance with the provisions of Section 10 of P.L. 1977, c.74 (N.J.S.A. 58:10A-10);
7. Seek injunctive relief against a violation or threatened violation in accordance with the provisions of Section 7 of P.L. 1972, c.42, as amended by Section 18 of P.L. 1990, c.28 (N.J.S.A. 58:11-55); and
8. Seal or close off sewerage connections in accordance with the provisions of Section 8 of P.L. 1972, c.42 (N.J.S.A. 58:11-56).

In the event of a violation of any rule, regulation or pretreatment standard adopted by the Authority, the Authority shall take one of the enforcement actions set forth above or obtain injunctive relief against the violation. If applicable, the Authority shall assess civil administrative penalties in amounts no less than the minimums set forth in Section N of this Article VI. Of the amount of any penalty assessed and collected pursuant to an action brought by the Authority in accordance with Article VI of these Rules and Regulations, 10% shall be deposited in the Wastewater Treatment Operators' Training Account established in accordance with Section 13 of P.L. 1990, c. 28 (*N.J.S.A. 58:10A-14.5*). The remainder shall be used by the Authority solely for enforcement purposes and for upgrading the Authority's Treatment Works. Nothing contained in this section shall be construed to prohibit or otherwise limit the Authority from pursuing any other remedy permitted by federal law and the laws of the State of New Jersey.

**C. Notice of Violation**

Whenever the Authority's Industrial Pretreatment Program Coordinator finds that any person has violated or is violating these Rules and Regulations, or a permit, order or agreement issued hereunder, the Industrial Pretreatment Program Coordinator or his duly appointed representative shall serve upon said Person written notice of the violation. Said notice shall identify the nature of the violation which is believed to have occurred and shall include notice of the potential statutory penalties associated with such violation. Within ten (10) days of receipt of said notice, the Person deemed to be in violation shall submit to the Industrial Pretreatment Program Coordinator, an explanation detailing the time(s) and date(s) that the violation occurred and a plan (including specific actions to be taken and a schedule for those actions) for the satisfactory correction of ongoing violations and prevention of future violations. Compliance with the requirements of this Section C shall in no way relieve the Person deemed to be in violation or any other Person responsible for the violation of any liability or responsibility for violations occurring before or after receipt of the Notice of Violation.

**D. Compliance Order**

1. Whenever the Industrial Pretreatment Program Coordinator finds that any Person has violated or is violating these Rules and Regulations, or a permit, order or agreement issued hereunder, the Industrial Pretreatment Program Coordinator may issue an order (1) specifying the provision or provisions of these Rules and Regulations, or permit or order, issued thereunder, of which the Person is in violation; (2) citing the action which caused said violation; (3) requiring compliance with such provision or provisions, and (4) giving notice to the Person of his right to a hearing on the matters contained in the order. The Compliance Order shall include a schedule for compliance and may include accelerated monitoring and reporting requirements for a period of time necessary to reasonably insure that the violation has been corrected, as deemed necessary by the Industrial Pretreatment Program Coordinator. Compliance Orders may also contain such other requirements as might be reasonably necessary and appropriate

to address the noncompliance, including the installation of pretreatment technology, additional self- monitoring and management practices.

2. Any person having received a Compliance Order hereunder may request a hearing to contest the underlying basis for such Compliance Order by filing a request for a hearing with the Industrial Pretreatment Program Coordinator within ten (10) days of receipt of the Compliance Order. Such request shall state which portions of the Compliance Order will be contested and the factual and legal basis therefore. Hearings shall be conducted in accordance with the procedures set forth in Section F - Show Cause Hearing of these Rules and Regulations. Whether or not a request for a hearing is made, immediate enforcement action may be pursued.
3. A Compliance Order may also include, if deemed appropriate by the Industrial Pretreatment Program Coordinator a list of penalties, assessments and damages that the Authority would impose through Civil Administrative Penalty (see Section H of this Article VI), Civil Action (see Section G of this Article VI) or Civil Penalty (see Section I of this Article VI) in the event of a violation of the Compliance Order or any of the milestones contained therein.

**E. Consent Agreement**

1. The Executive Director is hereby empowered to enter into agreements with the Person responsible for noncompliance with these Rules and Regulations, or a permit or order issued hereunder, setting forth specific action to be taken by the person in noncompliance to correct the noncompliance within a scheduled time period. The agreement may also include, if deemed appropriate by the Executive Director, provisions for the payment of compensation to the Authority for costs of investigation, inspection or monitoring which led to establishment of the violation; the reasonable cost of removing, correcting or terminating the adverse effects upon water quality resulting from the noncompliance; compensatory damages for any loss or destruction of wildlife, fish or aquatic life, or other natural resources, and any other actual damages caused by the violation; and the actual amount of any economic benefits accruing to the Person in noncompliance as a result of the violation, including (1) the amount of any savings realized from avoided capital or non-capital costs resulting from the violation, (2) the return earned or that may be earned on the amount of avoided costs, (3) any benefits accruing to the Person in noncompliance as a result of competitive market advantage enjoyed by reason of the violation, or (4) any other benefits resulting from the violation.
2. The Authority shall afford an opportunity to the public to comment on a proposed Consent Agreement prior to final adoption if the Consent Agreement would establish interim enforcement limits that would relax effluent limitations established in a permit or a prior enforcement action. The Authority shall provide public notice of the proposed Consent Agreement, and announce the length of the comment period, which shall be not less than 30 days, commencing from the date of publication of the notice. A notice shall also include a summary statement

describing the nature of the violation necessitating the Consent Agreement and its terms or conditions; shall specify how additional information on the Consent Agreement may be obtained; and shall identify to whom written comments are to be submitted. At least three days prior to publication of the notice, a written notice, containing the same information to be provided in the published notice, shall be mailed to the mayor or chief executive officer and governing body of the municipality and county in which the violation occurred, and to any other interested persons, including any other governmental agencies. The Authority shall consider the written comments received during the comment period prior to final adoption of the Consent Agreement. Not later than the date that final action is taken on the proposed order, the Authority shall notify each person or group having submitted written comments of the main provisions of the approved Consent Agreement and respond to the comments received therefrom.

3. The Authority, on its own initiative or at the request of any person submitting written comments pursuant to Subsection 2 of this section, may hold a public hearing on a proposed Consent Agreement, prior to final adoption if the order would establish interim enforcement limits that would relax for more than 24 months effluent limitations established in a permit or a prior enforcement action. Public notice for the public hearing to be held pursuant to this subsection shall be published not more than 30 and not less than 15 days prior to the holding of the hearing. The hearing shall be held in the municipality in which the violation, necessitating the consent order, occurred. The Authority may recover all reasonable costs directly incurred in scheduling and holding the public hearing from the person requesting or requiring the interim enforcement limits.

**F. Show Cause Hearing**

1. The Industrial Pretreatment Program Coordinator may order any Person he finds to be in violation of these Rules and Regulations, or a permit, order or agreement issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the Person specifying the time and place for the hearing, the proposed enforcement action, the reason for such action, and a request that the Person show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any agent or officer of a corporation. Whether or not a duly notified Person appears as noticed, immediate enforcement action may be pursued.
2. The Authority may itself conduct the hearing and take the evidence, or may designate any of its members or any officer or employee to:
  - a. Issue in the name of the Authority notices of hearings requesting the attendance and testimony of witnesses and production of evidence relevant to any matter involved in any such hearings.

- b. Take the evidence.
  - c. Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the Authority for action thereon.
3. At any order to show cause hearing, testimony taken before the hearing authority or any Person designated by it, must be under oath and recorded stenographically. The transcript, or any part thereof, so recorded, will be made available to any member of the public upon payment of the cost of preparing same. The Authority, however, may, pursuant to the Open Public Meetings Act (N.J.S.A. 10:4-6, et seq.), order certain portions of the hearing be held in private session. The transcript of any hearing held in private session will not be made available to members of the public except as provided by the Open Public Meetings Act.
  4. After the Authority has reviewed the evidence, it may issue a Compliance Order to the Person in violation directing that the proposed enforcement action be taken, directing that a different enforcement action be taken or directing that no enforcement action be taken.
  5. After the Authority has reviewed the evidence, it may also issue an order to the Person found to be in violation directing that, following a specified time period, the sewer service be discontinued unless adequate pretreatment facilities, devices or other related appurtenances shall have been installed or existing pretreatment facilities, devices or other related appurtenances are properly operated. Any Person ordered to suspend sewer service shall immediately stop or eliminate the discharge. In the event of a failure of the Person to comply with the suspension order, the Authority shall take such steps as deemed necessary including immediate severance of the sewer connection. The Authority shall reinstate service only upon proof of the elimination of the non-complying discharge.

**G. Civil Action**

Whenever the Executive Director finds that any Person has violated or is violating these Rules and Regulations, or a permit, order or agreement issued hereunder, the Executive Director is authorized through legal counsel, to commence a Civil Action in the Superior Court of New Jersey, Bergen County for appropriate relief for any such violation. Such relief may include, singly or in combination:

1. A temporary or permanent injunction;
2. Assessment of the violator for the reasonable costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation and for the reasonable costs of preparing and litigating the case.

3. Assessment of the violator for the reasonable cost incurred by the Authority in removing, correcting or terminating the adverse effects upon water quality resulting from any unauthorized discharge of pollutants for which the action under this Section G may have been brought;
4. Assessment against the violator of compensatory damages for any loss or destruction of wildlife, fish or aquatic life, or other natural resource, and for any other actual damages caused by unauthorized discharge;
5. Assessment against a violator of the actual amount of any economic benefits accruing to the violator from a violation. Economic benefits may include the amount of any savings realized from avoided capital or non-capital costs resulting from the violation; the return earned or that may be earned on the amount of avoided costs; any benefits accruing to the violator as a result of a competitive market advantage enjoyed by reason of the violation; or any other benefits resulting from the violation; and
6. Any other remedy allowed pursuant to Federal, State or local law, including, without limitation, the Act and the State Act.

#### **H. Civil Administrative Penalty**

1. The Executive Director, may after consultation with a compliance officer designated by NJDEP, issue a civil administrative penalty for any violation of the provisions of P.L. 1977, c.74 (*N.J.S.A. 58: 10A-1 et. seq.*) including a violation of any rule, regulation or pretreatment standard adopted by the Authority, in an amount not to exceed \$50,000.00 for each violation, with each day during which such violation continues constituting an additional, separate and distinct offense, or assess by civil administrative order, any costs recoverable pursuant to Section G of Article VI of these Rules and Regulations, including the reasonable costs of investigation and inspection, and preparing and litigating the case before an administrative law judge pursuant to Subsection (1) of this section, except assessments for compensatory damages and economic benefits. Notice of the penalty of assessment shall be given to the violator in writing by the Authority, and payment of the penalty of assessment shall be due and payable, unless a hearing is requested in writing by the violator, within 20 days of receipt of notice. If a hearing is requested, the penalty or assessment shall be deemed a contested case and shall be submitted to the office of Administrative Law for an administrative hearing in accordance with Sections 9 and 10 of P.L. 1968, c.410 (*N.J.S.A. 52:14B-9 and 52:14B-10*). Any amount assessed under this section shall fall within a range established by the Authority for violations of similar type, seriousness and duration, as set forth in the Authority's Enforcement Response Plan, attached and incorporated into these Rules and Regulations as Appendix D hereto.

2. Upon conclusion of an administrative hearing held pursuant to Subsection 1 of this section, the administrative law judge shall prepare and transmit a recommended report and decision on the case to the Executive Director and to each party of record, as prescribed in Subsection C of Section 10 of P.L. 1968, c.410 (*N.J.S.A. 52:14B-10*). The Executive Director shall afford each party of record an opportunity to file exceptions, objections and replies thereto, and to present arguments, either orally or in writing, as required by the Authority. After reviewing the record of the administrative law judge, and any filings received thereon, but not later than 45 days after receipt of the record and decision, the Executive Director shall adopt, reject, or modify the recommended report and decision. If the Executive Director fails to modify or reject the report within the 45 day period, the decision of the administrative law judge shall be deemed adopted as the final decision of the Executive Director and the recommended report and decision shall be made a part of the record in the case. For good cause shown, and upon certification by the Director of the Office of Administrative Law and the Executive Director, the time limits established herein may be extended.
3. A final decision or order of the Executive Director shall be in writing or stated in the record. A final decision shall include separately stated findings of fact and conclusions of law, based upon the evidence of record at the hearing of the administrative law judge. Findings of fact shall be accompanied by a concise and explicit statement of the underlying facts supporting the findings. A final decision or order may incorporate by reference any or all of the recommendations of the administrative law judge.

Parties of record shall be notified either by personal service or by mail of any final decision or order. Upon request, a copy of the decision or order shall be delivered or mailed forthwith by registered or certified mail to each party of record and to a party's attorney of record.

A final decision or order shall be effective on the date of delivery or mailing, whichever is sooner, to the party or parties of record, or shall be effective on any date thereafter, as the Authority may provide in the decision or order. The date of delivery or mailing shall be stamped on the face of the final decision or order. A final decision or order shall be considered a final agency action, and shall be appealable in the same manner as a final agency action of a State department or agency.

4.
  - a. A person who is assessed a civil administrative penalty, or is subject to a loan assessment levied pursuant to Subsection 1 of this section, and fails to contest or to pay the penalty or assessment, or fails to enter into a payment schedule with the Authority within 30 days of the date that the penalty or assessment is due and owing, shall be subject to an interest charge on the amount of the penalty or assessment from the date that the amount was due and owing. The

- rate of interest shall be that authorized pursuant to paragraph (a) of this Subsection 4.
- b. Any person who fails to pay a civil administrative penalty or assessment, in whole or in part, when due and owing, or who fails to agree to a payment schedule therefore, shall be subject to the civil penalty provisions of Subsection E of Section 5 of P.L. 1977, c.74 (*N.J.S.A. 58:10A-10*) (see Section I of Article VI of these Rules and Regulations).
  - c. A civil Administrative penalty or assessment imposed pursuant to a final order:
    - (i) may be collected or enforced by summary proceeding in a court of competent jurisdiction in accordance with the "Penalty Enforcement Law" (*N.J.S.A. 2A 58-1 et.seq.*); or
    - (ii) shall constitute a debt of the violator, and the civil administrative penalty may be docketed with the clerk of the Superior Court, and shall have the same standing as any judgment docketed pursuant to *N.J.S.A. 2A: 16-1*.
5. The Authority shall also recover from the violator, any costs or fees paid to the Office of Administrative Law for the costs of an administrative hearing provided pursuant to Subsection 1 of this section along with such other costs as may be recoverable for preparing and litigating the case, so long as the Authority is the prevailing party at said hearing. An assessment for hearing costs shall be included in the final decision or order issued by the Executive Director.

#### **I. Civil Penalty**

1. Whenever the Executive Director finds that any Person has violated or is violating these Rules and Regulations, or a permit, order or agreement issued hereunder, or that any person has failed to pay a civil administrative penalty or assessment, in whole or in part, when due and owing, or has failed to agree to a payment schedule therefore, the Executive Director is authorized, through legal counsel, to commence a Civil Action in the Superior Court of New Jersey, Bergen County in a summary proceeding pursuant to "The Penalty Enforcement Law" (*N.J.S.A. 2A: 58-1 et. seq.*) for the assessment of a Civil Penalty not to exceed \$50,000.00 per day of such violation, with each day's continuance of a violation to constitute a separate violation. The Authority may also seek an assessment of costs, interest charges and actual economic benefits accruing to the violator from violation.
2. The decision as to whether to seek a court order imposing such a penalty and the amount of such a penalty shall be made with due regard given to the seriousness of the particular violation and the seriousness of the conduct which give rise to the violation. The amount of the Civil Penalty to be sought in connection with any such Civil Action shall be determined in accordance with the Enforcement Response Plan approved by the Authority and attached hereto as Appendix D.

3. Anything in Subsections 1 and 2 of this section to the contrary notwithstanding, the Executive Director is authorized to issue a summons to any Person who violates P.L. 1977, c.74 (*N.J.S.A. 58:10A-1, et. seq.*) or any rule, regulation or pretreatment standard adopted by the Authority if the amount of the civil penalty assessed is \$5,000 or less. The summons shall be enforceable, in accordance with the "Penalty Enforcement Law", *N.J.S.A. 2A:58-1 et seq.*, in the municipal court of the territorial jurisdiction in which the violation occurred. The summons shall be signed and issued by the Executive Director, or in his absence the Chief Engineer. Proceedings before, and appeals from a decision of a municipal court shall be in accordance with the Rules Governing the Court of the State of New Jersey. Of the penalty amount collected, pursuant to an action brought in a municipal court pursuant to this section, 10% shall be paid to the municipality or municipalities in which the court retains jurisdiction for use for court purposes, with the remainder to be retained by the Authority.

**J. Criminal Violations**

The Executive Director is authorized to petition the Bergen County Prosecutor or the Attorney General for the State of New Jersey to bring a criminal action against any Person suspected of being in violation of any law subjecting the violator to criminal penalties, which violation has caused or will cause an impact upon the Authority, its facilities or the operation of same. Such action shall be taken pursuant to the provisions of Section 3 or P.L. 1990, c.28 (*N.J.S.A. 58:10A-6(i)*) and the penalties to be sought shall be in accordance with Section 5 or P.L. 1990, c.28 (*N.J.S.A. 58:10A 10(f)*).

**K. Increased Self-Monitoring and Reporting**

Notwithstanding the reporting requirements stipulated in a permit for discharge to the Authority Treatment Works or local sewer system to the contrary, any person who has violated or is violating these Rules and Regulations, or a permit, order or agreement issued hereunder shall be subject to the following:

1. Whenever any Person exceeds an effluent limitation that causes injury to persons, or damage to the environment, or poses a threat to human health or the environment, that Person shall, within two (2) hours of the occurrence, or of the Person becoming aware of the occurrence, report the exceedance to the Authority's Industrial Pretreatment Coordinator. Within twenty-four (24) hours thereof, or within twenty-four (24) hours of an exceedance, or of becoming aware of an exceedance, of a toxic pollutant, a Person shall provide the Industrial Pretreatment Coordinator with such additional information on the discharge as may be required by the Industrial Pretreatment Program Coordinator, including an estimate of the danger posed by the discharge to the environment, whether the discharge is continuing, and the measures taken or being taken to remediate the problem and any damage to the environment, and to avoid a repetition of the problem.

2. Notwithstanding the reporting requirements stipulated in a permit for discharge, whenever any Person commits a serious violation (as defined by N.J.S.A 8:10A-3(v)) that Person shall report to the Authority the occurrence of the serious violation within thirty (30) days of the violation and shall provide a statement indicating that the Person understands the civil administrative penalties required to be assessed for serious violations, and explaining the nature of the serious violation and the measures taken to remedy the cause or prevent a recurrence of the serious violation.
3. Notwithstanding the reporting requirements stipulated in a permit for discharge, whenever any Person in any month commits a serious violation (as defined by N.J.S.A. 58:10A-3(v)), fails to submit a completed discharge monitoring report, or exceeds an effluent limitation for the same pollutant at the same discharge point source by any amount for four out of six (6) consecutive months, that Person shall file monthly reports with the Authority's Industrial Pretreatment Program Coordinator. The reporting requirements stipulated in the permit may be restored if the Person has not committed any of the violations identified in this paragraph 2 for six consecutive months.
4. The terms "Toxic Pollutant" and "Serious Violation" shall have those meanings assigned to them by *N.J.S.A. 58:10 A-3*.
5. The Authority's Industrial Pretreatment Program Coordinator may also require increased self-monitoring and reporting by any Person who has violated or is violating these Rules and Regulations, or a permit or agreement issued hereunder, to the extent that such increased self- monitoring and reporting is reasonably related to monitoring the degree of such violation and/or confirming that the violation has been corrected and is not recurring.

**L. Public Notification of Permit Violations**

The Authority shall annually publish in the newspaper, pursuant to *40 CFR 403.8(f)(2)(vii)*, a list of the users that were in Federal significant noncompliance (as defined in Article II of the Rules and Regulations) with applicable pretreatment requirements during the twelve (12) previous months. The notification shall also summarize any actions taken against the user(s) during the same twelve (12) months. All records relating to compliance with applicable standards shall be made available to officials of the EPA or NJDEP upon request.

**M. Discharges Affecting Health or the Environment**

1. The Executive Director shall have the authority to immediately halt or prevent any discharge of pollutants to the Authority Treatment Works or local sewer system which reasonably appears to present an imminent endangerment to the health or welfare of persons. This authority shall include, but not be limited to, the right to seek injunctive relief and/or seal or close off such sewerage connections to the Authority Treatment Works or local sewer system. Such actions shall be taken after informal notice to the discharger. Informal notice may be oral or written, delivered to the highest ranking representative reasonably available at the site of the discharge at the time the notice is given, describing the nature of the perceived violation, demanding an immediate halt to the violating discharge, and generally describing the actions to be taken should the violating discharge not be immediately halted. Inability to furnish such informal notice prior to taking measures to halt the discharge after reasonable attempts to do so shall not preclude the Authority from undertaking any remedy allowed hereunder.
2. The Executive Director shall have the authority, after formal notice and the opportunity to respond, to halt or prevent any discharge to the Authority Treatment Works or local sewer system which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the Authority's Treatment Works. This authority shall include, but not be limited to, the right to seek injunctive relief and/or seal or close off such sewerage connections to the Authority Treatment Works or local sewer system. The requirements for formal notice and opportunity to be heard shall be satisfied through following the procedural requirements set forth in Section F - Show Cause Hearing of this Article VI.

**N. Mandatory Civil Administrative Penalties**

Under the provisions of Article VI, Section B of these Rules and Regulations, or any other section of these Rules and Regulations to the contrary notwithstanding, the Authority shall assess, as a minimum, with no discretion, a mandatory civil administrative penalty for the violations enumerated in Subsections 1, 2, and 3) of this section.

1. The Authority shall assess, as a minimum, a mandatory civil administrative penalty of \$1,000 against a violator for each serious violation, as defined by *N.J.S.A. 58:10A - 3(v)*, which assessment shall be made within six (6) months of the serious violation.
2. The Authority shall assess a minimum mandatory civil administrative penalty of \$5,000 against a violator for the violation that causes the violator to be, or to continue to be, a significant non-complier, as that term is defined by *N.J.S.A. 58:10A-3(w)*.
3. The Authority shall assess a minimum mandatory civil administrative penalty of \$100 for each effluent parameter omitted on a discharge monitoring report

required to be submitted to the Authority, and each day during which the effluent parameter information is overdue shall constitute an additional, separate and distinct offense, except that in no instance shall the total civil administrative penalty assessed pursuant to this subsection exceed \$50,000 per month for any one (1) discharge monitoring report. The civil administrative penalty assessed pursuant to this subsection shall accrue as of the fifth day following the date on which the discharge monitoring report was due and shall continue to accrue for 30 days. The Executive Director may continue to assess civil administrative penalties beyond the 30-day period until submission of the overdue discharge monitoring report or overdue information. A Person may contest the assessment of the civil administrative penalty required to be assessed pursuant to this subsection by notifying the Executive Director in writing, within 30 days of the date on which the effluent parameter information was required to be submitted to the Authority, of the existence of extenuating circumstances beyond the control of the Person, including circumstances that prevented timely submission of the discharge monitoring report, or portion thereof, or, if the civil administrative penalty is imposed because of an inadvertent omission of one or more effluent parameters, the Person may submit, without liability for a civil administrative penalty assessed pursuant to this subsection or Subsection 2 of this section, the omitted information within 10 days of receipt by the Person of notice of omission of the parameter or parameters.

4. If a violator establishes, to the satisfaction of the Authority, that a single operational occurrence has resulted in the simultaneous violation of more than one (1) pollutant parameter, the Authority may consider, for purposes of calculating the mandatory civil administrative penalties to be assessed pursuant to Subsections 1 and 2 of this section, the violation of the interrelated permit parameters to be a single violation.
5. The requirement that the Authority assess a minimum civil administrative penalty pursuant to this section shall in no way be construed to limit the authority of the Authority to assess a civil administrative penalty or bring an action for a civil penalty for a violation at any time after a violation occurred or to assess a more stringent civil administrative penalty or civil penalty against a person pursuant to the State Act, the Act or any other provision of these Rules and Regulations.
6. A violation under this section is non-minor and, therefore, not subject to a grace period.

**O. Affirmative Defenses**

1. A person may be entitled to an affirmative defense to liability for a mandatory assessment of a civil administrative penalty pursuant to Section N of Article VI of these Rules and Regulations; for liability for assessment of a Civil Administrative Penalty pursuant to Section H of Article VI of these Rules and Regulations; or for any monetary civil damages or monetary penalty assessed by the Authority pursuant to other enforcement actions available to the Authority under Article VI

of these Rules and Regulations, assessed due to a violation of an effluent limitation occurring as a result of an upset, an anticipated or unanticipated bypass, or a testing or laboratory error. A person shall be entitled to an affirmative defense only if, in the determination of the Authority, the person satisfies the provisions of Subsection 2, 3, 5, or 6, as applicable, of this section. The terms "Upset" and "Bypass" shall be as defined in Article II of these Rules and Regulations.

2. A person asserting an Upset as an affirmative defense pursuant to this section, except in the case of an approved maintenance operation, shall notify the Authority of an Upset within 24 hours of the occurrence, or of becoming aware of the occurrence, and, within five (5) days thereof, shall submit written documentation, including properly signed, contemporaneous operating logs, or other relevant evidence, on the circumstances of the violation, and demonstrating, as applicable, that:
  - a. the Upset occurred, including the cause of the Upset and, as necessary, the identity of the person causing the Upset;
  - b. the permitted facility was at the time being properly operated;
  - c. the person submitted notice of the Upset as required pursuant to this section, or, in the case of an Upset resulting from the performance by the permittee of maintenance operations, the permittee provided prior notice and received an approval therefore from the Authority; and
  - d. the person complied with any remedial measures required by the Authority.
3. A person asserting an unanticipated Bypass as an affirmative defense pursuant to this section shall notify the Authority of the unanticipated Bypass within 24 hours of its occurrence, and, within five (5) days thereof, shall submit written documentation, including properly signed, contemporaneous operation logs, or other relevant evidence, on the circumstances of the violation, and demonstrating that:
  - a. the unanticipated Bypass occurred, including the circumstances leading to the Bypass;
  - b. the permitted facility was at the time being properly operated;
  - c. the person submitted notice of the Bypass as required pursuant to this section;
  - d. the person complied with any remedial measures required by the Authority;
  - e. the Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

- f. there was no feasible alternative to the Bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime, except that the provisions of this paragraph shall not apply to a Bypass occurring during normal periods of equipment downtime or preventive maintenance if, on the basis of the reasonable engineering judgement of the Authority, back-up equipment should have been installed to avoid the need for a bypass.
4. Nothing contained in Subsection 2 or 3 of this section shall be construed to limit the requirement to comply with Article VI, Section K(1) of these Rules and Regulations.
5. A person may assert an anticipated Bypass as an affirmative defense pursuant to this section only if the person provided prior notice to the Authority, if possible, at least 10 days prior to the date of the Bypass, and the Authority approved the Bypass, and if the person is able to demonstrate that:
  - a. the Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
  - b. there was no feasible alternative to the Bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime, except that the provisions of this paragraph shall not apply to a Bypass occurring during normal periods of equipment downtime or preventive maintenance if, on the basis of the reasonable engineering judgement of the Authority, back-up equipment should have been installed to avoid the need for a Bypass.
6. A person asserting a testing or laboratory error as an affirmative defense pursuant to this section shall have the burden to demonstrate, to the satisfaction of the Authority, that a serious violation involving the exceedance of an effluent limitation was the result of unanticipated test interferences, sample contamination, analytical defects, or procedural deficiencies in sampling or other similar circumstances beyond the control of the permittee.
7. An assertion of an Upset, a Bypass or a testing or laboratory error as an affirmative defense pursuant to this section may not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
8. If the Authority determines, pursuant to the provisions of this section, that a violation of an effluent limitation was caused by an Upset, a Bypass or a testing or laboratory error, the Executive Director shall waive any mandatory civil administrative penalty required to be assessed pursuant to Section M of these

Rules and Regulations for such violation, as well as any other civil or administrative penalty or civil damages which the Authority is entitled to assess or seek as a result of such violation.

**P. Enforcement Response Plan**

The Authority has adopted, attached hereto, and incorporated by reference into these Rules and Regulations an Enforcement Response Plan as set forth in Appendix D. The purpose of the Enforcement Response Plan is to set forth procedures and guidelines summarizing how the Authority will investigate and respond to instances of user noncompliance.

The Enforcement Response Plan includes a section summarizing the enforcement responses to be taken by the Authority (the Enforcement Response Summary). The Enforcement Response Plan and Enforcement Response Summary contained therein are to be used to encourage prompt and efficient implementation of response actions. They are not intended to restrict the Authority's ability to apply other enforcement responses available by law when warranted by the facts and circumstances of any particular case.

**Q. Grace Period Applicability; Procedures**

1. Each violation identified in the table at Article III Section P by an “M” in the Type of Violation column and for which the conditions at 3 below are satisfied, is a minor violation, and is subject to a grace period, the length of which is indicated in the column with the heading Grace Period.
2. Each violation identified in the table at Article III Section P by an “NM” in the Type of Violation column is a non-minor violation and is not subject to a grace period.
3. The Authority shall provide a grace period for any violation identified as minor under this section, provided the following conditions are met:
  - a. The violation is not the result of the purposeful, knowing, reckless or criminally negligent conduct of the person responsible for the violation;
  - b. The violation poses minimal risk to the public health, safety and natural resources;
  - c. The violation does not materially and substantially undermine or impair the goals of the regulatory program;
  - d. The activity or condition constituting the violation is capable of being corrected and compliance achieved within the time prescribed by the Authority;
  - e. The activity or condition constituting the violation has existed for less than 12 months prior to the date of discovery by the Authority;
  - f. In the case of a violation that involves a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Authority as responsible for a violation of the same requirement of the same permit within the preceding 12-month period;



- iii. iv. Whether the delay will materially or substantially undermine or impair the goals of the regulatory program.
- f. If the person responsible for the minor violation fails to demonstrate to the Authority that the violation has been corrected and compliance achieved within the specified grace period or within the approved extension, if any, the Authority may, in accordance with the provisions of this chapter, impose a penalty that is retroactive to the date the notice of violation under 4 a) was issued.
- g. The person responsible for a minor violation shall not request more than one extension of a grace period specified in a notice of violation.



## **ARTICLE VII**

### **USER CHARGES**

The Authority shall notify each municipality and non-municipal Tier I users of the total charges for services rendered by the Authority. In addition, the Authority shall provide each municipality with the total charges for services rendered to each Tier II customer located within the municipality. Such notification shall delineate the amount of the service charge attributable to operation, maintenance and debt service costs as determined by the User Charge System. Each municipality shall collect on behalf of and forward to the Authority, user charges from all users and user classes within each municipality, as calculated by the Authority's User Charge System (Appendix B), in accordance with a method approved by the United States Environmental Protection Agency.



## **ARTICLE VIII**

### **SEWER USE ORDINANCE**

Each municipality shall adopt and enforce a Sewer Use Ordinance that shall include provisions no less stringent than those contained in these Rules and Regulations and the Authority's Model Ordinance (Appendix C).



## **ARTICLE IX**

### **ADOPTION OF USER CHARGE SYSTEM AND SEWER USE REGULATIONS**

Each municipality from which the Bergen County Utilities Authority accepts wastewaters and sewage for treatment shall adopt and implement a User Charge System in accordance with these Rules and Regulations. In addition, each municipality shall enact a sewer use ordinance regulating the use of sanitary sewers that connect into the Bergen County Utilities Authority sewer system, in accordance with the sewer use requirements of Rules and Regulations. Municipal Ordinances adopting the User Charge System and sewer use regulations shall be enacted within ninety (90) days from the date of passage of these Rules and Regulations.



## ARTICLE X

### CONNECTION FEES

**K. Introduction** – Pursuant to N.J.S.A. 40:14B-22, the Authority hereby adopts a program of imposing a connection fee on each individual or entity making a direct or indirect connection to the Authority’s sanitary wastewater collection and treatment system (the “System”).

**L. Requirement of a Connection Fee** –Except as listed herein, any person seeking to construct a direct or indirect connection to a municipal sewer system or the Authority’s System shall pay a connection fee to the Authority. With respect to developments where construction has not yet begun at the time of the adoption of this regulation, the connection fee shall be paid prior to the commencement of construction. With respect to developments where construction has begun, but no direct or indirect connection has been made to the System at the time of the adoption of this regulation, the connection fee shall be paid prior to the direct or indirect connection to the System.

The connection fee shall be computed in accordance with the formula set forth in N.J.S.A. 40:14B-22 and shall be recomputed each year as required by that statute. For purposes of that formula (i) the Authority hereby adopts the figure of 300 gallons per day as the “equivalent service unit”, based upon the projected flow for a single family dwelling having three or more bedrooms as provided in N.J.A.C. 7:14A-23.3 and (ii) the number of gallons per day produced by a particular connection shall be computed in accordance with N.J.A.C. 7:14A-23.3, to the extent the proposed development is covered by those criteria. To the extent the proposed development is not covered by the criteria in N.J.A.C. 7:14A-23.3, the projected flow shall be proposed by the applicant based on similar operations or best professional judgment and such projection shall be accepted, rejected or modified by the Chief Engineer for the Authority, exercising his reasonable discretion. The foregoing references to N.J.S.A. 40:14B-22 and to N.J.A.C. 7:14A-23.3 shall all be interpreted to mean that statute and that regulation, as same may be amended from time to time.

In the event a development serviced by an existing direct or indirect connection to the System is demolished, in whole or in part, and new development is constructed in its place at the same location, the applicant shall be entitled to a credit against the gallonage to be produced by the proposed development for the gallonage attributable to the structures which are being demolished in order for the development to proceed.

**M. Notification by Member Municipalities** –Each municipality which conveys wastewater to the Authority for treatment shall establish procedures to notify the

Authority of all new connections expected or requested to be made. The Authority shall establish forms, from time to time, for the use by each municipality in reporting the aforesaid information, and each municipality shall utilize the prescribed forms. Each municipality shall require each applicant for a construction permit to pay the applicable connection fee directly to the Authority prior to the issuance of a building permit. The Authority shall notify the municipality when the connection fee has been paid.

The Authority shall pay each municipality a service fee of 15% of the connection fee, not to exceed \$5,000.00 per development, for its services in reporting the required information and in requiring the applicant to pay the connection fee. Such service fee shall be payable only if (i) the municipality reports the expected or requested connection in a timely manner and (ii) the connection fee is actually paid to the Authority. All such payments of connection fees shall be made to the municipalities on an annual basis and shall be subject to adjustment for connection fees which were refunded during the same year.

## **ARTICLE XI**

### **AMENDMENT OF RULES AND REGULATIONS**

These Rules and Regulations may be amended by a Resolution of the Board of Commissioners of the The Bergen County Utilities Authority, provided that prior to enacting such amendments, each member municipality is given forty-five (45) days notice in writing of the amendment and an opportunity to comment on same at a public hearing.



**SUPPLEMENT**  
**TREATED GROUND WATER**  
**OR**  
**INDUSTRIAL WASTEWATER DISCHARGE PERMIT**

**APPLICATION FEE SCHEDULE (\$)**

<u>Avg. Discharge (gpd)</u>	<u>Non-Categorical</u>	<u>Categorical</u>
≤999	500	750
1,000 - 1,999	1,000	1,500
2,000 - 4,999	2,000	3,000
5,000 - 9,999	2,500	4,000
10,000 - 24,999	3,000	4,500
≥25,000	4,000	6,000

**ANNUAL PERMIT FEE SCHEDULE (\$)**

<u>Avg. Discharge (gpd)</u>	<u>Non-Categorical</u>	<u>Categorical</u>
≤999	750	4,000
1,000 - 1,999	1,500	5,000
2,000 - 4,999	2,000	5,750
5,000 - 9,999	2,500	6,300
10,000 - 24,999	3,250	7,000
≥25,000	4,500	7,500





**APPENDIX A**

**BCUA STANDARDS  
FOR CONNECTION TO AND RELOCATION OF  
AUTHORITY SEWERS  
AND  
RELATED REQUIREMENTS**

**October 2010**



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## INTRODUCTION

The purpose of these standards and specifications is to provide the basic requirements of the Bergen County Utilities Authority for all construction and relocations involving Authority Facilities. These documents are to be used by Professional Engineers in preparing plans and specifications for work involving Authority Facilities.

The information in these documents is general and must be adapted to conform to the particular requirements for the planned project.

The Authority accepts no responsibility as to the exactness of these documents. The Authority reserves the right to modify or change these standards and details at any time without notice to any party having received a copy of these documents.

Additionally the Authority reserves the right to impose supplemental requirements on specific projects as deemed necessary for the best interests of the Authority.

The use of these standards in no way precludes the requirement that the proposed work comply with latest Federal, State or Local requirements for such work.

All connection applications must be approved by the concerned Municipality, as the resulting connection will become a legal addition to the Municipal contract with the Bergen County Utilities Authority.

A sewer connection or relocation application should be filled out in quadruplicate and together with four copies of plans, section, details, specifications, required design computation, and sewer system master plan for unsewered areas should be transmitted to the Bergen County Utilities Authority Administration Building, Foot of Mehrhof Road, Little Ferry, New Jersey 07643.

A certified check for the application fee set forth in the Application Fee Schedule shall accompany the completed application.

It is essential to public health that the operation of existing sewerage facilities be maintained. Interruptions of normal operations shall be held to the minimum necessary for construction purposes, and only such changes in the normal operating procedures as are approved in writing by the Authority will be permitted. The Applicant will be required to work in close cooperation and coordination with the Authority to assure that a minimum of changes in the normal operating procedures and a minimum of nuisances result from his operations.

From the commencement of the work until its completion, the Applicant is solely responsible for the damage he may do or cause to Authority structures. The Authority may suspend construction operations when in its judgement, the conditions are unsuitable or the proper precautions are not being taken to properly protect Authority structures, whatever the weather may be and in any season. At no time during construction shall any

material be stored in Authority easements over existing Authority facilities to such a height that may cause damage to said facilities.

The Applicant shall restore all Authority areas and structures that have been disturbed by his operations, to their original condition or to a condition satisfactory to the Authority.

## **GENERAL REQUIREMENTS**

### **A. APPROVAL OF PLANS AND SPECIFICATIONS**

Approval of final plan and specifications must be obtained in writing from the Bergen County Utilities Authority prior to commencement of work.

### **B. “BUY AMERICAN” PROVISION**

All items or materials used in the construction of sewer mains or sewer related appurtenances, which are constructed by a private contractor for a customer but which are to be deeded or dedicated to the Authority and accepted by the Authority for ownership and maintenance, shall be manufactured products of the United States, wherever possible.

### **C. ESCROW FEES AND ESCROW ACCOUNTS**

- 1) Escrow fees shall be posted by the Applicant in the amount specified in these rules and regulations prior to commencement of work. The funds so posted shall be held by the Authority in an escrow account. The Authority shall, from time to time, withdraw funds from this escrow account to reimburse itself for costs incurred by the BCUA for inspection, engineering review, legal review or for other services provided to or on behalf of the Applicant by the Authority. In the event that the escrow fund is depleted or in deficit, the Applicant shall post additional escrow funds with the Authority in an amount to be set by the Authority. Any funds held in the escrow account shall not bear interest for the Applicant, unless otherwise provided by the Statute.
- 2) The Applicant may request the return of any unused portion of the escrowed funds at the completion or termination of construction and after the Authority has accepted all improvements, or after final release of all maintenance guarantees, whichever is later.
- 3) The Authority, in its discretion, may refuse to process any application or issue any permit if there is a deficit in the escrow amount of any Applicant.

### **D. TREATMENT WORKS APPROVAL APPLICATIONS**

- 1) All applications for treatment works approval shall be prepared by the Applicant at his sole expense and shall be subject to review and approval by the Authority and shall be submitted to NJDEP in the name of the Authority as the Applicant. All rights or entitlement contained in a treatment works approval permit issued by NJDEP shall belong to the Authority and not to the Applicant. The Authority reserves the right to withhold the submission of a treatment works approval to NJDEP for good

cause. The Authority shall have the right to surrender any treatment works approval to NJDEP if substantial construction of the project has not yet begun.

- 2) FINAL PLANNING BOARD APPROVAL (if applicable) SHALL BE A CONDITION PRECEDENT TO THE SUBMISSION OF A TREATMENT WORKS APPROVAL TO THE AUTHORITY FOR APPROVAL.

#### E. EASEMENTS

Permanent easements are required for all facilities, which the applicant proposes be “turned over” to the Bergen County Utilities Authority. The requirements of the Authority as to easements should be obtained directly from the Authority or its counsel. If the Authority elects to accept dedication, the permanent easements shall be dedicated to the Authority as part of Authority obtaining ownership of the facilities.

For pipe diameters up to 36-inches inclusively, easement width shall be 25’ minimum. Pipe diameters over 36-inches shall be 30’ minimum. Final determination of easement width shall be subject to the review of the Authority’s Engineer.

The sewer shall be generally located at the centerline of the easement. Under all conditions, meter chambers and all other facilities must clear the edge of the easement by a minimum of 10’, or as directed by the Authority’s Engineer.

#### F. METERING

Should a proposed connection enter an Authority Sewer downstream of an existing Authority meter; and should the projected flow be great enough to be metered; the Applicant shall construct according to Authority standards, large enough to meter the proposed ultimate flow and any flow from adjacent undeveloped areas that may flow through this meter.

The appurtenances installed with the flume shall have a rated capacity capable of metering initial flows. This rated capacity shall be shown on the drawings. Any replacement equipment needed to increase the capacity of the meter to handle ultimate flows shall be provided by the Authority during construction at no cost to the Authority.

Hydraulic computations showing flow levels in the flume under ultimate peak flow conditions must be included with the contract documents for the meter chamber submitted to the Authority for review and approval. These computations are to show non-submergence of the flume when considering flow levels in the complete system.

## G. PERFORMANCE AND MAINTENANCE GUARANTEES

- 1) "Performance guarantee" and "maintenance guarantee" shall mean either cash, third party surety bonds from a reputable insurance company or third party letters of credit from a financial institution having assets of One Billion Dollars or more, in a form that is acceptable to the Authority. Any letter of credit shall be an "evergreen" letter of credit, which shall be acceptable in form to the Authority in its sole discretion.
- 2) Prior to the commencement of any construction of facilities that either will be dedicated to the Authority or will remain as private property, the Applicant shall post with the Authority a performance guarantee covering said improvements. The amount to be posted under the performance guarantee shall be 120% of the actual construction cost. The Authority shall approve the form of the performance guarantee before it shall be accepted.
- 3) The Applicant may request a reduction in the performance guarantee posted if at least fifty percent (50%) of the improvements constructed are satisfactorily completed and tested in accordance with the BCUA rules, regulations and specifications and if the improvements, in the opinion of the BCUA, are adequately protected from future damage due to continuing construction. The Authority may allow up to a maximum of a seventy percent (75%) reduction of the dollar value of the improvements that are satisfactorily completed, tested and protected.
- 4) Maintenance guarantees for facilities to be dedicated or maintained by the Authority shall be posted upon final acceptance of all sanitary sewer improvements, for a two (2) year period in an amount of 10 percent (10%) of the actual construction cost.
- 5) Final acceptance of the improvements constructed shall not occur until the date that the maintenance guarantee, in a form satisfactory to the Authority, is received by the Authority.

## H. INSPECTION OF CONSTRUCTION

The Authority shall have the right to inspect the construction of all sewer systems and facilities, which shall be dedicated to the Authority to determine whether the systems and facilities are being properly constructed. The cost of inspection shall be borne by the Applicant.

Their inspection or lack of inspection will not constitute a waiver of their rights, acceptance of defective work or unsuitable modifications, or be used as a basis of a claim against the Authority. A minimum of 48 hours notice is required prior to starting work and other critical stages of construction.

The Authority shall inform the applicant of any improper construction or any deviation from the approved plans of the Authority or from its rules, regulations or specifications. The applicant shall thereafter correct any defects or deficiencies at no cost to the Authority. Any unsuitable modifications or damage to the Authority Facilities as a result of the proposed work must be corrected or repaired at no cost to the Authority. The Authority reserves the right to issue a stop-work order to the Applicant in the event of improper construction. The Authority shall be under no obligation to provide sewerage service to an Applicant if the sewer systems and facilities are not built in accordance with the approved construction plans and the Authority's rules, regulations and specifications.

From the commencement of work the work until its completion, the Applicant is required to keep one set of approved drawings on the site available for use by the Authority.

Any deviation from the accepted Plans and Specifications, unsuitable modifications, or damage to Authority Facilities as a result of the proposed work must be corrected or repaired at no cost to the Authority.

#### **I. ACCEPTANCE OF COMPLETED CONSTRUCTION**

- 1) After construction has been completed, the Applicant shall request in writing that the Authority accept the systems and facilities. The Applicant shall, at the time of the request, submit to the Authority any and all completed documents, which are necessary to:
  - a. Dedicate all sewer systems and facilities including mains, force mains, pumping station and any and all related appurtenances, except laterals, to the Authority, which are located in the public right-of-way or in easement areas approved by the Authority;
  - b. Deed (with warranties) at no cost to the Authority, all necessary titles or easements to lands necessary for the maintenance or operation of the sewerage systems and facilities, including easements for extension of mains to adjacent properties;
  - c. Post a two (2) year maintenance bond in the amount of ten percent (10%) of the actual construction cost to cover cost of repairs for any latent defects discovered during the two (2) year period; and
  - d. Furnish to the Authority record drawings of the sewer system and facilities, certified by the engineer for the Applicant.

Upon the completion of all of the requirements herein, the Authority shall determine whether said systems are constructed in accordance with the approved plans and rules, regulations and specifications and shall determine whether all supporting

documents are in order. If all construction and submissions are approved by the Commission and/or designated representative, the Authority shall proceed to accept the systems and facilities so constructed and shall accept and have recorded, wherever necessary, the dedications, deeds, easements, bonds and record drawings. All costs for recording of documents shall be paid by Applicant. The responsibility for all construction, maintenance and cost of operations prior to acceptance by the Authority shall be borne by the Applicant.

- 2) The Authority shall not accept any sewer facilities, which are not located in the public right-of-way or in easement areas approved by the Authority, even if the facilities were bonded improvements. In this event, the Authority shall approve final construction, but shall not accept the facilities, and the facilities shall remain the private property of and shall be maintained by the Applicant.
- 3) If all construction and submissions are approved by the Chief Engineer of the Authority, the offer of dedication shall be presented to the Commissioners of the Authority for their consideration in their full discretion. No acceptance shall be effective unless and until the Commissioner adopt a resolution approving the acceptance. If the Commissioners approve the acceptance of the facilities and the systems so constructed, the Authority shall record, wherever necessary, the dedications, deed, easements, bonds and record drawings.

## APPLICATION, REVIEW, AND INSPECTION FEE SCHEDULE

Application Fee: \$200.00 (NON-REFUNDABLE)

Initial Deposit to initiate review: \$2,000.00

Additional Escrow Fee: (escrowed)

1) Treatment Works/Sewer Main Extensions/Relocation:

2% of Authority Engineer's estimated cost of improvements including mains, manholes, and/or treatment works, and miscellaneous sewerage treatment appurtenances

2) Inspection Fees:

5% of Authority Engineer's estimated cost of improvements including mains, manholes, and/or treatment works, and miscellaneous sewerage treatment appurtenances

The amount which the Authority reimburses itself for the expenses of professional reviews and other services shall be the amount charged to the Authority for said reviews or services which shall be based on the hourly rate or other agreed upon rate then in effect with the person/entity providing said service. In the event that the escrow account is depleted, the Applicant shall post additional funds with the Authority in an amount to be set by the Authority.

## INSURANCE REQUIREMENTS

### **PUBLIC LIABILITY, PROPERTY AND AUTOMOBILE INSURANCE**

- A. The Contractor shall, at his own cost and expense, secure and maintain in force until Contract Completion and at all times thereafter when the Contractor may be correcting, removing or replacing defective work or completing plantings, insurance for damages imposed by law and assumed under the Contract of the kinds and in the amounts hereinafter provided with insurance companies authorized to do business in the State of New Jersey with an A. M. Best Rating of not less than A- and a Financial Size Category Rating of not less than VII.
  
- B. After Notice to Proceed, the Contractor shall furnish to the OWNER a certificate or certificates of insurance, in triplicate, together with declaration of pages, in a form satisfactory to the OWNER, showing that the Contractor has complied with this Section. Insurance binders are not acceptable as proof of insurance coverage. Such certificates shall specifically refer to this Project by project name and contract number. Original copies of the Owner's and Contractor's Protective Liability Insurance (OCPL) policy and the Builders risk Policy shall be provided to the OWNER before starting work.
  
- C. All of the policies of insurance required to be purchased and maintained and the certificates, declaration pages, or other evidence thereof shall contain a provision or endorsement that the coverage afforded is not to be cancelled, materially changed, or renewal refused until at least thirty (30) calendar days prior to written notice has been given to the OWNER by certified mail.
  
- D. Contractor Insurance Requirements: The Contractor shall procure and maintain liability insurance as specified below, to protect the Contractor, the OWNER, ENGINEER and their respective officers, employees and agents against claims of or relating to personal injury (including death) to persons or damage to property which may arise from or in connection with the performance of the work (whether performed on-site or off-site) by the Contractor, its employees, officers, agents, subcontractors or other individuals or entities for whom the Contractor may be contractually or legally responsible from the date of execution of the Contract until Contract Completion.
  - 1. Commercial General Liability: Commercial General Liability is to be written as broad as the standard coverage form currently in use in the State of New Jersey and shall not be circumscribed by any endorsements limiting the breath of coverage. The policy shall include coverage for contractual liability, products, completed operations and any explosion, collapse and underground (XCU) operations. Limits of liability shall not be less than \$5,000,000 combined single limit with excess or umbrella liability coverage with the same terms and conditions as the underlying coverage in an amount such that the primary coverage and

excess/umbrella coverage equals \$5,000,000. The policy shall name the OWNER, the ENGINEER, their respective officers, employees and agents as additional insured's.

2. Automobile Liability Insurance: The Contractor shall carry Automobile Liability Insurance covering owned, non-owned, and hired vehicles. The limits of liability shall not be less than \$1,000,000 combined single limit, each accident for bodily injury and property damage.
3. Workers Compensation and Employer's Liability: Workers Compensation Insurance in accordance with the laws of the State of New Jersey and any other state or federal jurisdiction as is required to protect the employees of the Contractor or any subcontractor who will be engaged in the performance of the work. This policy shall include Employer's Liability protection with a limit of liability of not less than \$1,000,000.
4. Owner's and Contractor's Protective Liability Insurance (OCPL): In addition to the insurance required above, the Contractor shall obtain and maintain a separate Owner's and Contractor's Protective Liability insurance policy for the same limits of liability as specified for the Commercial General Liability insurance. The policy shall be maintained in force for the term of the Contract or for one (1) year, whichever is longer, and shall name the OWNER, the ENGINEER and their respective officers, employees and agents as insured's.
5. Builder's Risk Insurance (if applicable): The Contractor shall provide Special Form Builder's Risk insurance on a completed value basis and in the full amount of the Contract insuring the interest of the OWNER, covering all real and personal property for all risks of physical loss or damage to the project, including coverage while in transit and during storage away from the site, external water damage and debris removal. In the event that the value of the work increases during the course of construction, the value of the insurance shall be immediately increased accordingly.

The Contractor shall maintain such coverage from the date of execution of the Contract until Contract Completion.

Coverage shall include all materials, supplies, assemblies, furnishings and equipment that are intended for specific installation in the project while such materials, supplies, assemblies, furnishings and equipment are located at the site, in transit and while temporarily located away from the site for the purpose of repair, adjustment or storage.

Coverage shall include structures, excavations and foundations, including pilings, demolition, re-excavation and debris removal and operations testing.

The Builder's Risk insurance policy shall be endorsed waiving the insurance company's rights of subrogation and provide that the insurance company will not cancel such insurance without giving thirty (30) day prior written notice to the OWNER.

Deductibles or self-inured retentions with respect to the builder's risk insurance shall be no greater than \$25,000 per claim for flood and earthquake, and not greater than \$10,000 per claim for all other property losses. The Contractor shall bear the cost of all deductibles and self-insured retentions. Notwithstanding any deductible or self-retention, the Contractor shall remain solely liable for the full amount of any item covered by the builder's risk insurance.

The OWNER and the Contractor waive all rights against each other for damages caused by fire or other perils to the extent they are covered by the builder's risk insurance or any other property insurance applicable to the work.

- E. Endorsement and Waivers: The Commercial General Liability Policy, Automobile Liability Policy, and Excess/Umbrella Policies provided by the Contractor shall contain or be endorsed to contain the following provisions:
1. The OWNER, the ENGINEER, and their respective officers, employees and agents shall be covered as additional insured's and respects any and all liability arising out of the work of this Contract.
  2. For any claims related to the Project, the Contractor's insurance coverage shall be primary insurance with respect to the OWNER, the ENGINEER, and their respective officers, employees and agents, and shall specify that coverage, continues notwithstanding the fact that the Contractor has departed from the site. Any insurance or self-insurance maintained by the OWNER, the ENGINEER, and their respective officers, employees and agents shall be in excess of the Contractor's insurance and shall not contribute with it.
  3. Any failure on the part of the Contractor to comply with reporting provisions or other conditions of the policies, any breach of warranty, any action or inaction of the Contractor or others, any foreclosures related to the Project or any change in ownership of all or any portion of the Project shall not affect coverage provided to the OWNER, the ENGINEER, and their respective officers, employees and agents.
  4. The Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. In the event the Commercial General Liability Insurance has an aggregate limit of liability, it shall be endorsed with the Designated Construction Project(s) General Aggregate Limit endorsement (CG 25 03 or equivalent).
  6. The Builder's Risk policy shall contain a waiver of subrogation against the OWNER, the ENGINEER and their respective officers, employees and agents.
- F. Disclaimer: The Contractor and each subcontractor have the responsibility to make sure that their respective e insurance programs fit their particular needs, and it is their responsibility to arrange for and secure any insurance coverage that they deem advisable, whether or not specified herein.
- G. No Recourse: There shall be no recourse against the OWNER or the ENGINEER for payment of premiums or other amounts with respect to the insurance required by the Contractor hereunder.
- H. Right to Remedy: If the Contractor fails to provide insurance as required herein, the OWNER shall have the right, but not the obligation, to purchase such insurance. In such event, the Contract Price shall be reduced by the amount paid for such insurance.

## SECTION I

### EXCAVATION AND EARTHWORK

#### Limits of Excavation

Excavations shall be carried to the dimensions and depths indicated or as necessary. Excavations carried below the depths indicated shall be refilled to the proper grade with thoroughly compacted foundation material or concrete.

In no case shall the earth be plowed, scraped, or dug by machinery within 3 inches of the finished subgrade. The final trimming of the bottoms of excavation shall be done by hand tools just before placing concrete or pipe.

#### Protection of Existing Structures

Excavations made adjacent to or in the proximity of existing structures shall be made with special care and in such a manner as not to damage the structures or disturb the supporting backfill and foundation of such structures.

#### Sheeting and Bracing

Where excavations are made with vertical sides that require supporting, the sheeting and bracing shall be of sufficient strength to sustain the sides of the excavations and to prevent movement which could in any way injure the work.

Sheeting shall be designed so that the lowest brace is no closer than 12 inches above the pipe.

The Applicant shall furnish drawings showing sheeting and bracing methods and for excavations over 12 feet in depth or when the excavation or sheeting method is outside the scope of the requirements of governmental agencies having jurisdiction. The Applicant shall certify to the Authority that the sheeting and bracing design has been checked and approved as adequate and in accordance with existing laws and regulations by a licensed Professional Engineer, and that sheeting and bracing has been constructed in accordance with the design which was checked and approved by said Engineer. If requested by the Authority, computations and substantiating data for review shall be furnished. A certification for design shall be submitted prior to placing any sheeting and bracing, and certification for construction shall be submitted immediately after sheeting and bracing has been constructed.

Special precautions shall be taken where there is additional pressure due to the presence of other structures, and in such case, the Applicant shall submit, for approval, if requested by the Authority, an outline plan showing the lines on which he proposes to drive sheeting, the method proposed for bracing against the loads imposed by the structure, and the order of installation and removal in relation to excavation, backfill and fill.

In locations where sheeting is noted on the Drawings to be left in place, all sheeting and bracing used shall remain in place unless otherwise approved in writing by the Authority.

Where sheeting is to be left in place, it must be driven in advance of excavation or, if approved, as the excavation proceeds. The Applicant will not be permitted to excavate prior to placement of sheeting or to excavate outside the sheeting lines.

### **Drilling and Blasting**

Special care shall be exercised in drilling and blasting adjacent to or in proximity of the existing structures in order to prevent damage to the structures and disturbance of their supporting foundations.

All state, municipal and other governmental regulations, together with such regulations as the Authority may require, regarding the composition, transportation, storage and use of explosive shall be strictly complied with. In particular, all blasting work shall be done in accordance with the requirements of the latest edition of "Rules and Regulations Governing Blasting on Construction and Related Operations" issued by the Department of Labor and Industry of the State of New Jersey.

Blasting shall be carried on only by authorized persons experienced in this line of work and in conformity with all laws and regulations.

### **Dewatering**

The applicant shall provide, operate and maintain satisfactory facilities and equipment including well pointed, if necessary, with which to collect and pump all water entering excavations or other parts of the work, to suitable places for disposal. All excavations shall be kept free of water until the work or structure to be built therein is completed. Settling basins and sumps shall be provided for catching and temporarily holding water pumped from excavations that contain mud, clay, sand, or other material in suspension. Such basins shall be large enough to allow storage time for the settlement of such suspended matter. The settled material shall be cleaned out frequently and disposed. At no time shall ground water or surface water be permitted to enter the Authority system.

In locations where the use of well points would result or is resulting in a lowering of ground water that might endanger adjacent structures, the Applicant shall take necessary steps to protect Authority structures.

Any Authority structure injured or damaged as a result of the lowering of ground water shall be repaired or replaced to the satisfaction of the Authority, at the expense of the Applicant.

### **Tunneling or Jacking**

Where tunneling or jacking is required, the Applicant shall submit to the Authority for approval a description of the equipment and methods to be used.

**Backfill and Fill**

Backfill and fill shall consist of suitably selected earth, free of organic matter, boggy, peaty humus, wood, rubbish, waste, ashes, cinders and rocks or stones. Backfill and fill material shall be from onsite excavation. Otherwise, backfill/fill material shall be gradation designation I-11, per NJDOT Table 901-2, Standard Soil Aggregate Designation, or as directed by the Authority.

Backfill to a height of 2 feet above the top of pipes shall be made with earth free from stones or rock fragments larger than 3 inches. Such backfill shall be uniformly placed in layers of not more than 6 inches uncompacted thickness and shall be compacted with flatfaced mechanical tampers or vibratory compactors depending upon the backfill and fill material.

The density of all backfill shall be at least equal to that of the adjacent undisturbed soil to avoid future unequal settlement.

Where sheeting is withdrawn, all cavities left thereby shall be filled with suitable granular earth, hosed or tamped in place so as to fill all voids thoroughly.

**Foundation Material**

Foundation material shall consist of crushed stone or gravel. Crushed stone or gravel shall consist of hard, sharp, clean material. It shall be free from any considerable amount of flat, laminated or elongated particles and shall be free from shells, clay limestone, shale, or other deleterious matter. Crushed stone or gravel shall be supplied graded as follows:

<b><u>Percent Passing - By Weight</u></b>		
<u>Screen or sieve size</u>	<u>For pipes 30-inches diameter or larger</u>	<u>For pipes less than 30 inches diameter and all other</u>
1 - 1/2"	100	
1 - 1/4"	95 - 100	90 - 100
1"		100
3/4"	50 - 90	90 - 100
1/2"	20 - 70	
3/8"	10 - 40	20 - 55
#4	5 - 20	0 - 10
#8	0 - 2	0 - 5

Foundation material shall be placed and firmly compacted by mechanical tamping equipment. Care shall be taken to place and compact material under pipe haunches.

## SECTION II

### CONCRETE

#### A. MATERIALS

1. **Cement** - All cement shall be portland cement and shall conform to the requirements of ASTM C150. Unless other types are required by these Specifications, or are authorized in writing, Type II cement shall be used.
2. **Air-Entraining Admixtures** - All concrete shall contain an air-entraining admixture conforming to the requirements of ASTM C 260 and shall be equal to Sika AER.
3. **Other Admixtures** - A retarding-densifier admixture shall be an integral part of the design mix. The densifier shall be an adipic acid type, and shall be non-hygroscopic powder or concentrated liquid, free from calcium chloride, foaming and air-entraining agents. A recognized and approved retarding densifier, admixture, is plastiment, as manufactured by the Sika Chemical Corporation.

The use of admixtures to accelerate hardening or for waterproofing will not be permitted.

4. **Aggregates** - Aggregates shall conform to the requirements of ASTM: C33, modified as follows:
  - a. Fine aggregates shall not contain more than 3 percent clay.
  - b. Fine aggregates shall be capable of developing 100 percent of the compressive strength of Ottawa Sand when tested in accordance with ASTM: C87.
  - c. Coarse aggregates shall not have an abrasion loss in excess of 35 percent.
  - d. Coarse aggregates shall not have a loss greater than five percent when subjected to the soundness test.
  - e. Deleterious substances in coarse aggregates shall limit chert to 1 percent, and coal and lignite to 0.5 percent.

Where the clear cover to the reinforcement is 2 inches or more, the maximum size of coarse aggregate shall be 1 - 1/2 inches; where the clear

cover is less than 2 inches, the maximum size of course aggregate shall be 3/4 inch.

5. **Water** - Water shall be clear and free from injurious amounts of oil, acids, alkalis, organic materials or other deleterious substances. If there is any question as to the suitability of the water, it shall be tested in accordance with AASHTO T-26.
6. **Forms** - Form lumber shall be dressed on four sides and only selected boards shall be used for form surfaces in Contact with concrete. Where a smooth surface is required, pressed wood lines or sheet metal forms shall be used.
7. **Form Fastenings** - Form ties and form hangers shall be provided with a water seal and shall be of such type, that after forms are stripped, the ties can be broken back a minimum of 2 inches from the surface of the concrete, or after bolts are removed, the portion of the tie remaining in the concrete shall be no closer than 2 inches to the washers, or other devices within the form which will leave a hole larger than 7/8 inch in diameter or an excessive depression back of the exposed surface of the concrete. To assure a break-back of 2 inches, the portion of the tie that is removed from the concrete shall be coated with a material, which will not prevent bond between the concrete and the mortar patch specified.
8. **Curing Materials**
  - a. Waterproof curing paper shall conform to the requirements of ASTM C171.
  - b. Curing solution shall conform to the requirements of ASTM C309 and shall be equal to Sika Antisol having a pink fugitive dye.
  - c. Polyethylene sheeting shall be 5 mils (0.006 in.) thick equal to Visking Co. VisQueen film.
9. **Waterstops** - Waterstops shall be of polyvinylchloride and shall conform to U.S. Army Corps of Engineer's Specification CRD-C572, shall be 6 inches wide and equal to Sericised/Durajoint Type No. 8 as manufactured by Construction Products Division, W. R. Grace and Company.
10. **Non-Shrink Grout** - Non-shrink grout shall consist of Type II Portland cement and fine sand, and shall contain a compound that will eliminate shrinkage of the grout. The non-shrink grout compound shall be equal to Sika Chemical Corp. Kemox G; Construction Products Division W.R. Grace and Co. and shall be used in strict accordance with the manufacturer's recommendations.
11. **Joint Sealer** - Joint sealer for horizontal joints shall be cold applied, two component polysulfide base joint sealing compound equal to Toch Brothers Division, Carboline Co., Thiotok Sealant P/G; Sonneborn Division of Contech,

Inc., Sonolastic; or equal, and shall conform to the requirements of ANSI A 116.1, Class A, (Self-leveling), and shall be gray in color.

Joint Sealer for vertical joints shall be a cold applied two component polysulfide base joint sealing compound equal to Toch Brothers Divisions, Carboline Co., Thiotok Sealant G/G; Sonneborn Division of Contech, Inc., Sonolastic; or equal, and shall conform to the requirements of ANSI A116.1, Class B, (Non-Sag), and shall be gray in color.

12. **Premolded Joint Filler.**– The premolded joint filler where used shall comply with ASTM : D994, and shall be Serviced Asphalt Expansion Joint Filler, Code 1301 as manufactured by the Dewey and Almy Chemical Division of the W.R. Grace Construction Co., or approved equal. The premoulded joint filler shall be used in accordance with the manufacturer's recommendations
13. **Epoxy Grout** – Epoxy grout shall consist of a two component mineral filled, 100 percent solids thermosetting epoxy polysulfide compound, and shall be Toch Brothers Division, Carboline Co. Epotox 650 Grout; Construction Products Division, W.R. Grace and Co., Epoxitite 2391 Grout or equal. The epoxy grout shall be used in strict accordance with the manufacturer's recommendations.

## **B. FORM DESIGN AND CONSTRUCTION**

Forms shall be tight, adequately constructed, and securely held in place to withstand the load of the fresh concrete and the effects of the vibrating process and to prevent the leakage of mortar.

## **C. CONCRETE MIX REQUIREMENTS**

The concrete mix shall be proportioned by weight and shall be determined on the basis of obtaining concrete having suitable workability, density, impermeability, durability and required strength characteristics, without using an excessive amount of cement.

Concrete mixtures should have the following characteristics:

Specified 28-day Compressive Strength (psi)	Maximum Water-Cement Ratio (Gal.per Bag)	Air Content (% by Vol.)	Slump(In.)
4,000	0.45 by weight	5% ± 1½ %	2 to 3
2,500	5 - 1/2	3 to 5	2 to 5

The 28-day strength of any concrete tested shall be not less than 80 percent of the specified 28-day compressive strength.

1. Mix Proportion

The mix shall be in accordance with ACI 613 and ACI 318

2. Ready Mix Concrete.

Ready mix concrete shall be in accordance with ASTM C94.

3. Concrete shall not be placed in mud or water. Surface of forms, embedded materials, and steel reinforcement that have been encrusted with dried mortar or grout shall be cleaned prior to placing concrete.

4. Where concrete is placed on foundation material, the foundation material shall be blanketed with a 6 mils polyethylene sheeting.

5. All rock surfaces against which concrete is to be placed shall be clean and free from mud, dirt, oil, or other material which may prevent a tight bond between the rock and concrete.

**D. PLACING CONCRETE**

Concreting operations shall be continuous until the pour is completed.

**E. CONCRETING DURING COLD AND HOT WEATHER**

Whenever the temperature is below 40 deg. F. or when it is evident that the temperature will drop below that point, concrete shall not be placed, except when approved by the Authority. If such approval is given, special precautions shall be taken for maintaining the specified temperature of freshly placed concrete.

**F. CONSTRUCTION JOINTS**

Construction joints shall be keyed unless otherwise noted to be roughened. Construction joints shall conform to the details shown and shall be located where they will have the least effect upon the stability, strength and water tightness of the concrete.

Whenever a stoppage of more than 30 minutes occurs in the placing of concrete, due to some emergency, construction joints shall be installed as approved. In order to promote watertightness of structures, concreting operations shall be so scheduled as to provide a delay between pours as follows:

<u>Pours</u>	<u>Minimum Time Between pours (days)</u>
Slab to Slab	7
Wall to Wall	7
Wall to Slab	3
Slab to Wall	1

All construction joints shall have a row of form ties located at a distance of approximately 6 inches from the joint to permit aligning and tightening of the forms for the subsequent section.

Waterstops shall be provided in all construction joints that are exposed to the weather, are below finished grade, or are below maximum water operating level. The waterstop shall be carefully placed so that one-half of the stop will project from the initial pour and will be firmly cast into the succeeding pour. Care shall be taken that the stop does not fold back against the original concrete when the succeeding pour is made.

#### **G. FINISHING CONCRETE**

Immediately after the removal of forms, honeycombing, pockets and open spaces shall be thoroughly wetted and scrubbed with a wire brush and then shall be compactly filled with mortar consisting of one part of portland cement and two parts sand, of the same type and quality as used in the concrete. This shall be done on all surfaces even though they will afterward be coated and/or covered with backfill. All surfaces shall be neatly finished at the edges; sprinkling with dry cement shall not be permitted.

On the interior surfaces of manholes and chambers, all fins and projection shall be ground smooth, but rubbing of entire areas will not be required.

#### **H. CURING OF CONCRETE**

Concrete shall be cured for a period of not less than 7 days. For the first 24 hours of the curing period, a continuous water spray shall be used to keep the concrete continuously moist. After the first 24 hours of the curing period, curing may be by means of a water spray, waterproof curing paper, or curing solution. Water spray shall keep the concrete continuously moist for the period of curing. Waterproof curing paper shall be placed on the concrete with a 6-inch lap on all edges, and sealed with tape. All traces of curing solution if used shall be removed prior to painting.

**I. PROTECTION**

After the curing period, concrete in slabs shall be covered with waterproof curing paper. All seams of such paper shall be overlapped at least 6 inches and sealed with tape.

All concrete shall be protected from injury.

**J. REMOVAL OF FORMS**

Forms shall not be removed until the concrete has hardened sufficiently to safely support its own load plus any superimposed loads that might be placed thereon.

Forms ties shall be broken back immediately after removing forms. The holes left by such ties shall be immediately filled with mortar consisting of one part portland cement and two part sand, of the same type and quality as used in the concrete, and the surface shall be finished with a steel trowel.

**K. BACKFILL AND FILL**

Backfill and fill shall not be placed against concrete walls for a minimum of 28 days after placing of concrete. Where walls span between slabs, the upper slab shall be in place a minimum of 14 days before backfill or fill is placed against the wall.

**L. DEFECTIVE CONCRETE**

Concrete damaged by freezing or by alternate freezing and thawing, or from any other cause, or any concrete work which shall be found defective shall be removed and rebuilt or otherwise made good at no expense to the Authority.

**M. CUTTING AND PATCHING**

Where it becomes necessary to cut walls or floors for installation of pipe, conduits, sleeves, saddles, boxes, inserts, foundation bolts, anchors and other similar work, the location and size of cut and method of cutting shall be submitted to the Authority for approval including a description of the equipment and the methods to be used. Jackhammers will not be permitted. During the progress of work, the exposed ends of pipe shall be provided with temporary covers fitted to the pipe so as to exclude, concrete, brick and other loose material from entering the Authority lines and adjacent work shall not be unnecessarily damaged. On the completion of the cutting, all affected areas shall be restored to the satisfaction to the Authority.

**SECTION III**  
**STEEL ENFORCEMENT**

**A. QUALITY AND GRADE**

All bar reinforcement shall meet the requirements of the "Standard Specification for Deformed Billet Steel Bars for Concrete Reinforcement, " ASTM: A615, Grade 60. No rolled or high carbon steel bars will be permitted in the work.

All steel used for reinforcement purposes shall be of clean, new stock, free from defects and bends not required by the Drawings. For No. 3 bars or larger, only deformed bars meeting the requirements of the Tentative Specifications for Minimum Requirements for the Deformation of Deformed Bars for Concrete Reinforcement, ASTM : A305, shall be used in the work.

**B. PROTECTION**

All steel shall be kept free from oil, grease, dirt or other objectionable adhering substances, and it shall be satisfactorily cleaned of scale and heavy of flaky rust before being placed in the work.

**C. BENDING**

All reinforcing bars shall be bent to the shapes as shown on the Drawings.

All bending shall be in accordance with the recommended practice as set forth in the "Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-315)" published by the American Concrete Institute.

All bars shall be net cold.

Welding of reinforcement shall conform to AWS Standards.

**D. PLACING AND LAPPING**

All placing and lapping shall be in accordance with the recommended practice as set forth in the "Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI-318)" and in the "Standard Building Code Requirements for Reinforced Concrete (ACI-318)" both as published by the American Concrete Institute.

**E. CONCRETE COVER**

Minimum concrete cover the principal reinforcement steel shall be provided not less than indicated below, unless larger cover dimensions are shown on the Approved Drawings.

Concrete poured against earth, rock or polyethylene covered foundation cushion, such as bottom slabs, footings, etc. shall be a minimum of 3 inches

Formed concrete that will be in contact with earth, or water, or over water or exposed to weather shall be a minimum of 3 inches

All other conditions shall have the following minimums:

- Bars larger than #5 .....2 inches
- Bars #5 or smaller .....1-1/2 inches
- Walls .....2 inches

## SECTION IV

### PIPE

#### A. PIPE AND FITTING MATERIALS

Materials for pipe and fittings shall be in accordance with the following schedule:

<u>Pipe Material</u>	<u>Standard</u>	<u>Notes</u>
Reinforced Concrete (PVC Lined)	ASTM : C76 / ACI 350	(1)
Ductile Iron	ANSI/AWWA C151/A21.51	(4)
PVC (Gravity)	AWWA C-900 and C-905	
PVC (Pressure)	AWWA C-900 and C-905	
HDPE	ASTM D-3350 (HDPE material)	
	ASTM F714	
CCFRPM	ASTM D3262	

#### Notes:

1. Only circular reinforcement will be permitted.
2. All ductile iron pipe and fittings to be buried shall be coated on the outside with asphaltic material at least 1 mil thick conforming to the requirements of ANSI/AWWA C110/A21.10, or ANSI/AWWA C153/A21.53. All ductile iron pipe for sanitary sewer service shall not be cement mortar lined but shall be lined with a ceramic epoxy, 40 mils thickness, Protecto 401, or equivalent.

#### B. PIPE JOINTS

All pipe joints shall be of a flexible type and shall be in accordance with the following schedule:

<u>Pipe Material</u>	<u>Standard</u>	<u>Notes</u>
Reinforced Concrete		
Ductile Iron	ANSI/AWWA C151/A21.51	
PVC	ASTM F477	
HDPE	ASTM D3261	
CCFRPM	ASTM D4161	

#### C. PIPE LAYING

All pipe and fittings shall be installed to the lines and elevations shown and in accordance with the manufacturer's requirements. In general, all pipe shall be laid in accordance with the requirements of ASTM D2321 for PVC Pipe, ASTM A476 for ductile iron pipe, and ASTM C1479 for precast concrete pipe.

Suitable tools and equipment shall be used for proper handling, storing and laying pipe and fittings. Each pipe and fitting shall be checked for defects and injuries and laying proceeds. Pipe found to be defective after laying shall be removed and replaced by undamaged pipe.

**D. FLEXIBLE COUPLINGS**

Each flexible sleeve type coupling shall be selected and sized for the type and size of pipe line in which it will be installed and for the pressure to which it will be subjected.

All flexible sleeve type couplings shall be constructed of cast iron equal to those manufactured by Dresser Industries, Inc. or Smith-Blair Products Rockwell International, or equal. All bolts shall be stainless steel.

**E. PIPE LINES KEPT CLEAN**

The interior of the pipe lines shall be cleaned of dirt, cement and superfluous materials of every description, and kept clean.

**F. FIELD TESTS**

The Applicant shall furnish all labor, testing equipment and materials and shall perform the tests described herein at no cost, and to the satisfaction, of the Authority.

Alignment and openness of joints shall be checked in large pipe by inspection and in small diameter pipe with reflected sunlight and flashlights, and if necessary, wooden balls and water. The pipe shall be true to both line and grade; shall be free of cracks and protruding joint materials and shall be clean.

Exfiltration and infiltration tests shall be conducted on completed sections of sewers not to exceed 1000 feet in length, and the test duration shall not be less than 8 hours. Shorter test sections may be required for sewers laid on steep grades. All required pumping shall be carried out.

Sewer pipes shall first be tested for exfiltration. Plugs shall be provided to isolate the test section. The pipe and manholes shall be filled with water to provide at the high point of the test section, a minimum head of 5 feet above ground water or the top of the pipe, whichever is higher. Standpipes or test pits shall be provided for the duration of the test. Volumetric measurement of the water added shall be made. Exfiltration shall be limited to a maximum of 20 gpd per inch of internal diameter per 1000 feet of pipe. Where the difference in elevation between inverts of adjacent manholes exceeds 10 feet, no exfiltration test will be required.

Upon completion of the exfiltration tests, sewer pipes shall be tested for infiltration. Ground water levels shall be permitted to return to their normal levels prior to the test. Infiltration shall be checked using weirs, gages and other measuring devices. Temporary bulkheads shall be provided to shut off all flow from above the section to be tested and pumps shall be provided downstream from the weir, to keep it continuously drained for the duration of the test. Infiltration shall be limited to a maximum of 20 gpd per inch of internal diameter per 1000 feet of pipe. All obvious leaks shall be repaired even though total infiltration meets the requirements. In addition, if requested by the Authority, and at no cost, the line shall be inspected during wet weather.

For the purpose of determining the maximum permissible infiltration and exfiltration, an allowance of 1/2 gallon per manhole per hour should be assumed. If infiltration or exfiltration exceed the specified amounts, the Applicant shall do whatever is necessary to reduce the infiltration or exfiltration to within the specified limit, as approved by the Authority.

## **INFILTRATION PREVENTION INSERTS**

- A. Inserts shall be manufactured from a high-density polyethylene copolymer material that meets ASTM D-1248, Class A, Category 5, Type III.
- B. Inserts shall have a minimum impact brittleness temperature of -105°F in accordance with ASTM D746.
- C. Insert material shall have a minimum softening temperature of 254°F meeting all requirements of ASTM D 1525.
- D. Insert material shall have a minimum tensile strength of 3700 psi and an elongation factor of 800% meeting all requirements of ASTM D 638.
- E. The insert thickness shall be a uniform 1/8" (minimum).
- F. The insert shall be provided with a polypropylene ethylene valve designed to release gas pressure at approximately 1 psi, and vacuum pressure at approximately 2 psi. The valve shall be unaffected by temperatures within a range of -70°F to 350°F. Valve body shall be corrosion and wear resistant.
- G. Insert shall have a corrosion resistant nylon strap installed for easy removal and reinstallation into the manhole frame.
- H. After installation, the insert shall not allow more than 5 gallons of inflow per 24 hours at four feet of water head above the frame.
- I. The insert diameter shall be based on dimensions provided to the manufacturer by the Applicant.
- J. Manhole inserts shall be provided as manufactured by Parson Environmental Products, Inc. (800-356-9023), L.F. Manufacturing, Inc. (800-237-3791) or equivalent.

## SECTION V

### MANHOLES

#### A. MATERIALS

1. Concrete and Steel reinforcement shall be as specified under Section II and III.
2. Segmental concrete block shall conform to the requirements of ASTM C139.
3. Precast concrete pipe manhole risers shall conform to the requirements of ASTM C478 except that joints shall conform to the requirements of ASTM C443.
4. Mortar shall consist of two parts portland cement and five parts sand, thoroughly mixed in the required proportions before adding water.
5. Grout shall be non-shrink grout as specified under Section II.
6. Interior and exterior of manhole to be coated with shop applied epoxy coating.

#### B. CONSTRUCTION

All manholes shall be constructed of precast reinforced concrete.

**Manhole** - The concrete base slab of all manholes shall be constructed on undisturbed subgrade. Waterways shall be formed of the same sizes and shapes as the pipes they connect to. Changes in diameter shall be made gradually and evenly. Special care shall be taken to form channels that will provide the hydraulic conditions for smooth flow; steel throwel finish shall be provided. Slopes shall be provided on the benches adjacent to the waterways.

**Concrete Block** - Manhole chimneys shall be laid in a full bed of mortar, with mortar spread on the sides and ends of each masonry unit, filled solidly with mortar as the work is carried up. The inside of block shall be rubbed with a burlap sack to clean it of spilled mortar epoxy coated. The exterior surface of block shall be plastered with a 3/8-inch layer of mortar. Particular care shall be taken to secure a watertight joint between the manhole chimney and the concrete on which it rests.

Attention is directed to the infiltration and exfiltration requirements as specified under Section IV.

**C. APPURTENANCES**

Castings shall be of the best quality close-grained gray iron conforming to the requirements of ASTM A48, Class 30. The castings shall be free from faults, sponginess, cracks, blowholes, and other defects affecting their strength. They shall be properly cleaned and coated with a waterproof asphaltum applied by immersion, while the casting is hot. Frames and covers shall be machined and match marked to insure a non-chattering fit. Frames shall be to grade on a full bed of grout.

Manhole frames and covers shall be equal to the Campbell Foundry Company Pattern Numbers as specified herein, except for modifications specified herein or shown on the Drawings. All covers shall have a non-skid top pattern and lettering as detailed on the Drawings and the pick holes shall be omitted. Frames and covers for all shallow manholes shall be equal to Campbell Pattern No. 1203 and, where required to be watertight, they shall be equal to (see attached specification on infiltration prevention inserts to replace gasket covers). For all watertight covers bolts shall be AISI Type 304 stainless steel and gaskets shall be neoprene. For watertight manhole frames and covers and for manholes that extend above the existing grade, the frames shall be anchored to the top of the manholes with three 5/8-inch stainless steel drill anchors.

Grating, frame and supports shall conform to the applicable portions of Section VI.

Manhole rungs shall be polypropylene plastic, 1/2" Grade 60 steel reinforced. Manhole rungs in precast concrete manhole shall be placed in careful alignment. The maximum variation from vertical alignment shall be 3/4 inch. Rungs shall be solidly anchored into precast manholes.

Eyebolts shall be drop forged steel with welders eyes equal to Merrill Bros. eyebolts. Sizes and anchorage for eyebolts shall be as detailed. Eyebolt and anchorage shall be galvanized after fabricating.

**D. ADDITIONAL MANHOLE REQUIREMENTS**

**Rungs**

1. Rungs shall be polypropylene steel-reinforced and 12 inches wide with a drop front and non-slip surface.
2. Steel shall be Grade 60.
3. Rungs shall be OSHA compliant.

4. Rungs shall extend 7 inches from the wall and shall be set into the wall at least 3 inches.

### **Pre-cast Manholes**

1. Pre-cast concrete manholes shall be provided and shall conform to ASTM C-478.
2. Butyl-Rubber gaskets conforming to ASTM C990 shall be used to joint manhole section.
3. Provide resilient connectors for pipe to manhole connections conforming to ASTM C923. Provide A-Lok Products or equivalent. Pipe connector shall permit 10-degree deflection without placing any loads on the pipe or manhole.
4. Floatation calculations shall be provided and shall have a safety factor of 1.5 against uplift.
5. Exterior shall be painted with Sherwin-Williams Enviro Green #1136-89 or equivalent 2.0 to 2.5 mils DFT/coat.
6. Interior shall be painted with 2 coats Sherwin-Williams Ceramic White high build epoxy or equivalent, 2.0 to 2.5 mils DFT/coat.
7. Provide infiltration dishes as specified herein.
8. Provide cast iron frame and cover as shown on the construction details.

### **Installation**

1. Manhole walls shall be constructed of precast concrete ring sections. Installation of butyl rubber gaskets for precast manholes shall be in accordance with the manufacturer's recommendations.
2. The invert channels shall be smooth and semicircular in shape conforming to the inside of the adjacent sewer section. Changes in direction of flow shall be made with a smooth curve of as large a radius as the size of the manhole will permit. Changes in size and grade of the channels shall be made gradually and evenly. The invert channels shall be formed in the concrete fill above the manhole base, or shall be half tile laid in concrete, or shall be constructed by laying full section sewer pipe through the manhole and cutting out the top half after the surrounding concrete has hardened. The floor of the manhole outside the channels shall be smooth and shall slope toward the channels not less than one inch (1") per foot nor more than two inches (2") per foot.

3. Construct manholes to the lines and grades shown on the Plans.
4. Frames shall be well set in mortar, making a watertight joint, and shall be adjusted so that the rim is approximately  $\frac{1}{4}$  inch above finished grade. Cover and frame shall have a shop coat of asphaltic pitch and shall have a field coat of similar paint after the frame is set in final position. Rungs shall be provided in the manhole as shown on the Plans.
5. If castings are to be set in concrete or cement mortar, all anchors or bolts shall be in place and position before the concrete or mortar is placed. The casting shall not be disturbed until the mortar or concrete has set.
6. When castings are to be placed upon previously constructed masonry, the bearing surface of masonry shall be brought to line and grade and present an even bearing surface in order that the entire face or back of the casting will come in contact with the masonry. Castings shall be set in mortar beds or anchored to the masonry as indicated.
7. Install inserts in strict accordance with the manufacturer's recommendations as approved by the ENGINEER.
8. Thoroughly clean the seating surfaces of the frames and covers with a wire brush before installing the inserts.

## **SECTION VI**

### **METER CHAMBERS**

#### **CHAMBERS**

Excavation and backfill shall conform to the applicable provisions of Section I. Concrete and reinforcing steel shall conform to the applicable provisions of Section II and III, respectively. Concrete shall be Class 4000 psi. Manhole chimneys, rungs, frame and cover shall conform to the applicable provisions of Section V.

Careful and accurate construction and alignment of concrete, piping and mechanisms for the meter chambers will be required. The Applicant shall do whatever work is necessary to meet the exact dimensions shown on the Drawings. Of critical importance are the alignment of the flume centerline with the upstream approach channel and the exact leveling of the flume to the required elevations. All tolerances shown on the Drawing are "in-place" tolerances.

#### **PARSHALL FLUME**

The Applicant shall furnish and install in each meter chamber one Parshall flume liner with dimensions as indicated on the Drawings and extending the full height of the flume.

The flume size shall be determined by the Applicant's Engineer. Signed and sealed design calculations by a licensed professional engineer shall be submitted to the BCUA prior to fabrication.

The flume liner shall be molded in one piece from polyester plastic resin, reinforced with a fiberglass mat of not less than 30 percent by weight. The interior surface shall have a 10 to 15-mil white gel coat backed by a resin rich layer of resin and chopped glass forming a water and chemical resistant surface. The thickness of the walls shall be a minimum of 1/4 inch.

Parshall Flumes with a 3" throat width shall be reinforced with box section stiffeners down the sides and across the bottom. The stiffeners shall be joined together at the knee to form a rigid dimensionally stable flume.

The flume shall be free standing, strong enough to hold 30 inches depth of water without visible distortion.

Stiffeners across the top shall be permanent FRP pultruded angle/channel or temporary wood spreaders as required, and shall provide sufficient strength and structural support to resist the stresses that occur during shipping and proper installation of the flume.

Locking clips shall be designed as an integral part of the liner and of sufficient numbers to assure permanent alignment. Temporary bracing shall be provided to assure maintenance of dimensions during shipment and installation. Concrete around the flume liner shall be carefully placed by hand.

Tolerances, in-place, for all flume dimensions shall be maintained within the limits shown on the Drawings. Addition of stiffeners, thickening of walls and special procedures for installation shall be provided to achieve this accuracy.

The manufacturer's representative shall perform is site inspection and provide written certification to the BCUA that the installation is in conformance with the manufacturer's requirements prior to acceptance by the BCUA.

The flume liner shall be manufactured by Plasti-Fab of Tualatin, Oregon or equivalent.

### **METERING EQUIPMENT**

The flow metering equipment shall consist of a ultrasonic transmitter and a totalizing-recording receiver. The flow meter shall be a Sigma 980 Flow Meter as described herein.

#### **Receiver**

1. Dimensions: 14.62"H x 11.88"W x 8.26"D
2. Weight: 16.8 lbs.
3. Enclosure: NEMA 4X, IP 66 with front cover closed, UV Resistant
4. Graphic Display; Back-lit LCD
5. Keypad: 19 Position sealed-membrane switch with 4 "soft keys"
6. Totalizer; 8-digit resettable and 8-digit non-resettable
7. Measurement Mode: Parshall Flume
8. Data Logging; "Smart" dynamic memory; 456 bytes, 402 days of level, velocity and rainfall readings at 15 minute intervals plus 300 events.
9. Electrical; 120V; 0.25A
10. Temperature Range; -20C to 50C
11. Humidity; 0-90%, non-condensing
12. Outputs; 2 isolated 4-20mamp output signals, 24Vdc; 600ohms
13. Alarms; 4 form C relays; 5amp
14. Communications; RS-232 SCADA modbus protocol; 14,400pbs Modem; Pager

The Receiver shall be mounted inside an aluminum enclosure. The enclosure and concrete base shall be constructed in accordance BCUA Standard Metering Cabinet and Pedestal Sheet No. 19, except the enclosure and enclosure extension shall be provided by the applicant. Provide all electrical equipment, wiring, conduit and telephone service in accordance with the drawings; Standards for Connection to BCUA Sewers. Enclosure door lock shall be keyed to the BCUA keying system.

## **Transmitter**

1. Operating Frequency; 75kHz
2. Beam Angle; 12 degrees
3. Accuracy; 0.03+/-
4. Range 11.5 inches to 10.7 feet
5. Operating Temperature; -20C to 50C
6. Material; PVC housing with acoustic window
7. Weight; 1.5 lb.
8. Dimensions 5"H x 2.25"D
9. Connection; Bare wire lead connection via terminal blocks

The Applicant shall obtain the exact location of the receiver from the Bergen County Utilities Authority. The Contractor shall submit drawings to the Authority showing the exact location.

The metering equipment shall be installed under the supervision of a qualified Engineer or Superintendent of the manufacturer. A letter from the manufacturer, indicating that the installation is in accordance with their requirements shall be presented to the Authority.

## **ELECTRICAL WORK**

Conduit and wiring shall be installed underground from the utility company's pole to the receiver and thence underground to the transmitter, light and receptacle in the meter chamber. Conduit inside the meter chamber and through the wall shall be 2-inch PVC coated rigid galvanized steel conduit equal to that as manufactured by Precision Polymers, Inc., Rockaway, New Jersey. Conduit outside the meter chamber shall be 2-inch rigid galvanized steel and shall extend to a height of 8 feet above ground at the pole, or to such other height as may be required by the utility company. At the inside face of the meter chamber wall and at the exit point of the outdoor enclosure, the conduit shall be provided with an explosion-proof seal fitting. Underground conduit shall be laid a minimum of 18 inches deep and shall be given a protective coating. The protective coating shall consist of a coat of Koppers 30 Metal Conditioner, or equal, followed by a heavy coat of Koppers No. 50 Special Heavy, or equal. In lieu of the above coating the conduit may be wrapped with "Tapecoat CT" as manufactured by Tapecoat Co., or equal.

Specific wiring, circuit breakers and electrical equipment are shown on the drawings; Standards for Connection to BCUA Sewers.

An explosion proof lighting fixture with a 100-watt lamp, a light switch and a receptacle shall be installed in the meter chamber. The lighting fixture shall be equal to Russell and Stoll, Catalog No. ELJ20G; switch shall be equal to Russell and Stoll, Catalog No. 4411; and receptacle shall be equal to Russell and Stoll, Catalog No. 4462SC. A two-pole heavy-duty explosion proof tumbler switch equal to Russell and Stoll, Catalog No. 4412 shall be installed in the meter chamber as a disconnect switch for the transmitter.

All electrical work shall comply with the requirements of the National Electrical Code, NEMA and the public utility company.

### **HOOK GAUGE**

The hook gauge shall be fabricated from 1/2-inch diameter brass rod bent to the shape of a hook with a long conical point on the short riser. It shall be fastened to the wall of the float well with a bracket, which permits vertical adjustment of the gauge using a simple thumb set screw so that the point of the hook may be set at the same elevation as the level portion of the flume. As an alternate, the Contractor may supply the No. 628 hook gauge as manufactured by W. & L. E. Gurley, Troy, New York.

### **WATERPROOFING**

The Applicant shall apply waterproofing to the exterior surfaces of the meter chamber. The waterproofing system shall consist of 1 coat - RIW Marine Mastic D & D applied to a minimum thickness of 1/8 inch by trowel or spray, as manufactured by Toch Bros., Inc., Paterson, New Jersey, or equal waterproofing system. The waterproofing materials shall be applied in strict accordance with the recommendation of the manufacturer.

### **PAINTING**

Ferrous metalwork inside the meter chamber shall be given two coats of high-build epoxy coating; MAB – 2 coats “Ply-Mastic 650 HB Epoxy 4-6 mils DFT/Coat or equivalent.

Surface preparation and application of coatings shall be in accordance with the manufacturer's recommendations. Color of the finish coats shall be as ordered by the Authority.

On the receiver “traffic box” there shall be painted the designation "B.C.U.A. Station No. \_\_\_\_\_," in letters of a size, style and color to match the existing meters in the system of the Bergen County Utilities Authority. The Station number shall be obtained from the Authority.

## SECTION VII

### INSPECTION, RECORD DRAWINGS AND TESTING

#### 1. SANITARY SEWER MAIN AND MANHOLE INSPECTION

After the construction has been completed on a sanitary sewer line, preliminary inspection and testing may be requested by the Contractor. Inspection will consist of general visual observation of pipe terminations in manholes, backfilling of manhole, rim elevations on manholes, manhole channel construction, sealing and finishing of manholes and general inspection to insure there is no infiltration occurring in the manhole.

#### 2. AS-BUILT REQUIREMENTS

The following procedure defines the minimum requirements imposed on the applicant when submitting as-built sewer main and force main drawings.

The applicant shall meet all the requirements listed under the preliminary submittal requirements section before commencing witnessed testing of any sewer main or force main.

Any submittals not meeting all the minimum requirements listed in the following procedure will not be reviewed by the Authority's Engineer.

#### 3. PRELIMINARY AS-BUILT SUBMITTAL REQUIREMENTS

##### A. General

- 1) This submittal consists of utilizing the approved drawing set with the design information distinguished from the corresponding as-built information. Methods such as circling or drawing a thin line through the design information shall be utilized. The design and as-built information shall be legible.
- 2) Each submittal shall consist of three (3) blue line copies of each drawing included in the as-built transmittal. All drawings shall be signed and sealed by a State of New Jersey licensed surveyor.
- 3) If the alignment of the sewer main or force main has been revised during construction, the as-built alignment shall be shown.
- 4) All titles to easements shall be based on the as-built alignment of the piping. The applicant shall record all BCUA easements with

Bergen County. Documentation substantiating that this has been accomplished shall be submitted to the BCUA.

B. Sewer Mains

- 1) As-built manhole rim elevations shall be provided.
- 2) As-built invert elevation of all pipes penetrating each manhole shall be provided.
- 3) As-built pipe lengths measured from manhole centerline to manhole centerline shall be provided.
- 4) As-built pipe slopes shall be calculated and indicated.
- 5) As-built pipe diameter and pipe material shall be provided.
- 6) The as-built length from each lateral connection to the downstream manhole shall be provided. In addition, the as-built length from the last lateral to the upstream manhole shall be provided.
- 7) Any lateral deviating from the standard wye connection and ¼” per foot slope shall be noted.
- 8) Any lateral installed for a future connection shall have the pipe cover and three (3) tie dimensions taken at the end of the lateral (i.e., measurement from a permanent object; corner of house, catch basin, manhole, etc.).
- 9) Locations of all known utility crossings, as-built concrete encasements, concrete cradles and in place sheeting or shoring shall be noted.
- 10) The as-built manhole frame and cover manufacturer’s name and model number shall be listed.
- 11) With the exceptions of Items 6, 7, 8 and 10, all the above information shall be shown on plan and profile drawings. Said items need only be shown in plan view.

C. Force Mains

- 1) As-built invert elevations at each bend shall be provided. In addition the invert elevation at the force main as-built high point shall be provided.

- 2) At each bend three (3) tie dimensions shall be taken.
- 3) The dimensions for each thrust block shall be provided.
- 4) When restrained joints are provided the dimension to the first unrestrained joint shall be provided.
- 5) Manufacturer's data on air relief valves, gauges and all valves shall be provided separately.
- 6) As-built drawings of any air relief and blowoff chambers shall be provided.
- 7) The as-built pipe length between bends shall be provided.
- 8) As-built pipe diameter and pipe material shall be provided. References to ductile iron pipe being non-cement lined shall be included.
- 9) All bend angles shall be noted.
- 10) All the above information shall be shown on a plan and profile. The profile shall show the location of all crossing utilities and their invert elevation.

**4. FINAL AS-BUILT SUBMITTAL REQUIREMENT**

The final submittal is the record plan which consists of the entire project on one (1) 1" = 100 feet scale plan view with the streets outlined and labeled, and the as-built lateral, sewer main and force main information shown. For smaller projects the record plan scale may be adjusted or the original drawings utilized as a background. The drawing size shall be twenty-four inches (24") by thirty-six inches (36"). Unless the applicant makes other arrangements, the Authority's Engineer shall prepare the final as-built submittal, and the cost shall be borne by the Applicant. Submit six (6) copies and one (1) CD in Adobe (pdf) format.

**5. SANITARY SEWER MAIN TESTING**

All gravity sanitary sewer mains and force mains are required to pass the following tests to insure there will be neither exfiltration nor infiltration.

Gravity Sewer Mains:

- Exfiltration, infiltration and lamping tests.
- Deflection testing (PVC gravity sewer mains only).

Force Mains:

- Exfiltration

No testing by the Authority's Engineer will be conducted until the requirements provided in the as-built section are met.

**6. METHOD OF TESTING – EXFILTRATION TEST FOR GRAVITY SANITARY SEWER LINES**

A. General Requirements

- 1) Perform all tests in presence of the Engineer.
- 2) Conduct exfiltration test when all utilities (including gas, water, telephone, sewers), manholes, and laterals have been installed.
- 3) Establish test sections between consecutive manholes as directed by the Engineer.
- 4) All requirements of this specification shall be met prior to acceptance of sewer facilities by the Chief Engineer of the Authority.

B. Procedure for Exfiltration Test (Low Pressure Air Test, 3.5 lbs.)

- 1) Plug test section of sewer line at each end. Tap one (1) plug and provide air inlet connection for filling pipe from air compressor.
- 2) Cap or plug all service laterals, stubs and fittings connecting to sewer test section, and brace against internal pressure to prevent air leakage by slippage and blowouts.
- 3) Connect air hose to tapped plug selected for air inlet. Connect other end of air hose to portable air control equipment used for controlling air entry rate to sewer test section and monitoring air pressure in pipeline.
- 4) Air control equipment shall include shutoff valve, pressure regulating valve, pressure reduction valve and monitoring pressure

gauge having pressure range from 0 to 5 psi and an accuracy of +0.04 psi.

- 5) Connect another air hose between air compressor (or other source of compressed air) and air control equipment. This completes test equipment setup.
- 6) Supply air to test section slowly, filling pipeline until constant pressure of 3.5 psig is maintained. Air pressure must be regulated to prevent pressure inside the pipe from exceeding 5.0 psig.
- 7) When constant pressure of 3.5 psig is reached, throttle air supply to maintain internal pressure above 3.0 psig for at least five (5) minutes, permitting temperature of entering air to equalize with temperature of pipe wall. During this stabilization period, check all capped and plugged fittings with a soap solution to detect leakage at connections.
- 8) If leakage is detected, release pressure in line and tighten all leaky caps and plugs. Start test operation again by supplying air. When necessary to bleed off air to tighten or repair faulty connection, a new five (5) minute interval shall be allowed after pipeline has been refilled.
- 9) After stabilization period, adjust air pressure to 3.5 psig and shut off or disconnect air supply. Observe gauge until air pressure reaches 3.0 psig. At 3.0 psig commence timing with a stopwatch that is allowed to run until the line pressure drops to 2.5 psig. The time required, as shown on the stopwatch, for a pressure loss of 0.5 psig is used to compute air loss.
- 10) If the time, in minutes and seconds, for the air pressure to drop from 3.0 to 2.5 psig is GREATER than that shown in Table 2 for designated pipe size, the section undergoing testing shall have passed.
- 11) If the time, in minutes and seconds, for 0.5 psig drop is LESS than shown in Table 1 for designated pipe size, the section of pipe shall have failed the test. The failed section shall be replaced by the Contractor, and the sewer shall be retested.

**TABLE 2**

**Time Requirements For Air Testing  
For Sewer Or Uniform Pipe Size**

<u>Pipe Size (Inches)</u>	Time	
	Minutes	Seconds
4**	2	32
6**	3	50
8**	5	6
10	6	22
12	7	39
14	8	56
15	9	35
16	10	12
18	11	34
20	12	45
21	13	30

\* Multi-Pipe Sizes: When sewer line undergoing test is eight inches (8”) or larger diameter pipe and includes different sized laterals, the figure in Table 1 for uniform sewer main sizes WILL NOT give reliable or accurate criteria for the test. Where multi-pipe sizes are to undergo air testing, the Engineer will compute “average” size in inches, which is multiplied by 38.2 seconds. The results give minimum time in seconds acceptable for pressure drop of 0.5 psig for “average” diameter pipe.

\*\* For eight inches (8”) and smaller pipe only, if during the five (5) minute stabilization period, pressure drops less than 0.5 psig after initial pressurization and air is NOT added, pipe section undergoing test shall have passed.

C. Procedure for Air Pressure Correction Due to Groundwater

- 1) Air pressure correction is required when prevailing groundwater is above sewer line being tested. Under this condition, air test pressure shall be increased 0.433 psi for each foot groundwater level is above invert of pipe.
- 2) Establish height of groundwater (in feet) above pipe invert:
  - a) DURING SEWER AND MANHOLE CONSTRUCTION, install one-half inch (½”) diameter pipe nipple (threaded one or both ends, approximately ten inches (10”) long) through manhole wall directly on top of one of sewer pipes

entering manhole, with threaded end of nipple extending inside the manhole.

- b) Seal pipe nipple with a threaded one-half inch (1/2") cap.
  - c) Immediately before air testing, determine groundwater level by removing the threaded cap from nipple, blowing air through the pipe nipple to remove any obstructions, and connecting clear plastic tube to pipe nipple.
  - d) Hold plastic tube vertically permitting water to rise to groundwater level.
  - e) After water level has stabilized in plastic tube, measure vertical height of water, in feet, above invert of sewer pipe.
- 3) Determine air pressure correction, which is added to 3.0 psig normal starting pressure of test, by dividing the vertical height in feet by 2.31. The result gives air pressure correction in pounds per square inch to be added:

Example: If the vertical height of water from the sewer invert to the top of the water column measures 11.55 feet, the additional air pressure required would be:

$$\frac{(11.55)}{2.31} = 5 \text{ psig}$$

Starting pressure of the test would be 3.0 plus 5 or 8.0 psig, and the one-half (1/2) pound drop becomes 7.5 psig. There is no change in the allowable drop (0.5 psig) or in the time requirements established for the basic air test.

## 7. METHOD OF TESTING – INFILTRATION TEST

### A. General

- 1) All work relating to infiltration testing shall be performed in the presence of the Engineer. The weir shall be provided by the Contractor.
- 2) All requirements of this specification shall be met prior to acceptance of sewer facilities by BCUA.

B. Procedure for Infiltration Test

- 1) Examine the sanitary sewer system for infiltration at the downstream end of the system after construction has been completed.
- 2) In the event that there is infiltration and water is flowing at the downstream end of the system, then the source and volume of flow shall be determined by an infiltration test.
- 3) The test shall consist of isolating the source of infiltration by plugging the first upstream manhole and observing to see if the flow stops. This procedure is repeated one manhole at a time until each source has been isolated.
- 4) When the infiltration has been isolated to a section or area, the volume of flow shall be determined using a ninety-degree (90°) V-notch weir inserted into the pipe.
- 5) The actual infiltration rate will be determined by the Engineer based on the weir measurements. This rate will be compared with the allowable infiltration rate of 50 gallons/inch diameter/mile of pipe/per day (24 hours).
- 6) If the allowable infiltration rate is greater than the actual infiltration rate, the infiltration test passes. If the actual infiltration is greater than the allowable infiltration, the infiltration test fails.
- 7) In the event the infiltration test fails, the section of the pipe involved shall be repaired as necessary and the test repeated.

**8. METHOD OF TESTING - LAMPING**

A. General

- 1) Lamping shall be performed on all gravity sanitary sewer lines.
- 2) Lamping will be performed by the Engineer. The Contractor shall provide all necessary labor, gas detectors and safety equipment to assist the Engineering during the lamping inspection.

B. Procedure for Lamping

- 1) Lamping consists of visually examining the inside of the pipe between two (2) consecutive manholes using light and mirror.

- 2) The light is shown from one manhole towards the other manhole.
- 3) A mirror is held at the invert of pipe and adjusted so that light and barrel of pipe can be seen.
- 4) The barrel of the pipe shall have no vertical deflection and at least seventy-five percent (75%) of the barrel shall be visible in the horizontal direction.
- 5) In the event that lamping shows the pipe not laid to line and grade within the acceptance limits specified above, then it shall be repaired and relamped as necessary until the lamping complies with the acceptance limits.
- 6) No lamping shall be performed until all gravity lines have been jet cleaned and vacuumed.

**9. METHOD OF TESTING - DEFLECTION**

A. General

For pipe conforming to the requirements of ASTM D3034, F679 and F794 maximum allowable pipe deflection (reduction in vertical inside diameter) shall be five percent (5%).

For pipe conforming to the requirements of ASTM D2241, AWWA C-900 and AWWA C-905 maximum allowable pipe deflection (reduction in vertical inside diameter) shall be five percent (5%).

B. Procedure for Deflection Testing

Deflection tests shall be successfully performed on the complete installation by means of one of the following methods prior to the acceptance of construction:

- “Go-No-Go” mandrel properly sized.
- Calibrated television.

**10. SANITARY FORCE MAIN INSPECTION AND TESTING**

Once construction has been completed on the force main and all its appurtenances, the Contractor may request preliminary inspection and test.

The Contractor will be responsible for supplying all equipment, tools, safety equipment and personnel to perform the necessary tests. He will also provide

personnel, as required to assist the Inspector during his visual inspection. The Inspector must be present at all times during pressure testing of a force main.

A visual inspection of all terminations and manholes will be performed to insure that construction on this force main system meets all the drawing and specifications requirements, and in addition, all cleanup work has been completed.

## 11. **METHOD OF TESTING – EXFILTRATION TEST**

### A. General Requirements

- 1) Perform all tests in presence of the Engineer.
- 2) Conduct exfiltration test prior to backfilling trench.
- 3) Establish test sections between valves, or as directed by the Engineer.
- 4) All requirements of this specification shall be met prior to acceptance of force main by the BCUA.

### B. Procedure for Exfiltration Test

- 1) Expel air from pipe through blowoffs, or taps required for release of air from high points. Taps for release of air and blowoffs for filling pipe and releasing air shall be provided by the Contractor.
- 2) Fill each pipe section slowly with water, and subject pipe to hydrostatic pressure of 150 psi for one (1) hour.
- 3) When test pressure is reached, measure amount of makeup water required to maintain this pressure during the one (1) hour test period.
- 4) Leakage shall not exceed twelve (12) gallons per inch of diameter per mile of pipe per day. Pipelines failing to meet this requirement shall be repaired and retested as above specified.
- 5) Compute leakage as follows:
  - a) Gallons of makeup water x 24 = gallons loss/day
  - b) Gallons loss/day x feet of pipe testing = gallons/loss/mile/day  
5,280 feet/mile

c)  $\frac{\text{Gallons/loss/mile/day}}{\text{Pipe diameter in inches}}$

Gallons loss/inch diameter/mile/day

d) Allowable exfiltration rate is 12 gallons/ inch/diameter/  
mile/day.

**12. METHOD OF TESTING – HIGH DENSITY POLYETHYLENE PIPE (HDPE)**

A. Deflection testing:

1. Maximum allowable pipe deflection (reduction in vertical inside diameter) shall be as follows:

<u>Dimension Ratio (SDR)</u>	<u>Safe Deflection As % of Diameter</u>
32.5	7.0
26	5.5
21	4.5
17	2.8
11	1.5
9	1

2. Deflection tests shall be successfully performed on the complete installation by means of one of the following methods prior to the acceptance of construction.

a. "Go-No-Go" mandrel properly sized.

b. Calibrated television.

B. Pressure testing:

1. After the pipeline has been laid, it shall be filled with water, taking care to bleed off any trapped air. It should then be subjected to a hydrostatic pressure test with a test pressure at the lowest elevation to the system, which is 1.5 times the system design pressure. When in the opinion of the *ENGINEER*, local conditions require that the trenches be backfilled immediately after the pipe has been laid, the pressure test may be made after backfilling has been completed but not sooner than that time which will allow sufficient curing of any concrete that may have been used (typical minimum concrete cure times are 36 hours for early strengths and 7 days for normal-strength materials).

2. The test procedure consists of two steps: the initial expansion and the test phases. To compensate for initial expansion of the pipe under test, sufficient make-up water should be added to the system at hourly intervals for 3 hours to return to the test pressure. After the completion of this first phase (around 4 hours after initially pressurizing the pipe under test), the actual test should begin. The test phase shall not exceed 3 hours. After this testing period, a measured amount of make-up water shall be added to return to the test procedure. The amount of make-up water shall not exceed the allowance given in Table 1. Alternatively, testing for leakage shall be done by maintaining the test pressure over a period of 4 hours, and then dropping the pressure by 10 psi. If the pressure remains steady (within 5% of the target value) for an hour, no leakage in the system is indicated.
  
3. **WARNING:** Under no circumstances shall the total time under test exceed eight (8) hours at 1½ times the pressure rating. If the test is not completed due to leakage, equipment failure, etc., the test section shall be permitted to "relax" for eight (8) hours prior to the next testing sequence.

NOMINAL PIPE SIZE (IN.)	1-HOUR TEST	2-HOUR TEST	3-HOUR TEST
3	0.10	0.15	0.25
4	0.13	0.25	0.40
6	0.30	0.60	0.90
8	0.50	1.0	1.5
10	0.75	1.3	2.1
12	1.1	2.3	3.4
14	1.4	2.8	4.2
16	1.7	3.3	5.0
18	2.2	4.3	6.5
20	2.8	5.5	8.0
22	3.5	7.0	10.5
24	4.5	8.9	13.3

4. These allowances apply only to the test period and not to the initial expansion phase.

**FORM OF AGREEMENT**

**Between**

**BERGEN COUNTY UTILITIES AUTHORITY**

**And**

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This Agreement (“Agreement”) is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between the Bergen County Utilities Authority (the “Authority”) having an address of Foot of Mehrhof Road, Little Ferry, New Jersey 07642, and \_\_\_\_\_ (“Contractor”) having an address of \_\_\_\_\_, \_\_\_\_\_, New Jersey \_\_\_\_\_.

**Background**

**WHEREAS**, the Authority is a public body corporate and politic of the State of New Jersey organized under the laws of the State of New Jersey, specifically the municipal and county utilities authorities law, N.J.S.A. 40:14B-1 et seq; and

**WHEREAS**, the Authority provides water pollution control services to forty seven (47) municipalities in the County of Bergen, State of New Jersey, as well as various industrial and other facilities in those municipalities which connect directly to the Authority’s water pollution control facilities; and

**WHEREAS**, the Authority owns and operates two wastewater treatment plants, as well as various trunk lines, interceptor lines, pump stations, meter chambers and other facilities necessary for the efficient operation and maintenance of the Authority’s Water Pollution Control Facilities (collectively, the “WPCF Facilities”); and

**WHEREAS**, \_\_\_\_\_ is the owner or contract purchaser (the “Owner”) of premises designated as Block \_\_\_\_\_, Lot(s) \_\_\_\_\_ on the Tax Map of the \_\_\_\_\_ of \_\_\_\_\_ in Bergen County, New Jersey (the “Premises”); and

**WHEREAS**, the Owner has obtained the required site plan approval from the Planning Board [or Board of Adjustment] of the \_\_\_\_\_ of \_\_\_\_\_ (the “Planning Board”) to construct the following development on the Premises (collectively, the Proposed Development); and

**WHEREAS**, the Owner has engaged the Contractor to serve as the general contractor [construction manager, owner’s representative, \_\_\_\_\_] for the Proposed Development; and

**WHEREAS**, the site plan approved by the Planning Board calls for the construction of the following improvements on lands owned by the Owner or of a governmental entity other than the Authority (e.g., utility lines in public streets or rights of way), which the Owner proposes to offer for dedication to the Authority to become part of the Authority’s WPCF Facilities (the “Proposed Improvements”); and

**WHEREAS**, the construction of the Proposed Improvements by the Contractor shall also be referenced herein as the “Work”.

\* \* \* \*

**Agreement**

In consideration of the mutual promises contained herein, Contractor and the Authority agree as follows:

**1. *Review of Plans*** Contractor agrees to submit the Plans to the Authority for review. The Authority agrees to review the Plans promptly in accordance with the Rules and Regulations of the Authority.

In the event that the Plans are not satisfactory to the Authority, it agrees to promptly provide Contractor with detailed comments as to any deficiencies. Upon receipt of revised Plans from the Contractor, the Authority agrees to review same promptly and to provide Contractor with an approval of the revised Plans or further detailed comments, as applicable. The Plans, as approved by the Authority, shall be referenced herein as the “Approved Plans”.

In the event that the Contractor wishes to revise or modify the Plans after the Authority has approved same, it shall submit the proposed revisions to the Approved Plans to the Authority for its review and approval.

**2. *Construction Work*** The Contractor agrees that all of the Work shall be in accordance with the Approved Plans, as same may be modified with the prior approval of the Authority as provided above.

During construction, the Contractor agrees to protect and safeguard any and all existing improvements and facilities owned by the Authority located in the vicinity of the Proposed Improvements (the “Existing Authority Improvements”). In the event that any damage occurs to the Existing Authority Improvements

during the Work, the Contractor shall notify the Authority immediately. Upon receipt of such notice, the Authority shall have the option either (i) to undertake all necessary repairs to the Proposed Improvements itself on an emergency basis or (ii) to notify the Contractor as to required repairs and to require the Contractor to perform those repairs immediately, in a good, workmanlike manner and in accordance with all requirements of the Authority.

In the event that the Authority elects to undertake the repairs itself, the Contractor shall be responsible to the Authority for all costs incurred by the Authority in connection with those repairs. In the event that the Authority elects to require the Contractor to undertake the repairs, the Contractor shall bear all costs of same and Contractor shall also be responsible to the Authority for all costs incurred by the Authority in connection with those repairs. The “costs incurred by the Authority” in both of the foregoing instances shall include reasonable engineers’ fees and reasonable attorneys’ fees incurred by the Authority.

**3. *Indemnification*** Contractor hereby agrees to indemnify and hold harmless the Authority, the Engineer and their respective commissioners, directors, officers, agents and employees from and against all claims, damages, losses and expenses, including attorney’s fees, arising out of, or resulting from the construction of the Work, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the Contractor or any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable. The Authority and the Engineer shall be indemnified by the Contractor even if the negligence or fault of the Authority or of the Engineer contributed to the claims, damages, losses or expenses. However, the Contractor shall not indemnify the Owner or the Engineer for that party’s sole negligence or fault.

In any and all claims against the Owner or the Engineer, or any of their respective commissioners, directors, officers, agents or employees, by any employee of the Contractor or of any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen’s compensation acts, disability benefit acts or other employee benefits acts.

Contractor also hereby agrees to indemnify and hold harmless the Authority, the Engineer and their respective commissioners, directors, officers, agents and employees from and against all claims, damages, losses and expenses, including attorney’s fees, arising out of, or resulting from the failure of the Contractor to comply with any of the requirements with respect to the Proposed Improvements set forth in the Rules and Regulations of the Authority or in any approval issued by the Authority with respect to

the Approved Plans (or any subsequent approval of any modifications to the Approved Plans).

**4. Insurance Requirements** Contractor shall comply with the following requirements as to insurance with respect to the construction of the Proposed Improvements.

- A. The Contractor shall, at his own cost and expense, secure and maintain in force until completion of the Work and at all times thereafter when the Contractor may be correcting, removing or replacing defective work or completing plantings, insurance for damages imposed by law and assumed under the Contract of the kinds and in the amounts hereinafter provided with insurance companies authorized to do business in the State of New Jersey with an A. M. Best Rating of not less than A- and a Financial Size Category Rating of not less than VII.
- B. Prior to commencing the Work, the Contractor shall furnish to the Authority a certificate or certificates of insurance, in triplicate, together with declaration of pages, in a form satisfactory to the Authority, showing that the Contractor has complied with this Section 3. Insurance binders are not acceptable as proof of insurance coverage. Such certificates shall specifically refer to the Proposed Improvements by project name and location. Original copies of the Owners and Contractor's Protective Liability Insurance (OCPL) policy and the Builders Risk Policy shall be provided to the Authority before starting work.
- C. All of the policies of insurance required to be purchased and maintained and the certificates, declaration pages, or other evidence thereof shall contain a provision or endorsement that the coverage afforded is not to be cancelled, materially changed, or renewal refused until at least thirty (30) calendar days prior to written notice has been given to the Authority by certified mail.
- D. Contractor Insurance Requirements: The Contractor shall procure and maintain liability insurance as specified below, to protect the Contractor, the Authority, ENGINEER and their respective commissioners, officers, employees and agents against claims of or relating to personal injury (including death) to persons or damage to property which may arise from or in connection with the performance of the work (whether performed on-site or off-site) by the Contractor, its employees, officers, agents, subcontractors or other individuals or entities for whom the Contractor may be contractually or legally responsible from the date of execution of the Contract until the completion of the Work.

1. Commercial General Liability: Commercial General Liability is to be written as broad as the standard coverage form currently in use in the State

of New Jersey and shall not be circumscribed by any endorsements limiting the breath of coverage. The policy shall include coverage for contractual liability, products, completed operations and any explosion, collapse and underground (XCLI) operations. Limits of liability shall not be less than \$2,000,000 combined single limit with excess or umbrella liability coverage with the same terms and conditions as the underlying coverage in an amount such that the primary coverage and excess/umbrella coverage equals \$2,000,000. The policy shall name the Authority, the Engineer, their respective officers, employees and agents as additional insured's.

2. Automobile Liability Insurance: The Contractor shall carry Automobile Liability Insurance covering owned, non-owned, and hired vehicles. The limits of liability shall not be less than \$1,000,000 combined single limit, each accident for bodily injury and property damage.

3. Workers Compensation and Employer's Liability: Workers Compensation Insurance in accordance with the laws of the State of New Jersey and any other state or federal jurisdiction as is required to protect the employees of the Contractor or any subcontractor who will be engaged in the performance of the work. This policy shall include Employer's Liability protection with a limit of liability of not less than \$1,000,000.

4. Owners and Contractor's Protective Liability Insurance (OCPL): In addition to the insurance required above, the Contractor shall obtain and maintain a separate Owner's and Contractor's Protective Liability insurance policy for the same limits of liability as specified for the Commercial General Liability insurance. The policy shall be maintained in force for the term of the Contract or for one (1) year, whichever is longer, and shall name the Authority, the Engineer and their respective commissioners, officers, employees and agents as insured's.

5. Builder's Risk Insurance (if applicable): The Contractor shall provide Special Form Builder's Risk insurance on a completed value basis and in the full amount of the Contract insuring the interest of the Authority, covering all real and personal property for all risks of physical loss or damage to the project, including coverage while in transit and during storage away from the site, external water damage and debris removal. In the event that the value of the work increases during the course of construction, the value of the insurance shall be immediately increased accordingly.

The Contractor shall maintain such coverage from the commencement of the Work until the completion of the Work to the satisfaction of the Authority and the acceptance of the Proposed Improvements by the Authority, if applicable.

Coverage shall include all materials, supplies, assemblies, furnishings and equipment that are intended for specific installation in the project while such materials, supplies, assemblies, furnishings and equipment are located at the site, in transit and while temporarily located away from the site for the purpose of repair, adjustment or storage.

Coverage shall include structures, excavations and foundations, including pilings, demolition, re-excavation and debris removal and operations testing.

The Builder's Risk insurance policy shall be endorsed waiving the insurance company's rights of subrogation and provide that the insurance company will not cancel such insurance without giving thirty (30) day prior written notice to the Authority.

Deductibles or self-insured retentions with respect to the builder's risk insurance shall be no greater than \$25,000 per claim for flood and earthquake, and not greater than \$10,000 per claim for all other property losses. The Contractor shall bear the cost of all deductibles and self-insured retentions. Notwithstanding any deductible or self-retention, the Contractor shall remain solely liable for the full amount of any item covered by the builder's risk insurance.

The Authority and the Contractor hereby waive all rights against each other for damages caused by fire or other perils to the extent they are covered by the builder's risk insurance or any other property insurance applicable to the work.

E. Endorsement and Waivers: The Commercial General Liability Policy, Automobile Liability Policy, and Excess/Umbrella Policies provided by the Contractor shall contain or be endorsed to contain the following provisions:

1. The Authority, the Engineer, and their respective commissioners, officers, employees and agents shall be covered as additional insureds and respects any and all liability arising out of the work of this Contract.

2. For any claims related to the Proposed Improvements, as described in section D. "Contractor Insurance Requirements" herein, the Contractor's insurance coverage shall be primary insurance with respect to the Authority, the Engineer, and their respective commissioners, officers, employees and agents, and shall specify that coverage, continues notwithstanding the fact that the Contractor has departed from the site. Any insurance or self-insurance maintained by the Authority, the Engineer, and their respective commissioners, officers, employees and agents shall be in excess of the Contractor's insurance and shall not contribute with it.

3. Any failure on the part of the Contractor to comply with reporting provisions or other conditions of the policies, any breach of warranty, any action or inaction of the Contractor or others, any foreclosures related to

the Project or any change in ownership of all or any portion of the Project shall not affect coverage provided to the Authority, the Engineer, and their respective officers, employees and agents.

4. The Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. In the event the Commercial General Liability Insurance has an aggregate limit of liability, it shall be endorsed with the Designated Construction Project(s) General Aggregate Limit endorsement (CG 25 03 or equivalent).

6. The Builder's Risk policy shall contain a waiver of subrogation against the Authority, the Engineer and their respective commissioners, officers, employees and agents.

- F. Disclaimer: The Contractor and each Subcontractor have the responsibility to make sure that their respective e insurance programs fit their particular needs, and it is their responsibility to arrange for and secure any insurance coverage that they deem advisable, whether or not specified herein.
- G. No Recourse: There shall be no recourse against the Authority or the Engineer for payment of premiums or other amounts with respect to the insurance required by the Contractor hereunder.
- H. Right to Remedy: If the Contractor fails to provide insurance as required herein, the Authority shall have the right, but not the obligation to purchase such insurance. In such event, Contractor shall reimburse the Authority for any premiums paid by the Authority.
- I. In the event of payment, discharge, satisfaction, or settlement, of claims against the Authority through the use of proceeds from an insurance policy obtained by a Contractor that insures the Authority or the Engineer as a direct or additional insured ("Contractor Insurer Payment on Authority's Account"), then such Contractor Insurer Payment on Authority's 's Account, will be deemed by Authority to have insured Authority and/or the Engineer against any Authority obligation for self-insurance amounts , deductible amounts, or self-retained limit amounts (collectively, "S.I.R. amounts") , that may be contained either within any of the Authority's own policies of insurance , and/or within of the Engineer's insurance policies , and the amount of such Contractor Insurer Payment on Authority's Account shall be applied toward the exhaustion of Authority's SIR amounts.

**5. *Engineer Access to Job Site*** Contractor agrees to provide the Engineer with reasonable access to all job sites during periods of construction, to allow Engineer to inspect the progress of construction for the Authority.

**6. *Site Specific Requirements*** The Contractor agrees to comply with the following site specific requirements:

[To be inserted, if known at the time of the Agreement]

**7. *Escrow for Authority Costs*** The Contractor shall be responsible to the Authority for all Authority costs arising out of or related to this Agreement and the Proposed Improvements. This shall include, without limitation, (i) reasonable engineers fees in connection with the review of the Plans, construction oversight and attendance at meetings, whether same occur before or after the execution of this Agreement and (ii) reasonable attorneys fees in connection with the preparation or negotiation of this Agreement or the enforcement of the Authority's rights under this Agreement

Upon execution of this Agreement, the Contractor has deposited the sum of \_\_\_\_\_ with the Authority to cover the aforesaid costs. At the conclusion of the construction of the Proposed Improvements (or sooner, at the option of the Authority), the Authority shall provide the Contractor with an informal accounting of the costs incurred and shall refund any balance in the escrow to the Contractor. In the event that the balance in the escrow falls below the sum of \_\_\_\_\_, the Authority shall notify the Contractor and, within 5 business days of receipt of such notice, the Contractor shall deposit such additional monies as the Authority shall request, provided that at no time shall the amount of the deposit exceed the sum of \_\_\_\_\_ (i.e., the amount of the original deposit).

**8. *Notices*** All notices, requests and other communications under this Agreement shall be in writing, shall be made by hand delivery, certified mail – return receipt requested or nationally recognized overnight delivery service and shall be effective upon receipt by the following individuals:

**As to the Authority**

Executive Director  
Bergen County Utilities Authority  
Foot of Mehrhof Road  
Little Ferry, NJ 07643

*With a copy to:*

Chief Engineer  
Bergen County Utilities Authority  
Foot of Mehrhof Road  
Little Ferry, NJ 07643

**As to Contractor**

\* \* \* \* \*

**9. Assignment** This Agreement shall not be assigned by Contractor without the prior written consent of the Authority.

**10. Governing Law & Jurisdiction** This Agreement shall be governed by the laws of the State of New Jersey. In the event of any dispute with respect to this Agreement, the parties agree that the Superior Court of New Jersey, Bergen County shall have exclusive jurisdiction to adjudicate the dispute.

**11. Severability** In the event any covenant, condition or provision of this Agreement is held to be invalid or unenforceable by a court of competent jurisdiction, the invalidity or unenforceability thereof shall in no way affect any of the other covenants, conditions, or provisions hereof.

**12. Titles of Sections** Any titles of the several sections of the Agreement have been provided for convenience only and shall be disregarded in construing or interpreting any of its provisions.

**13. Timeliness of Actions.** Except as specifically provided herein, each and every duty or action to be performed by either party shall be performed in a reasonable and timely fashion.

**14. Recitals.** The recital provisions in the various Whereas clauses are an integral part of this Agreement.

**BERGEN COUNTY UTILITIES AUTHORITY**

By \_\_\_\_\_

**Name:**

**Its:**

**[Contractor]**

By \_\_\_\_\_

**Name:**

**Its:**

BERGEN COUNTY UTILITIES AUTHORITY  
LITTLE FERRY, BERGEN COUNTY,  
NEW JERSEY  
CONSTRUCTION STANDARDS FOR  
CONNECTION TO AND RELOCATION OF  
THE AUTHORITY SEWERS  
OCTOBER, 2010

**COMMISSIONERS:**

**ANDREW "CHUCK" VACCARO, CHAIRMAN**

**RONALD PHILLIPS, VICE CHAIRMAN**

**JAMES L. CASSELLA**

**LOUIS J. DeLISIO**

**PAUL A. JULIANO**

**JAMES KRONE**

**DAVID J. LORENZO**

**RICHARD D. SCHOOLER**

**JOEL T. THORNTON**

**RICHARD WIERER, ACTING EXECUTIVE DIRECTOR**

**ERIC ANDERSEN, P.E., CHIEF ENGINEER DIRECTOR OF W.P.C. DIVISION**

**E. NEAL ZIMMERMANN, ESQ., GENERAL COUNSEL**

**WALLACE NOWOSIELECKI, CHIEF FINANCIAL OFFICER**

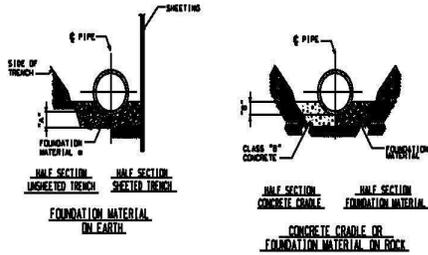
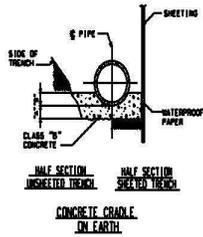
**MARYANN LAMBER, SECRETARY**

**DRAWING LIST:**

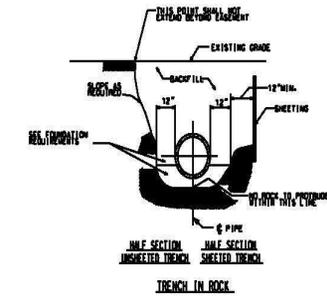
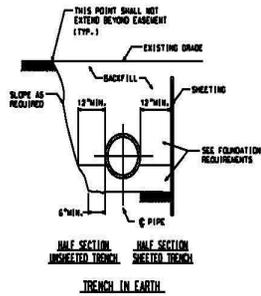
1. TYPICAL DETAIL & MISCELLANEOUS DETAILS
2. MISCELLANEOUS DETAILS MANHOLE TYPE 1
3. MISCELLANEOUS DETAILS MANHOLE TYPE 2
4. TYPICAL MANHOLE DETAILS TYPE 3 & 4 AND MISCELLANEOUS DETAILS
5. TYPICAL MANHOLE DETAILS AND MISCELLANEOUS DETAILS
6. TYPICAL MANHOLE DETAILS AND MISCELLANEOUS DETAILS
7. PARSHALL FLUME METER CHAMBER LAYOUT
8. PARSHALL FLUME METER CHAMBER REINFORCING DETAILS
9. PARSHALL FLUME INSTALLATION DETAILS
10. MISCELLANEOUS METER CHAMBER DETAILS
11. METERING CABINET, INSTRUMENTATION AND ELECTRICAL DETAILS
12. PEDESTAL AND METERING CABINET, INSTRUMENTATION AND ELECTRICAL DETAILS

**NOTE:**

BERGEN COUNTY UTILITIES AUTHORITY STANDARD AND SPECIFICATION FOR CONSTRUCTION OF AND CONNECTION TO AUTHORITY FACILITIES, BY CLINTON BOGERT ASSOCIATES, DEC. 1977, HAS BEEN UPDATED TO CONFORM WITH THE LATEST INDUSTRY STANDARDS AND TECHNOLOGIES.

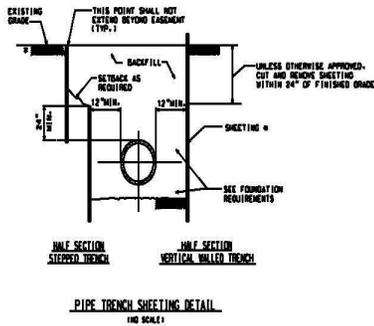


**FOUNDATION REQUIREMENTS**  
(NO SCALE)



**TYPICAL TRENCH DETAILS**  
(NO SCALE)

NOTES:  
1. THE CONTRACTOR HAS THE OPTION OF SHEETING OR STEPPING BACK SHEETING OR SLOPING EXCAVATION ABOVE TOP OF PIPE.

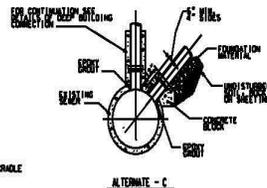
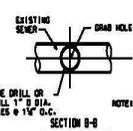
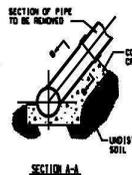


\* ADJUST PER GEOTECHNICAL REPORT AS REQUIRED.

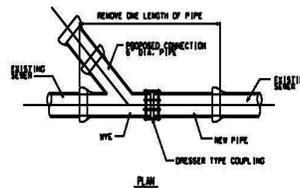
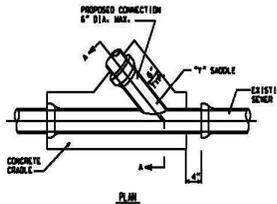
FOUNDATION	
PIPE DIA.	"A" OR "B"
6"	4"
8"	4"
10"	4"
12"	4"
12" AND 14"	4"
15"	5"
18" AND 18"	5"
18"	5"
20" AND 21"	5"
24"	6"
24"	6"
30"	10"
36"	12"
42" AND 78"	12"

= FOR FOUNDATION MATERIAL, INCREASE "A" OR "B" FOR EVERY FOOT THAT TOPS TO TOP OF PIPE EXCEEDS 15'

NOTE:  
FOR DIMENSIONS "A" AND "B" SEE FOUNDATION SCHEDULE THIS DRAWING

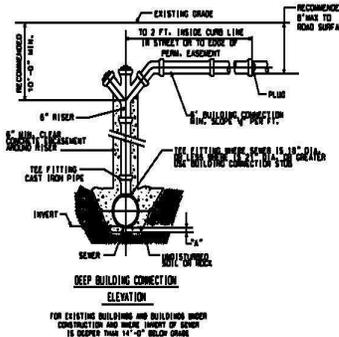
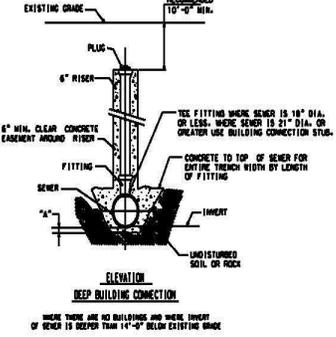


**BUILDING CONNECTION TO EXISTING BCUA SEWER**  
(NO SCALE)

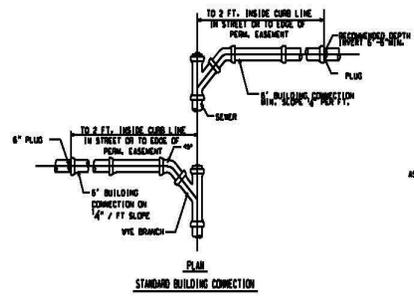


**BUILDING CONNECTION TO RELOCATED B.C.U.A. SEWER**  
(NO SCALE)

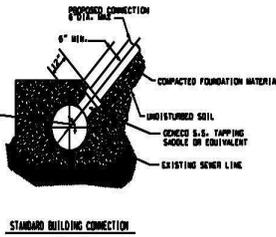
NOTES:  
1. THE DEPTH OF LOCUS OF SEWER TO EXISTING GRADE SHALL BE MAINTAINED THROUGHOUT THE ENTIRE LENGTH OF THE BUILDING UNDER CONSTRUCTION.  
2. THE DEPTH FROM THE TOP OF SEWER TO EXISTING GRADE SHALL BE MAINTAINED THROUGHOUT THE ENTIRE LENGTH OF THE BUILDING UNDER CONSTRUCTION.  
3. SEE ALL THE NOTES WHERE BUILDING CONNECTIONS ARE NOT IN DET.



FOR EXISTING BUILDINGS AND BUILDINGS UNDER CONSTRUCTION AND WHERE LOCUS OF SEWER IS DEEPER THAN 14'-0" BELOW EXISTING GRADE



FOR SEWERS 18" DIA. OR LESS OR LESS 21" DIA. OR GREATER USE BUILDING CONNECTION B10.

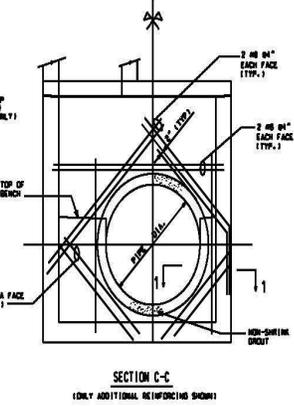
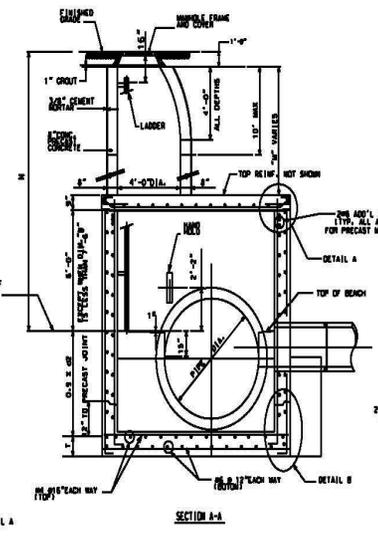
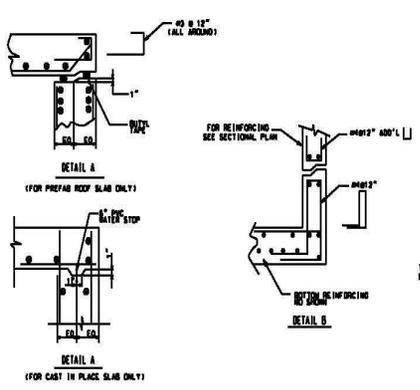
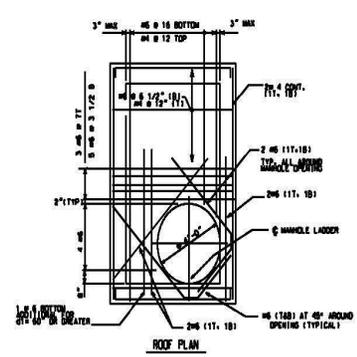


**STANDARD BUILDING CONNECTION**  
ELEVATION

**BERGEN COUNTY UTILITIES AUTHORITY**  
CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS  
SHEET TITLE  
TYPICAL DETAIL & MISCELLANEOUS DETAILS

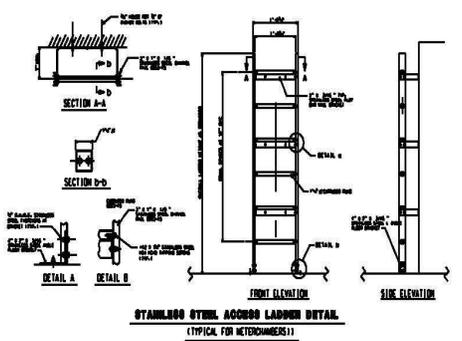
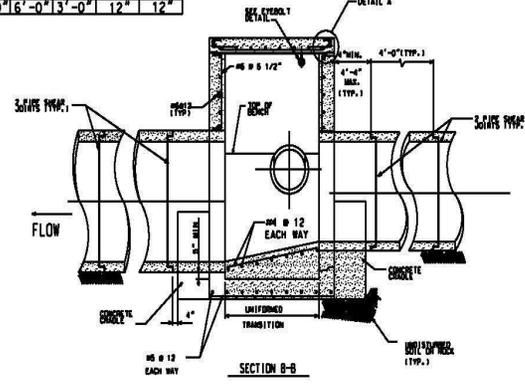
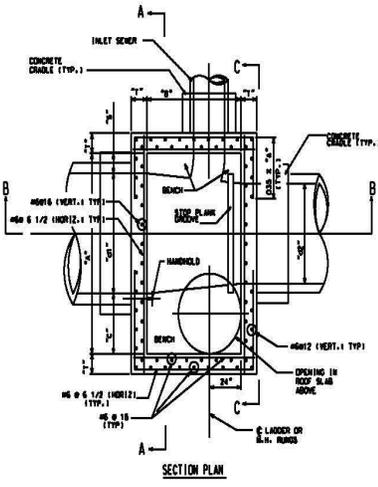
NO.	DATE	DESCRIPTION	APPROVED	REVISION

REVISION	NO.	DATE	BY	CHKD.

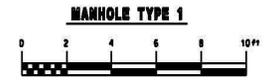
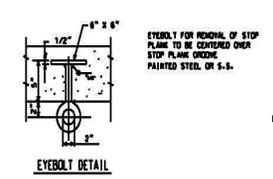


**TYPE 1 MANHOLE SCHEDULE**

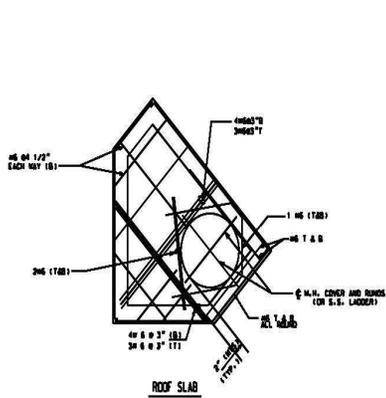
DI	A"	B"	C"	H"	W"	W"
48"	7'-6"	4'-0"	2'-6"	12"	12"	12"
54"	8'-3"	4'-0"	2'-9"	12"	12"	12"
60"	8'-9"	5'-0"	2'-9"	12"	12"	12"
66"	9'-6"	5'-6"	3'-0"	12"	12"	12"
72"	10'-0"	6'-0"	3'-0"	12"	12"	12"



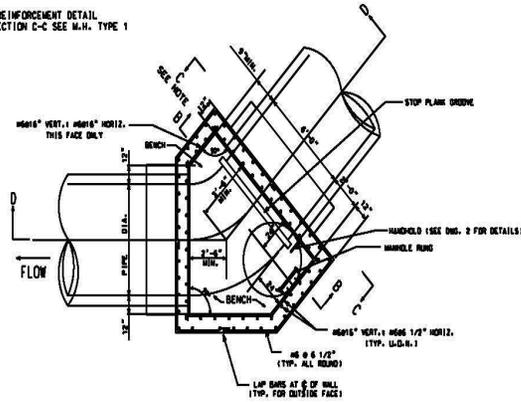
- NOTES:**
1. WHEN DIMENSION "H" IS LESS THAN 1'-4" USE 4" MANHOLE FRAME AND COVER.
  2. WHEN DIMENSION "W" IS LESS THAN 4'-0" USE ALTERNATE DETAIL AT TOP OF M.H. CHIMNEY.
  3. MANHOLE TYPE 1 IS ALSO SUITABLE FOR USE WITH SEWER DEFLECTIONS UP TO 15" IN WHICH CASE THE CHIMNEY IS TO BE A SMOOTH CURVE.
  4. IF DEFLECTION IS GREATER THAN 15" USE TYPE 2 M.H.'S
  5. FOR DETAILS OF APURTANCES, ETC. SEE DRAWING 3
  6. FOR ALTERNATE DETAILS AT TOP OF M.H. CHIMNEY, GENERAL NOTES ETC. SEE DRAWING 3
  7. FOR DROP MANHOLES INCREASE "H" SO THAT SOFFIT ON ROOF SLAB IS 6" ABOVE TOP OF INLET SEWER.
  8. FOR DETAILS OF CONCRETE CHANDLE SEE FOUNDATION REQUIREMENTS DRAWING 1.
  9. FOR DETAILS OF CONCRETE CHANDLE SEE FOUNDATION REQUIREMENTS DRAWING 1.
  9. 2 CENTS HS SPOT ON OUTSIDE OF ALL SURFACES & WALLS



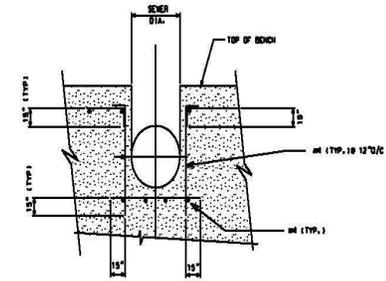
<p><b>BERGEN COUNTY UTILITIES AUTHORITY</b></p> <p>CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS</p>	
<p>DESIGN BY: [ ]</p> <p>CHECKED BY: [ ]</p> <p>DATE: [ ]</p>	<p>DESIGNED BY: [ ]</p> <p>CHECKED BY: [ ]</p> <p>DATE: [ ]</p>
<p>DATE: [ ]</p> <p>DESCRIPTION: [ ]</p> <p>APPROVED: [ ]</p>	<p>DATE: [ ]</p> <p>DESCRIPTION: [ ]</p> <p>APPROVED: [ ]</p>



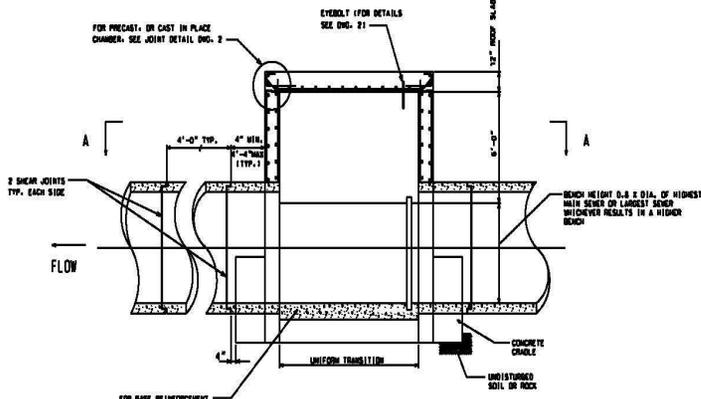
NOTE:  
FOR REINFORCEMENT DETAIL  
OF SECTION C-C SEE M.H. TYPE 1



SECTION A-A

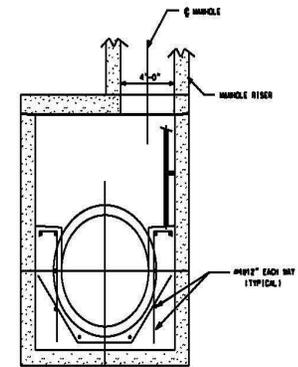


TYPICAL REINFORCEMENT DETAIL  
AT TOILET TROUGH IN BENCH



SECTION D-D

MANHOLE TYPE 2



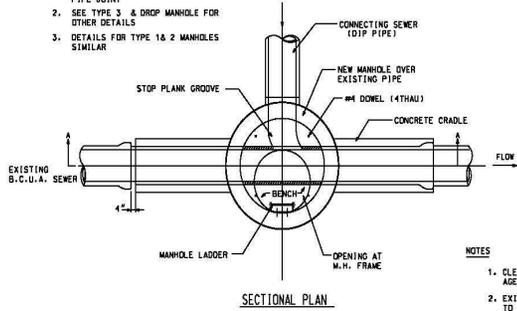
SECTION B-B  
(BENCH REINFORCED)

		<b>BERGEN COUNTY UTILITIES AUTHORITY</b>	
		SHEET TITLE	
		MISCELLANEOUS DETAILS MANHOLE TYPE 2	
DESIGN	AS SHOWN	DATE	NOV. 2009
ISSUED	BY	DATE	OCT. 2009
REVISION	BY	DATE	
DATE	DESCRIPTION	APPROVED	8 OF 12



**NOTES:**

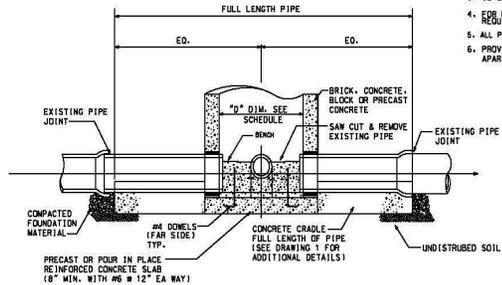
1. LOCATE MANHOLE BETWEEN EXISTING PIPE JOINT
2. SEE TYPE 3 & DROP MANHOLE FOR OTHER DETAILS
3. DETAILS FOR TYPE 1 & 2 MANHOLES SIMILAR



**SECTIONAL PLAN**

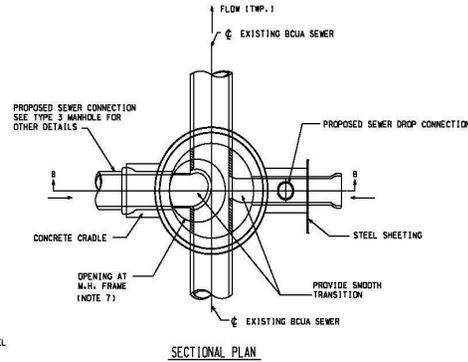
**NOTES:**

1. CLEAN AND ROUGHEN ALL SURFACES AND USE A BONDING AGENT AGAINST WHICH NEW CONCRETE IS TO BE PLACED.
2. EXISTING CONCRETE WHICH MUST BE REMOVED TO MEET NEW CHANNEL LINES IS TO BE CORE DRILL OR REMOVED TO A LINE AT LEAST 1" BEYOND FINISHED CHANNEL LINE AND FINISHED OFF TO NEW WITH CEMENT MORTAR.
3. SEWER CONNECTION TO TYPE 1 & 2 MANHOLES SIMILAR.
4. FOR DETAILS OF CONNECTION CRADLE SEE FOUNDATION REQUIREMENTS DRAWING 1.
5. ALL PIPE TO BE ENRVY COATED DUCTILE IRON PIPE
6. PROVIDE A MINIMUM OF 3 SHEAR JOINTS AT 2X PIPE O.D. APART, FROM THE FORCE OF THE CONCRETE ENCASMENT

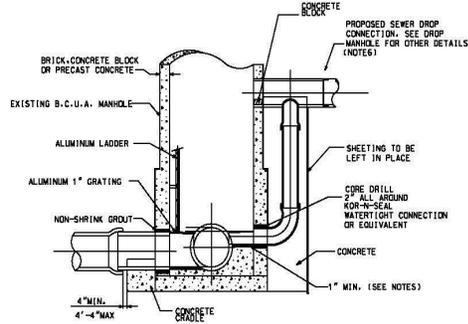


**SECTIONAL A-A**

**NEW DOG HOUSE MANHOLE OVER EXISTING B.C.U.A. SEWER LINE**

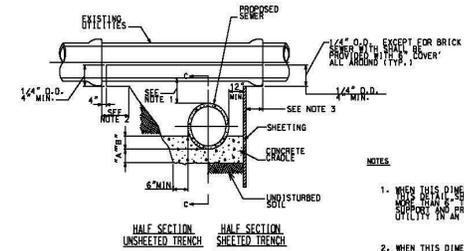


**SECTIONAL PLAN**



**SEWER CONNECTION TO EXISTING TYPE 3 B.C.U.A. MANHOLE**

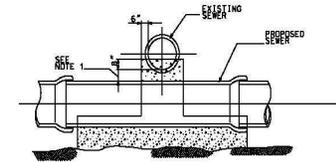
(FOR ADDITIONAL DETAILS SEE ALSO DROP MANHOLE OR DRIP, NO. 4)



**SECTIONAL PLAN**

**NOTES:**

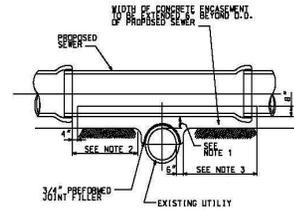
1. WHEN THIS DIMENSION IS 1'-0" OR LESS THIS DETAIL SHALL BE USED. IF IT IS MORE THAN 1'-0" THE CONTRACTOR SHALL NOTIFY IN AN APPROVED MANNER.
2. WHEN THIS DIMENSION IS LESS THAN 4" TO WITHIN 4" OF THE NEXT JOINT.
3. FOR DIMENSIONS "A" AND "B" SEE FOUNDATION SCHEDULE DRAWING 1.
4. FOR "A" AND "B" DIMENSION SEE DRAWING #1



**SECTION C-C**

**PROPOSED SEWER CROSSING BELOW EXISTING UTILITY**

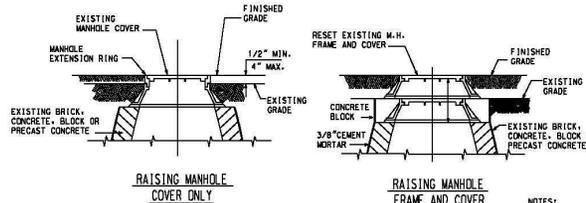
(NO SCALE)



**ELEVATION**

**PROPOSED SEWER CROSSING ABOVE EXISTING UTILITY**

(NO SCALE)



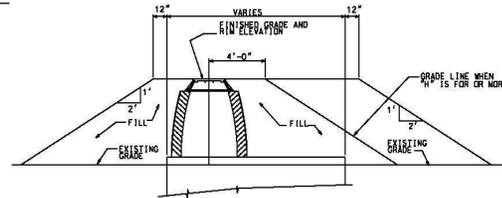
**NOTES:**

1. MANHOLE RUNGS NOT SHOWN
2. PROVIDE ADDITIONAL MANHOLE RING AS REQUIRED MAX SPACING 1'-0"
3. FOR PRECAST CONCRETE MANHOLES USE PRECAST GRADING RUNGS

**RAISING AND LOWERING OF EXISTING MANHOLE DETAILS**

**NOTES:**

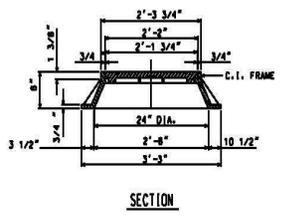
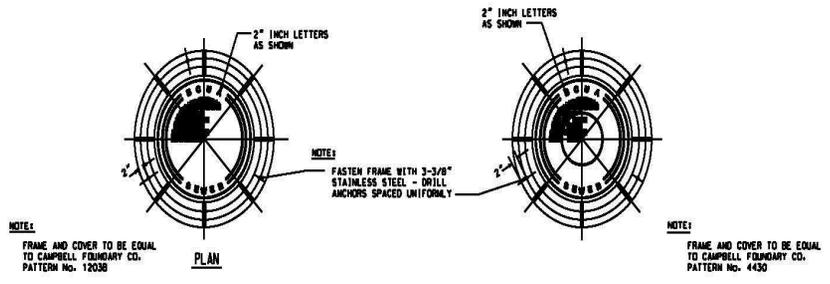
1. IF RAISING OF MANHOLE OF EXISTING MANHOLE FRAME & COVER RESULTS IN D.I.M. 7" EXCEEDING 3" REMOVE CONE SECTION AND CONSTRUCT UPPER SECTION OF MANHOLE TO CONFORM TO MANHOLE DETAILS ON DRAWING 3 OR 4.
2. OPENING IN CHIMNEY TO BE LOCATED TANGENT TO VERTICAL MANHOLE WALL AS PER TYPE 3 MANHOLE DETAIL.



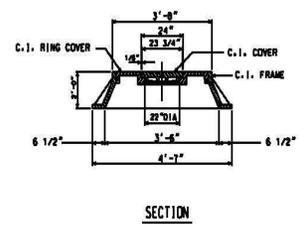
**SPECIAL GRADING AT MANHOLE AND METER CHAMBER**

(NO SCALE)

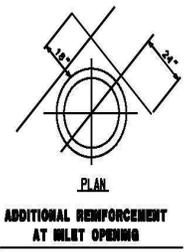
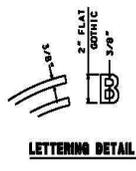
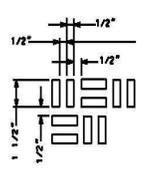
<b>BERGEN COUNTY UTILITIES AUTHORITY</b>			
CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS			
SHEET TITLE <b>TYPICAL MANHOLE DETAILS AND MISCELLANEOUS DETAILS</b>			
SCALE	NONE	JOB NUMBER	
DRAWN	BC	DATE	OCT. 2009
CHECKED	BC	DESIGN NUMBER	
REV. DATE	DESCRIPTION	APPROVED	CHECKED
			<b>8 OF 12</b>



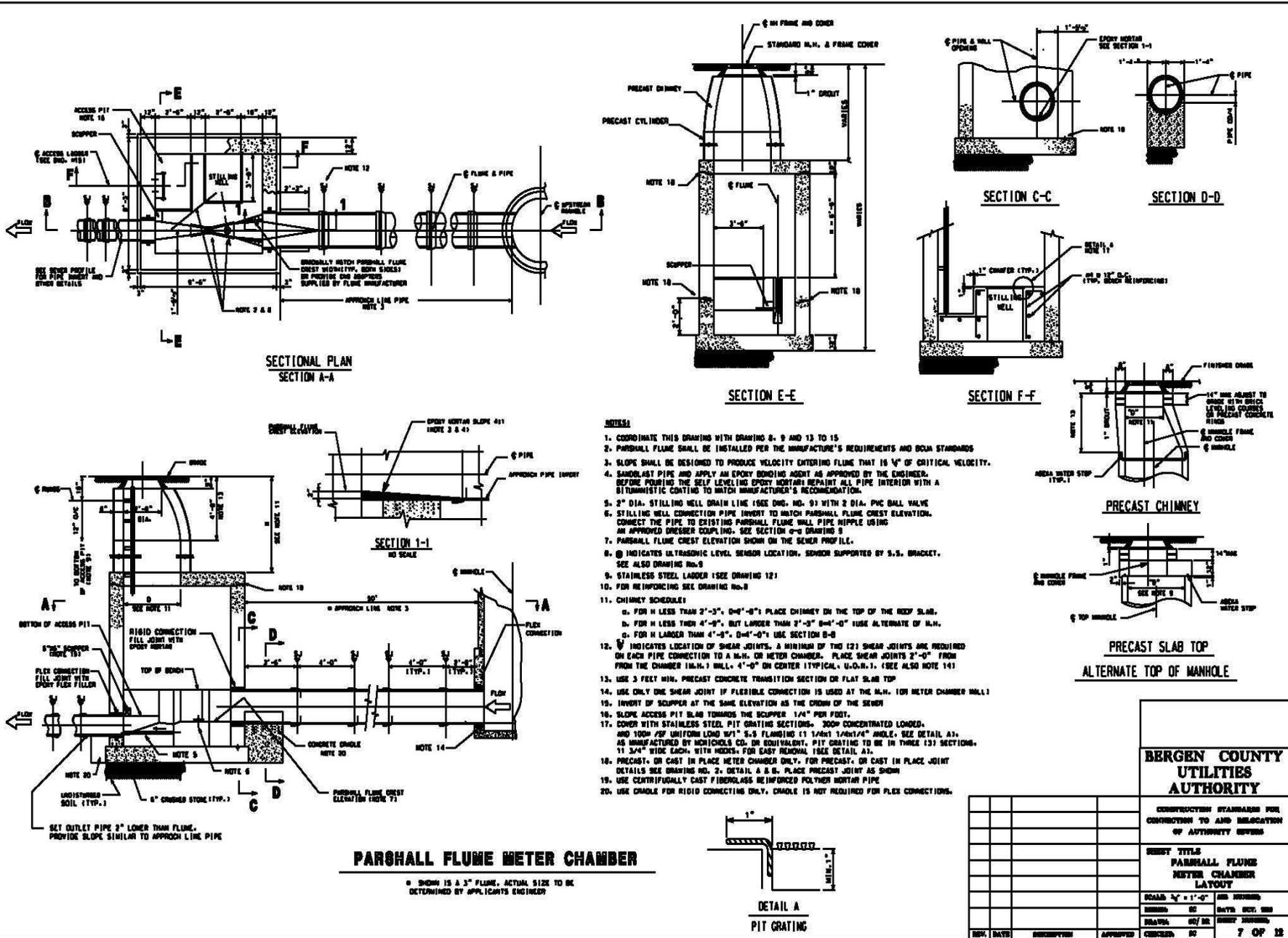
**DETAIL OF STANDARD MANHOLE FRAME AND COVER**

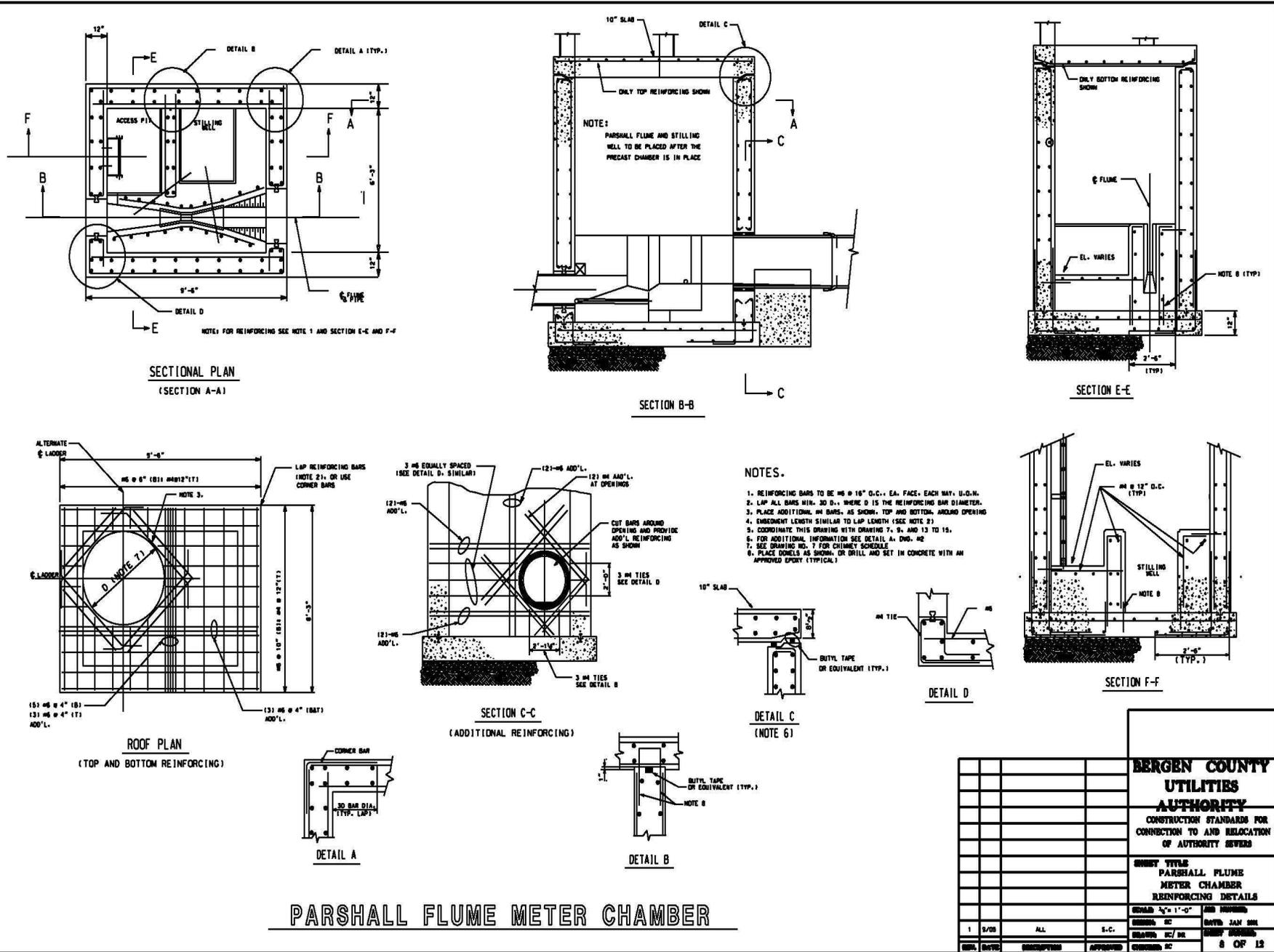


**DETAIL OF 42 INCH MANHOLE FRAME AND COVER**



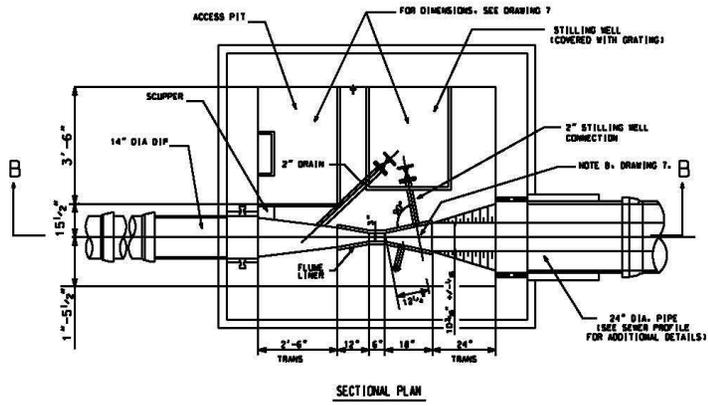
			<b>BERGEN COUNTY UTILITIES AUTHORITY</b>	
			CONSTRUCTION STANDARDS FOR CONSTRUCTION TO AND RELOCATION OF AUTHORITY SEWERS	
			SHEET TITLE TYPICAL MANHOLE DETAILS MISCELLANEOUS DETAILS	
DESIGN	INCHES	AND FINISHES	DATE	REVISED
ISSUED	S.C.	DATE	OCT. 2010	
REVISION	D.L.	DATE		
APP. DATE	DESCRIPTION	APPROVED	REVISION	S.C.
				6 OF 12



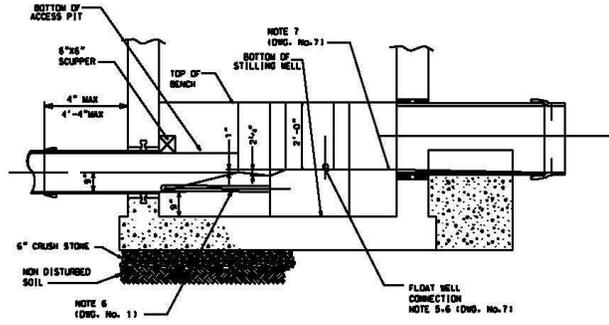


**PARSHALL FLUME METER CHAMBER**

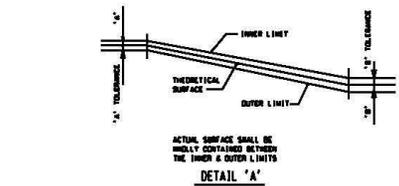
<b>BERGEN COUNTY UTILITIES AUTHORITY</b>			
CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS			
SHEET TITLE PARSHALL FLUME METER CHAMBER REINFORCING DETAILS			
SHEET NO. 24 OF 27		SHEET NUMBER	
DATE: JAN 04		SHEET NUMBER	
1	9/05	ALL	S.C.
REV.	DATE	DESCRIPTION	APPROVED
			CHANGED BY
			8 OF 12



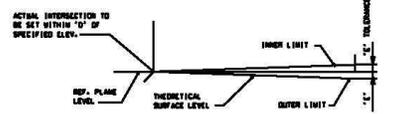
SECTIONAL PLAN



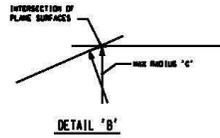
SECTION B-B



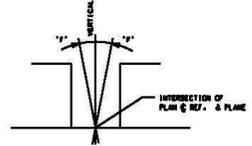
DETAIL 'A'



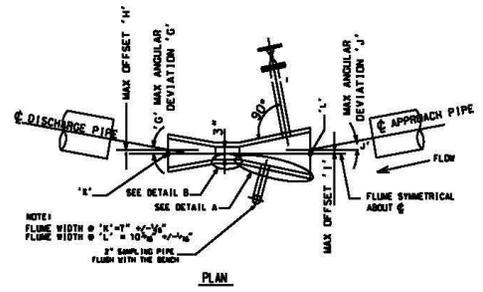
DETAIL 'C'



DETAIL 'B'



DETAIL 'D'



PLAN

	FLUME SIZE	
	3"	6"
A	1/8"	1/8"
B	1/8"	1/8"
C	1/8"	1/8"
D	1/8"	1/8"
E	1/8"	1/8"
F	0" - 10"	0" - 20"
G	0"	0"
H	1/8"	1/8"
I	1/8"	1/8"
J	1"	1"

FLUME INSTALLATION REQUIREMENTS

**PARSHALL FLUME INSTALLATION REQUIREMENTS**

- A. THE FLUME SHOULD BE INSTALLED LEVEL WITHIN 1/100 OF A FOOT.
- B. CROSS TIES AND/OR SHORING OF INSIDE WALLS SHOULD BE INSTALLED TO PREVENT SHIFTING OR BENDING OF SIDEWALLS. FOR PROPOSED DETAILS SEE FIGURE 1.
- C. CROSS TIES AND/OR SHORING SHOULD NOT BE REMOVED EARLIER THAN 24 HOURS AFTER POURING CONCRETE AROUND THE FLUME.
- E. THE FLUME SHALL BE TIGHTLY SECURED IN PLACE TO PREVENT SETTLING OR SAGGING, USING VERTICAL LEGS AS SHOWN ON FIGURE 2.
- F. CONCRETE BENCH SHOULD BE POURED IN TWO PHASES.

**PHASE A1 (SEE FIGURE 2)**

POUR CONCRETE AROUND PARSHALL FLUME. INSTALL FLUME 4" DIAMETER WELL AND DRAIN SLEEVES AND INSERTS. REINFORCING BARS. VERIFY IF FLUME IS SET WITHIN REQUIRED LIMITS. PLACE CONCRETE IN SUCCESSIVE LIFTS OF NO MORE THAN 6" PER LIFT. DO NOT USE A VIBRATOR SINCE ITS EXCESSIVE USE CAN CAUSE DISTORTION OF THE FLUME WALLS. (A REBAR COULD BE USED FOR COMPACTING CONCRETE.)

**PHASE B1 (SEE FIGURE 2)**

POUR REMAINING OF THE BENCH AREA. PLACE REMAINING OF WELL AND DRAIN SLEEVE AND INSERT CONNECTION TO STILLING WELL. REINFORCING BARS AND POUR CONCRETE. NO SUCCESSIVE CONCRETE LIFTS REQUIRED. USE OF VIBRATOR IS NOT PERMITTED.

- G. INSTALLING THE PARSHALL FLUME WITH THE GROUT IN PLACE METHOD, OR BACKFILLING WITH SAND IS NOT AN ACCEPTABLE METHOD.
- H. AS SHOWN, FLUME IS ON THE LEFT SIDE CHAMBER WHEN LOOKING DOWNSTREAM. WHERE DESIGNATED ON PLAN AND PROFILE, OR REQUIRED, CONTRACT FLUME OPPOSITE HAND ON RIGHT SIDE.
- I. COORDINATE THIS DRAWING WITH DWG. 10 AND 11.
- J. CENTERLINE FLUME IS ESTABLISHED AS A BISECTOR OF WIDTH OF THROAT AT EACH END. ('A' AND 'B') AT REFERENCE PLANE LEVEL.
- K. COORDINATE WITH DRAWING 13.

• 3" FLUME IS SHOWN. ACTUAL SIZE TO BE DETERMINED BY APPLICANT'S ENGINEER

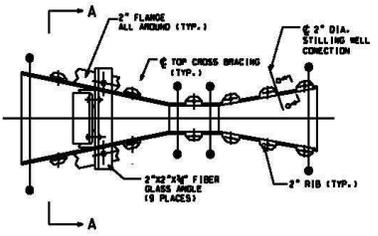


FIGURE 1

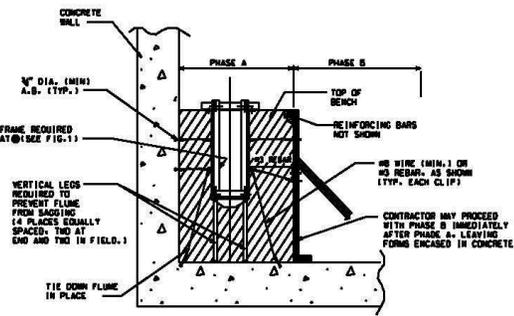
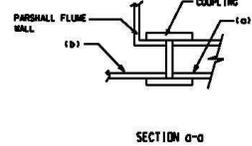


FIGURE 1 SECTION A-A

**PARSHALL FLUME METER CHAMBER**

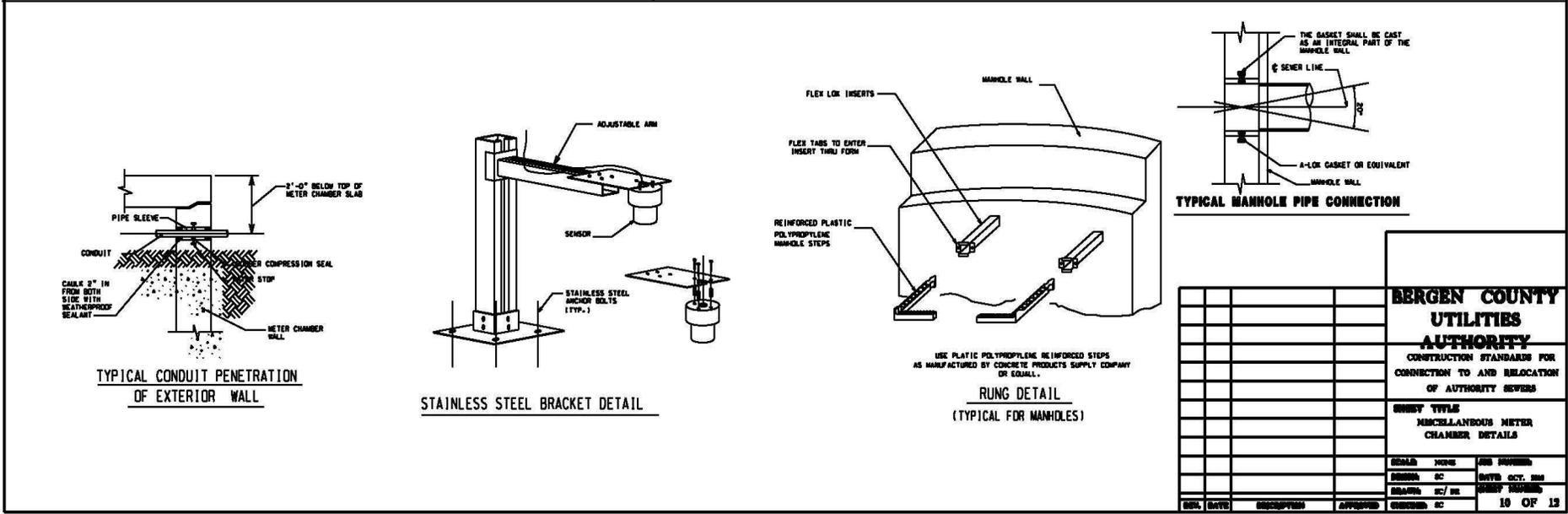
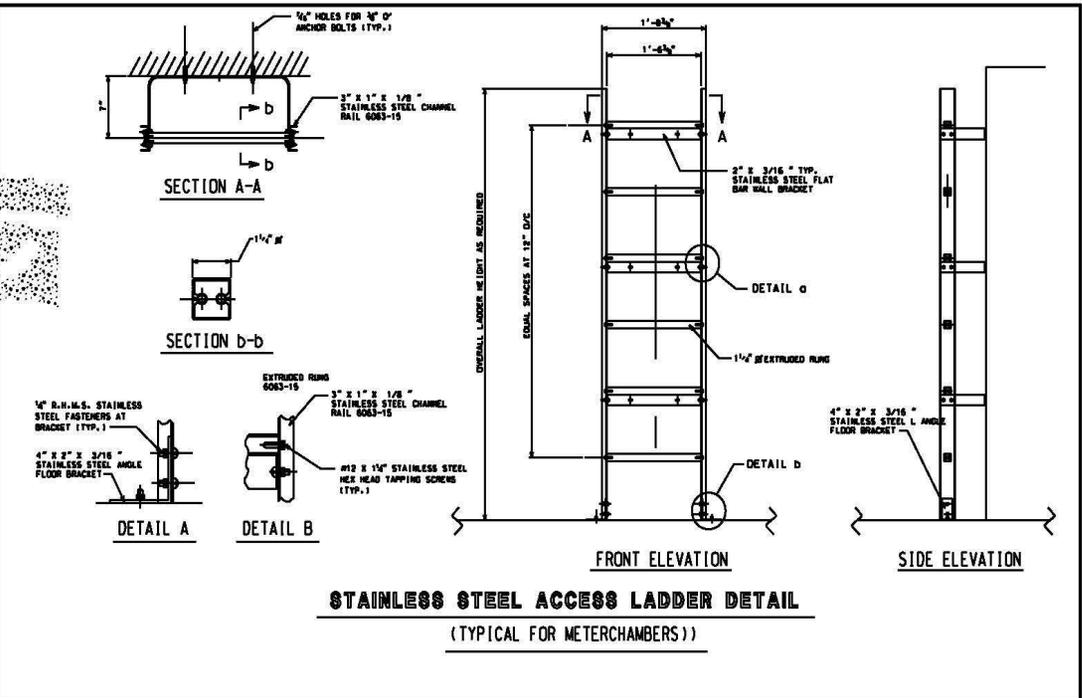
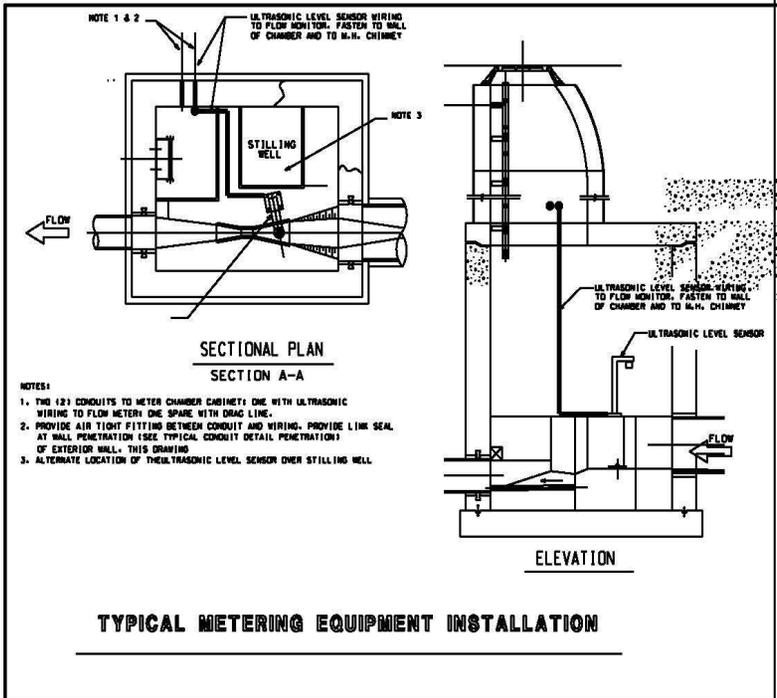


SECTION a-a

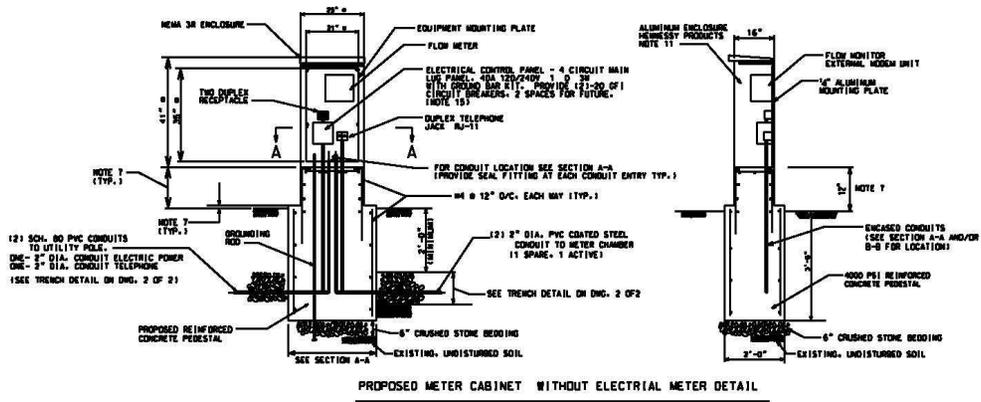
**NOTES:**

STILLING WELL PIPE (INVERT (a)) TO MATCH PARSHALL FLUME CREST ELEVATION (b).

BERGEN COUNTY UTILITIES AUTHORITY			
CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS			
SHIBUY TITILE 5" PARSHALL FLUME INSTALLATION DETAILS			
REVISION NO	SCALE	DATE	BY
1	9/08	ALL	S.C.
DATE	DATE	DATE	DATE
1	9/08	ALL	S.C.
DATE	DATE	DATE	DATE

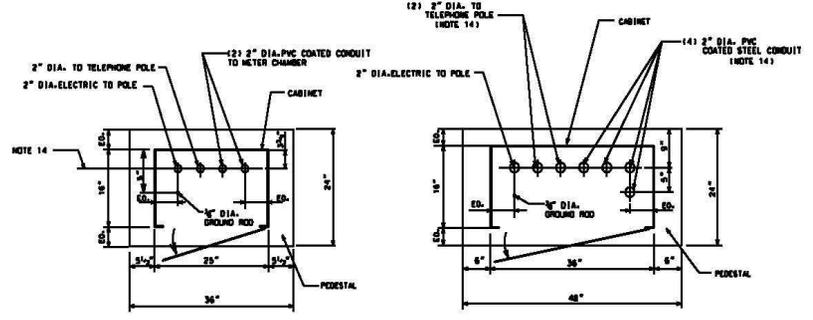


• - DIMENSION FOR STANDARD CABINET



PROPOSED METER CABINET WITHOUT ELECTRICAL METER DETAIL

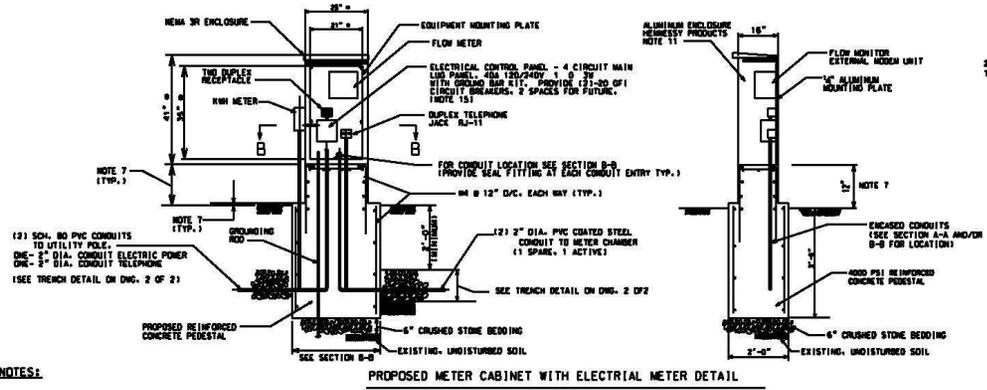
(SEE NOTE 10)



SECTION A-A  
(STANDARD CABINET WITHOUT ELECTRICAL METER)  
(SEE NOTE 10)

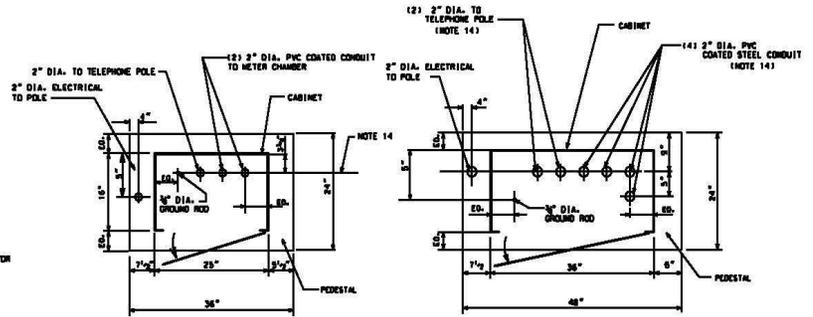
SECTION A-A'  
(OVERSIZED CABINET WITHOUT ELECTRICAL METER)  
(SEE NOTE 10)

• - DIMENSION FOR STANDARD CABINET



PROPOSED METER CABINET WITH ELECTRICAL METER DETAIL

(SEE NOTE 10)

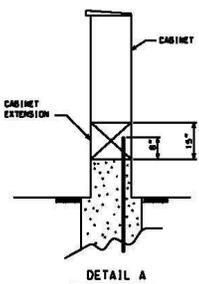


SECTION B-B  
(STANDARD CABINET WITH ELECTRICAL METER)  
(SEE NOTE 10)

SECTION B-B'  
(OVERSIZED CABINET WITH ELECTRICAL METER)  
(SEE NOTE 10)

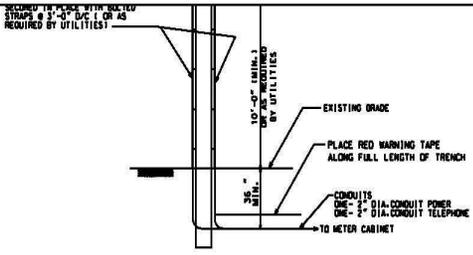
NOTES:

1. POSITION AND TERMINATE WIRING FOR FLOW METER AND INSIDE PANEL ENCLOSURE.
2. SEAL ALL CABINET PENETRATIONS AS REQUIRED TO MAINTAIN 3000 GRAIN PROOF AND SPECIFICATION PROOF SHAPE RATINGS.
3. RUN TELEPHONE WIRING EXPOSED INSIDE ENCLOSURE, NEATLY ROUTE AND SECURE ALL WIRING FROM INSIDE ENCLOSURE. ROUTE AND TERMINATE, AS REQUIRED, TO TELEPHONE JACK RJ-11. CONNECT WIRING TO FLOW METER.
4. RUN POWER WIRING PLUG FROM EXTERNAL FLOW METER TO DUPLEX RECEPTACLE.
5. PLACE CABINET OVER A 6\"/>

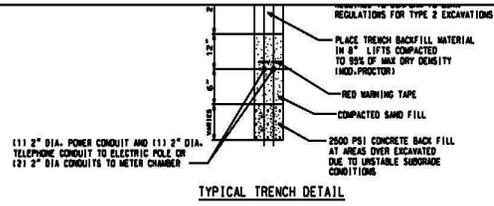


DETAIL A

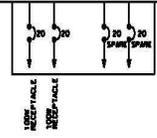
BERGEN COUNTY UTILITIES AUTHORITY			
CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS			
BEST TITLE INSTRUMENTATION AND ELECTRICAL DETAILS			
SCALE	DATE	JOB NUMBER	
10	11/07	CHANGE PERMITS HEIGHT, LINED NOTES 14 & 15 & DETAILS A	SC
9	5/01	ADDED NOTE TO PERMITS HEIGHT	SC
8	4/01	REVISED CABINET HEIGHT	SC
7	12/02	REVISED CONDUIT TO ELECTRICAL POLE	SC
6	10/02	REVISED ALL NOTES	
5	7-1-00	REVISED CONDUIT PIPE AND SECTION A-A	
4	6-14-00	AND SECTION A-A	
3	11-11-98	REVISED ELEC.	
2	9-27-97	DEPTH ONLY LAYOUT/REVISE USE	
1	6-24-97	ADD A.I. EQUIPMENT LIGHT	
REV.	DATE	DESCRIPTION	APPROVED CHECKED BY



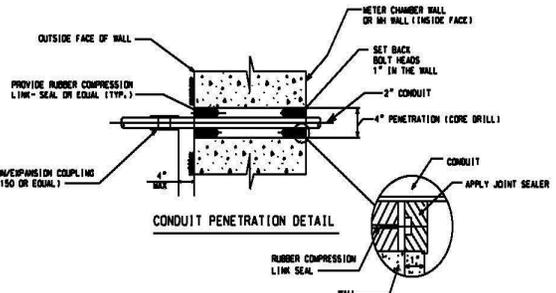
UTILITY POLE CONNECTION DETAIL



TYPICAL TRENCH DETAIL

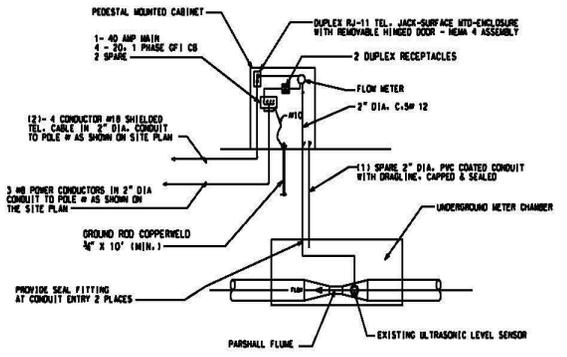


ONE LINE DIAGRAM

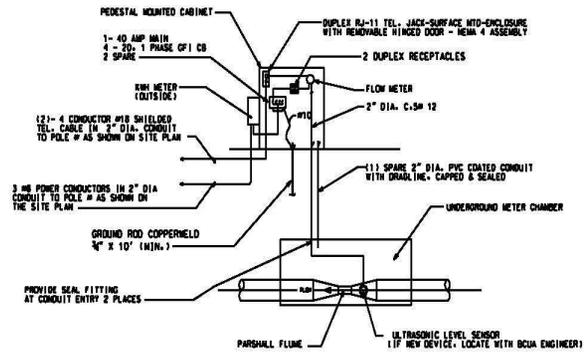


CONDUIT PENETRATION DETAIL

NOTE:  
 AT EXISTING METER CHAMBERS, PLUS EXISTING HOLES, WITH ELASTIC JOINT FILLER AND COREDRILL NEW PENETRATIONS AS DIRECTED BY THE BCUA'S ENGINEER.



TYPICAL METER CHAMBER WITHOUT ELECTRIC METER ELECTRICAL PLAN



TYPICAL METER CHAMBER WITH ELECTRIC METER ELECTRICAL PLAN

NOTE:  
 1. FOR NOTES SEE DRAWING 14

REV.	DATE	DESCRIPTION	APPROVED	CHECKED	DATE
9	5/04	CONDUIT TO ELECTRICAL POLE			
8	4/04				
7	12/02	REVISED CONDUIT TO ELECTRICAL POLE	SC		
6	10/02	REVISED ALL ITEMS			
5	7-1-00	REVISED CONDUIT PIPE AND ADD NOTE 5 & 6			
4	6-14-00	ADD SECTION A-A			
3	11-11-98	REVISED ELEC.			
2	9-27-97	DEPTH ONLY LAYOUT/REVISE BASE			
1	6-24-97	ADD ALT. EQUIPMENT LAYOUT			

**BERGEN COUNTY UTILITIES AUTHORITY**

CONSTRUCTION STANDARDS FOR CONNECTION TO AND RELOCATION OF AUTHORITY SEWERS

SHEET TITLE  
 PRELIMINARY AND REVISION CABINET, DRAINAGE AND ELECTRICAL DETAILS

SCALE: N.T.S. JOB NUMBER: 900  
 BERGEN, N.J. DATE: OCT. 2000  
 DRAWN: D. R. REVISION NUMBER:  
 12 OF 12



# APPENDIX B

## BCUA USER CHARGE SYSTEM



## **DESCRIPTION OF SYSTEM**

All municipalities and non-municipal Tier I users of the Authority's wastewater treatment services shall be notified, not less often than annually, of their share of the Authority's operation, maintenance and debt service costs. In addition, the Authority shall provide each municipality with the total charges for services rendered to each Tier II customer located within the municipality. Charges to each user shall be based upon the wastewater volume and strength attributed to that user in proportion to the total contribution of all users.

The Authority shall review, not less often than every five years, the wastewater contribution of users and user classes within each municipality, the total costs of operation, maintenance, and debt service of its wastewater treatment and collection system works and its approved user charge system. This review shall include an allocation of the operation, maintenance and debt service costs relative to volume and strength generated by all the users.

Municipalities shall be notified by the Authority, not less often than annually, of the appropriate amounts to be recovered from users within each municipality. These charges shall represent the proportionate share of the Authority's operation, maintenance and debt service costs for each user and user class.

All municipalities shall notify each user, at least annually, in conjunction with a regular bill of their user charge and that portion of the sewer service charge or ad valorem tax bill, which is attributable to the Authority's operation, maintenance, and debt service costs.

## **DEFINITIONS RELATED TO COMMUNITIES WITH NON-COMBINED SEWERS SYSTEMS (Non-CSS)**

### **NON-CSS BIOCHEMICAL OXYGEN DEMAND (BOD) CONCENTRATIONS**

The Non-CSS BOD concentration used is the average influent BOD removed at the Little Ferry and Edgewater Wastewater Treatment Plants for all BCUA Non-CSS Collection System Meters not separately sampled.

### **NON-CSS BOD CONTRIBUTIONS**

The Non-CSS BOD contributions are determined by multiplying the Non-CSS BOD concentration (in mg/l) times the respective total annual flow recorded for BCUA Non-CSS Collection System Meters in Millions of Gallons (MG) times 8.34.

### **NON-CSS TOTAL SUSPENDED SOLIDS (TSS) CONCENTRATIONS**

The Non-CSS TSS concentration used is the average influent TSS removed at the Little Ferry and Edgewater Wastewater Treatment Plants for all BCUA Non-CSS Collection System Meters not separately sampled.

### **NON-CSS TSS CONTRIBUTIONS**

The Non-CSS TSS contributions are determined by multiplying the Non-CSS TSS concentration (in mg/l) times the respective total annual flow recorded for BCUA Non-CSS Collection System Meters (in MG) times 8.34.

### **FLOW CORRECTION FACTOR**

The flow correction factor is the sum of all metered flow through the BCUA Little Ferry and Edgewater Plant Effluent Meters minus the sum of all metered flow through the BCUA Collection System Meters divided by the sum of all metered flow through the Plant Effluent Meters ( $V_{\text{plant-Vcoll}} / V_{\text{plant}}$ ). The flow correction factor is applied to all metered flow through the BCUA Collection System Meters (both CSS and Non-CSS) for the purpose of calculating user charges.

#### Notes:

- Annual BOD contribution from Tier 1 – Non-CSS Municipal Users is the product of ① times ② where: A) ① is the Total BOD Removed at the Plant minus the BOD Contributions from: i) Tier 1 – CSS Municipal Users, ii) Tier 1 - Non-Municipal Users and iii) Tier 2 - Municipal Users and B) ② is the % BOD Removed at Plant. Percent BOD removal at Plant is (BOD removed/BOD influent x 100%).
  
- Annual TSS contribution from Tier 1 – Non-CSS Municipal Users is the product of ③ times ④ where: A) ③ is the Total TSS Removed at the Plant minus the TSS Contributions from: i) Tier 1 – CSS Municipal Users, ii) Tier 1 - Non-Municipal Users and iii) Tier 2 – Municipal Users and B) ④ is the % TSS Removed at Plant. Percent TSS removal at Plant is (TSS removed/TSS influent x **100%**).

## **DEFINITIONS RELATED TO COMMUNITIES WITH COMBINED SEWERS SYSTEMS (CSS) – PARTIAL OR TOTAL**

### **CSS BOD CONCENTRATIONS**

Each CSS community will have its CSS BOD concentration determined by averaging the BOD Concentrations from all BCUA CSS Collection System Meters sampled by the BCUA on representative rain days during the year.

### **CSS BOD CONTRIBUTIONS**

The CSS BOD contributions are determined by multiplying the CSS BOD concentration (in mg/l) within the community times the respective total annual flow recorded on the BCUA CSS Collection System Meters on rain days (as defined herein) for each CSS community (in MG) times 8.34.

For partial CCS communities, the total BOD contributions are determined by adding the CSS BOD contributions and the Non-CSS BOD contributions as previously defined.

For total CCS communities, the total BOD contributions are determined based on the CSS BOD contributions only, as previously defined.

### **CSS TSS CONCENTRATIONS**

Each CSS community will have its CSS TSS concentration determined by averaging the TSS Concentrations from all BCUA CSS Collection System Meters sampled by the BCUA on representative rain days during the year.

### **CSS TSS CONTRIBUTIONS**

The CSS TSS contributions are determined by multiplying the CSS TSS concentration (in mg/l) within the community times the respective total annual flow recorded on the BCUA CSS Collection System Meters on rain days (as defined herein) for each CSS community (in MG) times 8.34.

For partial CCS communities, the total TSS contributions are determined by adding the CSS TSS contributions and the Non-CSS TSS contributions as previously defined.

For total CCS communities, the total TSS contributions are determined based on the CSS TSS contributions only, as previously defined.

#### Note:

- BCUA CSS Collection System Meters, as defined hereinafter, are used for the CSS flows. All other BCUA Collection System Meters (hereinafter “BCUA Non-CSS Collection System Meters”) are used to determine Non-CSS flows. All metered flows (both CSS and Non-CSS) will have a flow correction factor applied such that all users pay their respective share of the actual flow treated at the Little Ferry and Edgewater Treatment Plants.

**DEFINITIONS RELATED TO COMMUNITIES WITH COMBINED SEWERS SYSTEMS  
(CSS) – PARTIAL OR TOTAL (Continued)**

**BCUA COMBINED SEWER SYSTEM (CSS) COLLECTION SYSTEM METERS**

The BCUA has established that the following flow meters are in fact receiving combined sewer system flows that pass through the following BCUA Collection System Meters:

Fort Lee	Meters No. 18, 21 and 24
Hackensack	Meters No. 103 and 109
Ridgefield Park	Meter No. 17
Cliffside Park	Meters No. 20 and 62

**CSS COMMUNITIES**

**Based upon the aforementioned BCUA Collection System Meters, the following communities have combined sewer systems either in part of the community or throughout the entire community as follows:**

**Partial CSS Communities**

Fort Lee  
Hackensack  
Cliffside Park

**CSS Community**

**Ridgefield Park**

**RAIN DAYS**

For the purposes of calculating the charges for communities having combined sewer systems or partially combined sewer systems, rain days are defined as those days which have recorded rainfalls of at least 0.10 inches of rain or the day after a rain day of at least 0.75 inches as recorded at the Teterboro NJ Airport.

**TIME PERIOD FOR WASTEWATER SAMPLING OF BCUA CSS COLLECTION SYSTEM METERS**

During the first year after this amendment is enacted, the Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) contribution for the BCUA CSS Collection System Meters will be based upon a representative wastewater sampling performed by the BCUA of selected rain days during the period from 2000 to 2005. There is no collection system sampling data for years 2006 through 2008. BOD and TSS sampling on selected rain days will be collected from the BCUA CSS Collection System Meters starting in 2009. Beginning with the computation of the 2011 service charges, the representative CSS wastewater sampling data will be used to determine the BOD and TSS contribution from the BCUA CSS Collection System Meters.

## METHOD OF DETERMINING RATES

- Step 1 Determine the Authority's annual operation, maintenance and debt service costs, including replacement costs necessary to maintain the capacity and level of performance for which the Authority's treatment works was designed.
- Step 2 Determine the amount of operation, maintenance and debt service costs that must be recovered from all users on a proportionate basis by subtracting all other miscellaneous revenues from the total annual operation, maintenance and debt service costs determined in Step 1.
- Step 3
- a. Allocate annual costs to be recovered from all users as determined in Step 2 to the wastewater parameters (Flow, BOD and TSS) that affect the annual operation, maintenance and debt service costs.
  - b. Annual costs to be recovered from all users as determined in Step 2 that are not directly allocable to the selected wastewater parameters will be proportioned on a weighted basis.
- Step 4 Calculate the total annual operation, maintenance and debt service costs allocable to the wastewater parameters determined in Step 3 by adding costs established in Steps 3 (a) and (b).

Step 5 **A. For Non-CSS Communities**

Determine the total annual wastewater flow and calculate strength contributions of all users. Annual flow is based on BCUA plant effluent flow meters. Annual biochemical oxygen demand (BOD) contributions and annual total suspended solids (TSS) are determined by using the Plant influent and effluent BOD and TSS concentrations and the plant effluent flow as reported to the NJDEP in Daily Monitoring Reports (DMR).

**B. For CSS Communities; Partial or Total**

For Partial CSS Communities (Fort Lee, Hackensack and Cliffside Park)

Use the method in Step 5 for the BCUA Non-CSS Collection System Meters within the community added to Step 5A as outlined hereinafter for the BCUA CSS Collection System Meters within the community.

Step 5A BCUA CSS Collection System Meters

Determine the total annual wastewater flow directly from the BCUA CSS Collection System meters and calculate the strength contributions (annual Biochemical Oxygen Demand (BOD) and annual Total Suspended Solids (TSS)) from the BCUA CSS Collection System meters based upon representative wastewater sampling of the BCUA CSS Collection System meters during rain days.

## METHOD OF DETERMINING RATES (Continued)

Step 5A (Continued) The User Charge method described herein insures that the cost of operation, maintenance and debt service relative to infiltration and inflow flows at the Authority's treatment works is distributed proportionally among all subscribers and among all users and user classes within each member municipality.

### **For Total CSS Communities (Ridgefield Park) Use Step 5A as outlined above.**

Step 6 Determine User Charge unit rates by dividing the annual amount of operation, maintenance and debt service costs attributable to each wastewater parameter (as determined in Step 4) by the total amount of that parameter contributed by the Authority's users (see Step 5). The resultant rates will reflect the Authority's operation and maintenance costs and debt service costs for each parameter to be recovered from all users on a per unit basis.

The user rates for recovery of BCUA O & M and debt service costs from all users are calculated by the following formulas:

$$R_f = (C_{om} \times P_{omf}) / V + (C_{ds} \times P_{dsf}) / V$$

Where:

$R_f$  = Annual BCUA Rate for treatment of a unit of wastewater Flow  
 $C_{om}$  = Annual BCUA O & M costs to be recovered from all users  
 $P_{omf}$  = Proportion of O&M costs attributed to treatment of Flow  
 $V$  = Annual Plant Effluent Flow  
 $C_{ds}$  = Annual BCUA Debt Service Costs to be recovered from all users  
 $P_{dsf}$  = Proportion of Debt Service Costs attributed to treatment of Flow

$$R_{bod} = (C_{om} \times P_{ombod}) / BOD_p + (C_{ds} \times P_{dsbod}) / BOD_p$$

Where:

$R_{bod}$  = Annual BCUA Rate for treatment of a unit of BOD  
 $C_{om}$  = Annual BCUA O & M costs to be recovered from all users  
 $P_{ombod}$  = Proportion of O&M costs attributed to BOD removal  
 $BOD_p$  = Annual Plant BOD Removed (BOD influent-BOD effluent)  
 $C_{ds}$  = Annual BCUA Debt Service Costs to be recovered from all users  
 $P_{dsbod}$  = Proportion of Debt Service Costs attributed to BOD removal

$$R_{tss} = (C_{om} \times P_{omtss}) / TSS_p + (C_{ds} \times P_{dstss}) / TSS_p$$

Where:

$R_{tss}$  = Annual BCUA Rate for treatment of a unit of TSS  
 $C_{om}$  = Annual BCUA O & M costs to be recovered from all users  
 $P_{omtss}$  = Proportion of O&M costs attributed to TSS removal  
 $TSS_p$  = Annual Plant TSS Removed (TSS influent-TSS effluent)  
 $C_{ds}$  = Annual BCUA Debt Service Costs to be recovered from all users  
 $P_{dstss}$  = Proportion of Debt Service Costs attributed to TSS removal



## METHOD OF DETERMINING USER CHARGES

### MUNICIPAL CHARGES

To determine the annual User Charges for member municipalities, the charges are calculated by adding the Tier 1 User Charge to the Tier 2 User Charge based on the following formula:

$$C_M = C_{M1} + \sum C_{M2}$$

Where:

- $C_M$  = Annual Charge to member municipality
- $C_{M1}$  = Tier 1 Annual Charge to member municipality
- $C_{M2}$  = Tier 2 Annual Charge to member municipality for each user in this classification located within the member municipality

#### Tier 1 – Municipal User Annual Charge Non-CSS Community

To determine the annual User Charges for this user classification, the charges are calculated by multiplying the rates calculated in Step 6 by the annual flow and strength contribution of each Tier 1 User. The annual flow is determined by the BCUA Collection System Meters. The strength contribution is determined by the strength contributed by all users at the treatment plant minus the Tier 1 - Non-Municipal and Tier 2 - Municipal Users strength contribution as measured by the BCUA.

The annual user charges to each Tier 1 - Municipal User for recovery of BCUA O & M and debt service costs are calculated by the following formula:

$$C_{M1} = (R_f \times V_u \times (1+F_c)) + (R_{bod} \times L_{bod}) + (R_{tss} \times L_{tss})$$

Where:

- $C_{M1}$  = Tier 1 Annual Charge to member municipality
- $R_f$  = Annual BCUA Flow Rate for treatment of a unit of wastewater flow
- $V_u$  = Annual volume contribution from User
- $F_c$  = Flow correction Factor
- $R_{bod}$  = Annual BCUA BOD Rate for treatment of a unit of BOD
- $L_{bod}$  = Calculated Annual BOD contribution from All Municipal Users x % removal at Plant x BCUA Collection System Metered Flow / Total BCUA Collection System Metered Flow
- $R_{tss}$  = Annual BCUA TSS Rate for treatment of a unit of TSS
- $L_{tss}$  = Calculated Annual TSS contribution from All Municipal Users x % removal at Plant x BCUA Collection System Metered Flow / Total BCUA Collection System Metered Flow

## METHOD OF DETERMINING USER CHARGES (Continued)

### MUNICIPAL CHARGES (Continued)

#### Tier 1 – Municipal User Annual Charge Partial CSS Communities

To determine the annual User Charges for this user classification, the charges are calculated by multiplying the rates calculated in Step 6 by the annual flow and strength contribution of each Tier 1 User. The annual flow is determined by the BCUA Collection System Meters. The strength contribution is determined by the strength contributed by all users at the treatment plant minus the Tier 1 - Non-Municipal and Tier 2 - Municipal Users strength contribution as measured by the BCUA.

The annual user charges to each Tier 1 - Municipal User for recovery of BCUA O & M and debt service costs are calculated by the following formula:

$$C_{M1} = ((R_f \times V_u \times (1+F_c)) + (R_{bod} \times L_{bod}) + (R_{tss} \times L_{tss})) + ((R_{bod} \times LCS_{bod}) + (R_{tss} \times LCS_{tss}))$$

#### Where:

$C_{M1}$  = Tier 1 Annual Charge to member municipality

$R_f$  = Annual BCUA Flow Rate for treatment of a unit of wastewater flow

$V_u$  = Annual volume contribution from User (BCUA Non-CSS Collection System Meters)

$F_c$  = Flow correction Factor

$R_{bod}$  = Annual BCUA BOD Rate for treatment of a unit of BOD

$L_{bod}$  = Calculated Annual BOD contribution for BCUA Non-CSS Collection System Meters from All Municipal Users x % removal at Plant x BCUA Non-CSS Collection System Metered Flow / Total BCUA Collection System Metered Flow

$R_{tss}$  = Annual BCUA TSS Rate for treatment of a unit of TSS

$L_{tss}$  = Calculated Annual TSS contribution for BCUA Non-CSS Collection System Meters from All Municipal Users x % removal at Plant x BCUA Non-CSS Collection System Metered Flow / Total BCUA Collection System Metered Flow

$LCS_{bod}$  = Annual BOD contribution from the BCUA CSS Collection System Meters

$LCS_{tss}$  = Annual TSS contribution from the BCUA CSS Collection System Meters

## METHOD OF DETERMINING USER CHARGES (Continued)

### MUNICIPAL CHARGES (Continued)

#### Tier 1 – Municipal User Annual Charge Total CSS Communities

To determine the annual User Charges for this user classification, the charges are calculated by multiplying the rates calculated in Step 6 by the annual flow and strength contribution of each Tier 1 User. The annual flow is determined by the BCUA Collection System Meters. The strength contribution is determined by the strength contributed by all users at the treatment plant minus the Tier 1 - Non-Municipal and Tier 2 - Municipal Users strength contribution as measured by the BCUA.

The annual user charges to each Tier 1 - Municipal User for recovery of BCUA O & M and debt service costs are calculated by the following formula:

$$C_{M1} = ((R_f \times V_u \times (1+F_c)) + (R_{bod} \times LCS_{bod}) + (R_{tss} \times LCS_{tss}))$$

#### Where:

- $C_{M1}$  = Tier 1 Annual Charge to member municipality
- $R_f$  = Annual BCUA Flow Rate for treatment of a unit of wastewater flow
- $V_u$  = Annual volume contribution from User
- $F_c$  = Flow correction Factor
- $R_{bod}$  = Annual BCUA BOD Rate for treatment of a unit of BOD
- $R_{tss}$  = Annual BCUA TSS Rate for treatment of a unit of TSS
- $LCS_{bod}$  = Annual BOD contribution from the BCUA CSS Collection System Meters
- $LCS_{tss}$  = Annual TSS contribution from the BCUA CSS Collection System Meters

## METHOD OF DETERMINING USER CHARGES (Continued)

### MUNICIPAL CHARGES (Continued)

#### Tier 2 – Municipal User Annual Charges

To determine the annual User Charges for this user classification, the charges are calculated by multiplying the rates calculated in Step 6 by the annual flow and strength contribution of each Tier 2 – Municipal User as measured by the BCUA.

The annual user charges to each Tier 2 – Municipal User for recovery of BCUA O & M and debt service costs are calculated by the following formula:

$$C_{M2} = (R_f \times V_u \times (1+F_c)) + (R_{bod} \times L_{bod}) + (R_{tss} \times L_{tss})$$

#### Where:

$C_{M2}$  = Tier 2 Annual Charge to member municipality  
 $R_f$  = Annual BCUA Flow Rate for treatment of a unit of wastewater flow  
 $V_u$  = Annual volume contribution from User  
 $F_c$  = Flow correction Factor  
 $R_{bod}$  = Annual BCUA BOD Rate for treatment of a unit of BOD  
 $L_{bod}$  = Annual BOD contribution from User x % removal at Plant  
 $R_{tss}$  = Annual BCUA TSS Rate for treatment of a unit of TSS  
 $L_{tss}$  = Annual TSS contribution from User x % removal at Plant

### NON-MUNICIPAL CHARGES – TIER 1

To determine the annual User Charges for this user classification, the charges are calculated by multiplying the rates calculated in Step 6 by the annual flow and strength contribution of each Non-Municipal Tier 1 User as measured by the BCUA.

The annual user charges to each Non-Municipal - Tier 1 User for recovery of BCUA O & M and debt service costs are calculated by the following formula:

$$C_{NM} = (R_f \times V_u \times (1+F_c)) + (R_{bod} \times L_{bod}) + (R_{tss} \times L_{tss})$$

#### Where:

$C_{NM}$  = Non-Municipal Tier 1 Annual User Charge  
 $R_f$  = Annual BCUA Flow Rate for treatment of a unit of wastewater flow  
 $V_u$  = Annual volume contribution from User  
 $F_c$  = Flow correction Factor  
 $R_{bod}$  = Annual BCUA BOD Rate for treatment of a unit of BOD  
 $L_{bod}$  = Annual BOD contribution from User x % removal at Plant  
 $R_{tss}$  = Annual BCUA TSS Rate for treatment of a unit of TSS  
 $L_{tss}$  = Annual TSS contribution from User x % removal at Plant

The following definitions shall apply for purposes of this Step 6:

#### **ANNUAL PLANT BOD REMOVED**

The Annual Plant BOD Removed shall mean the total amount of BOD removed during the year at the Little Ferry and Edgewater Wastewater Treatment Plants, calculated based on the Daily Monitoring Reports (DMR) submitted by the Authority to NJDEP.

Notwithstanding the foregoing, if a Trigger Event occurs, as to the Little Ferry Wastewater Treatment Plant only, in lieu of the foregoing as to the months when the Trigger Event occurred, the adjusted plant BOD removed for each of those particular months shall be the average of the preceding five (5) years BOD removed during each of those calendar months for the Little Ferry Treatment Plant. Those adjusted monthly plant BOD removed amounts for the Little Ferry Treatment Plant shall be added to the unadjusted plant BOD removed amounts for the Edgewater Treatment Plant to arrive at adjusted monthly amounts of plant BOD removed for those particular months. The Annual Plant BOD Removed shall be the sum of the monthly plant BOD amounts removed, either unadjusted or adjusted, for the twelve month period.

#### **ANNUAL PLANT TSS REMOVED**

The Annual Plant TSS Removed shall mean the total amount of TSS removed during the year at the Little Ferry and Edgewater Wastewater Treatment Plants, calculated based on the DMR submitted to NJDEP.

Notwithstanding the foregoing, if a Trigger Event occurs, as to the Little Ferry Wastewater Treatment Plant only, in lieu of the foregoing as to the months when the Trigger Event occurred, the adjusted plant TSS removed for each of those particular months shall be the average of the preceding five (5) years TSS removed during each of those calendar months for the Little Ferry Treatment Plant. Those adjusted monthly plant TSS removed amounts for the Little Ferry Treatment Plant shall be added to the unadjusted plant TSS removed amounts for the Edgewater Treatment Plant to arrive at adjusted monthly amounts of plant TSS removed for those particular months. The Annual Plant TSS Removed shall be the sum of the monthly plant TSS amounts removed, either unadjusted or adjusted, for the twelve month period.

#### **ANNUAL PLANT EFFLUENT FLOW**

The Annual Plant Effluent Flow shall mean the total flow through the effluent meters of the Little Ferry and Edgewater Wastewater Treatment Plants for the year, as reported on the DMR submitted to NJDEP.

Notwithstanding the foregoing, if a Trigger Event occurs, as to the Little Ferry Wastewater Treatment Plant only, in lieu of the foregoing as to the months when the Trigger Event occurred, the adjusted monthly plant effluent flow for each of those particular months shall be the average of the preceding five (5) years effluent flow during each of those calendar months for the Little Ferry Treatment Plant. Those adjusted monthly plant effluent flow amounts for the Little Ferry Treatment Plant shall be added to the unadjusted amounts of plant effluent flow for the Edgewater Treatment Plant to arrive at adjusted monthly amounts of plant effluent flow for those particular months. The Annual Plant Effluent Flow shall be the sum of the monthly plant effluent flow amounts, either unadjusted or adjusted, for the twelve month period.

#### **TRIGGER EVENT**

A Trigger Event occurs when the Authority sends a letter to NJDEP asserting a affirmative defense pursuant to N.J.A.C. 7:14A-6.11 and N.J.A.C. 7:14-8.3(i) as to either Carbonaceous Biochemical Oxygen Demand (CBOD) or Total Suspended Solids (TSS), with respect to the

Little Ferry Wastewater Treatment Plant only, for three consecutive months during a particular year for the determination of user charge rates.”



# APPENDIX C

## BCUA MODEL ORDINANCE FOR REGULATION OF SEWER USE



BCUA MODEL ORDINANCE FOR REGULATION OF SEWER USE

AN ORDINANCE regulating the use of public and private sewers and drains, private wastewater disposal, the installation and connection of building sewers, and the discharge of water and wastes into the public sewer system(s) and providing penalties for violations thereof;

WHEREAS, the Federal government has enacted and emended the Federal Water Pollution Control Act now known as the Federal Clean Water Act (33 U.S.C. 1251, et.seq.) and the \_\_\_\_\_ of \_\_\_\_\_ desires to remain in compliance therewith; and

WHEREAS, the \_\_\_\_\_ of \_\_\_\_\_ is within the district serviced by the Bergen County Utilities Authority and has contracted with the Authority for the removal and treatment of the wastewater contained within its sanitary sewer system; and

WHEREAS, the \_\_\_\_\_ of \_\_\_\_\_ desires to assure that the use of the public wastewater system operated by it will conform to the best sanitary engineering practices; and

WHEREAS, the \_\_\_\_\_ of \_\_\_\_\_ desires to regulate the use of the public wastewater system operated by it as required by the Federal Clean Water Act; and

WHEREAS, the Bergen County Utilities Authority (BCUA) has incorporated in its Rules and Regulations, as required by the Federal Clean Water Act, an Industrial Cost Recovery System, a User System, and Rules and Regulations pertaining to the use of public and private sewers and drains, which have been approved by the United States Environmental Protection Agency;

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the \_\_\_\_\_ of \_\_\_\_\_ that, as required by the Federal Clean Water Act, the \_\_\_\_\_ of \_\_\_\_\_ hereby enacts the Industrial Cost Recovery System, User Charge System, and Rules and Regulations governing the use of public and private sewers, by adopting the Rules and Regulations of the Bergen County Utilities Authority Rules and code entitled "Bergen County Utilities Authority Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works" and which are approved by the United States Environmental Protection Agency; and

BE IT FURTHER ORDAINED that not fewer than three (3) copies of the "Bergen County Utilities Authority Rules and regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works" have been and now are filed in the office of the Clerk of the of; and

BE IT FURTHER ORDAINED that the adoption of this "Sewer Use Ordinance" by the \_\_\_\_\_ of \_\_\_\_\_ shall include the adoption of all future amendments to said "Bergen County Utilities Authority Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works" provided that prior to enacting such amendments, the \_\_\_\_\_ of \_\_\_\_\_ is given forty-five (45) days notice in writing of the amendment and an opportunity to comment on same at a public hearing.

# APPENDIX D

## ENFORCEMENT RESPONSE PLAN



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## **I. INTRODUCTION**

### **A. Background**

The Authority has in place an Industrial Pretreatment Program (IPP) approved by the New Jersey Department of Environmental Protection (NJDEP) in 1984. As such, the Authority qualifies as a Delegated Local Agency as that term is defined pursuant to the Water Pollution Control Act (the State Act) (*N.J.S.A. 58:10A-1, et seq., as amended*). The United States Environmental Protection Agency (USEPA) has enacted General Pretreatment Regulations for Existing and New Sources of Pollution (*40CFR Part 403*), which are incorporated by reference in regulations promulgated by the NJDEP at *N.J.A.C. 7:14 A - 2.3*. As a Delegated Local Agency, the Authority is charged with certain responsibilities for enforcing its IPP in accordance with the requirements of the NJDEP and USEPA regulations. These obligations arise through requirements set forth in the Clean Water Act (the Act) (*33 U.S.C. 1551, et. seq.*).

The requirement that Delegated Local Agencies develop and implement an Enforcement Response Plan (ERP) has been promulgated at *40 CRF Part 403.8(f)(5)* and *N.J.A.C. 7:14A-19.4*. The primary purpose of the ERP is to set forth procedures indicating how a Delegated Local Agency will investigate and respond to instances of user noncompliance. The State of New Jersey has also enacted legislation dealing with enforcement of industrial pretreatment requirements (see P.L. 1990, c.28 and P.L. 1991, c.8). The Authority has prepared this ERP in order to comply with current federal and state requirements as well as to provide overall guidance to the Authority's staff in enforcement of the IPP requirements. This ERP shall be appended to and incorporated within the *Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works* (the Authority's Rules and Regulations).

### **B. Enforcement Response Plan (ERP) Elements**

The ERP as been developed in accordance with the requirements of *40 CRF 403.8 (f)(5)* and *N.J.A.C. 7:14A-19.4*. The following, as excerpted from *N.J.A.C. 7:14A-19.4*, outlines the required ERP elements, which have been included in this document:

1. Description of how the Authority will investigate instances of noncompliance;
2. Description of the types of escalating enforcement responses the Authority will take in response to all anticipated types of user violations and the time periods within which responses will take place;
3. Identification by title of the official(s) responsible for implementing each type of enforcement response;

4. Adequate reflection of the Authority's primary responsibility to enforce all applicable pretreatment requirements and standards; and
5. Description of non-compliance and nature of violation criteria, and responses as set forth by the NJDEP as minimum requirements.

### **C. ERP Format**

This ERP is presented in three (3) sections as follows:

- I. INTRODUCTION
- II. INVESTIGATION OF NONCOMPLIANCE
- III. ENFORCEMENT RESPONSE PLAN

The Introduction covers document purpose and format. Section II discusses the procedures to be utilized by the Authority's staff for the determination of noncompliance events or violations. Section III contains the enforcement procedures that will be implemented with this plan. This includes the escalating enforcement actions the Authority's staff will take in response to anticipated user violations.

## **II. INVESTIGATION OF NON-COMPLIANCE**

### **A. Overview**

This Section outlines the various members of the IPP Enforcement Team and identifies procedures for identifying noncompliance with pretreatment requirements.

The IPP Department shall maintain a staff of trained professionals to develop and enforce pretreatment rules, regulations, discharge permits, compliance schedules and other program requirements. The IPP staff shall interact with other Authority Departments and personnel in the performance of their work efforts. These Departments include mainly the Laboratory for sampling and analysis, and treatment plant operations for monitoring plant influent and sludge quality data. Also, when needed for technical assistance, the IPP Department may consult with the Authority's Consulting Engineering regarding technical matters beyond the expertise of the IPP staff or the Authority's own Engineering Department. The Authority's General Counsel will provide legal services to the IPP staff on an "as needed" basis in accordance with the guidelines in this ERP.

## **B. IPP Enforcement Team**

### **1. Overview**

The IPP is administered by a team of personnel experienced in the various aspects of pretreatment operation, administration and enforcement. The Team consists of the Authority's IPP staff, other Authority technical and administrative personnel, outside consultants and legal advisors.

Each member of the IPP Enforcement Team has specific responsibilities within the overall program. General responsibilities relative to monitoring and enforcement of existing rules, regulations and permits are set forth in this Section. Specific responsibilities involving enforcement actions are covered under Section III.D entitled "Enforcement Response Summary". The definition of the responsibilities of the various Team members should be used in conjunction with Section III.D to clarify who is to initiate and/or approve particular enforcement responses.

### **2. IPP Staff**

The following subsections detail the basic staff titles and general enforcement responsibilities within the IPP Division.

#### **(a) Industrial Pretreatment Program Coordinator**

The Industrial Pretreatment Program Coordinator (IPP Coordinator) is responsible for providing overall guidance for IPP operations. The IPP Coordinator shall establish the administrative organization of the IPP Unit, and shall assign all work tasks.

The IPP Coordinator is responsible for providing interpretations of the BCUA's *Rules and Regulations*, recommending updates to the *Rules and Regulations* when necessary, and assisting in the development of all rules, limitations, permits or plans associated with the IPP. The IPP Coordinator shall review and make final determinations concerning Treated Groundwater or Industrial Wastewater Discharge Permit Applications, assist users with the preparation of application documents, where needed, and issue Treated Groundwater or Industrial Wastewater Discharge Permits.

The IPP Coordinator shall prepare and issue enforcement actions, including Notices of Violation (NOVs), orders for additional sampling and monitoring, Compliance Schedules, Compliance Orders, Orders to Show Cause, and Civil Administrative Penalty assessments. In addition, the IPP Coordinator shall make recommendations to the Executive Director and Chief Engineer concerning the amount of penalties to be sought by way of any civil action brought in the Superior Court of New Jersey to enforce the

terms of the *Rules and Regulations* or to collect any and all penalties assessed in accordance therewith. The IPP Coordinator shall also recommend to the Executive Director and Chief Engineer any and all technical provisions to be included in any Consent Agreement(s) with IPP permittees. The IPP Coordinator is responsible for preparing the annual list of facilities in Significant Non-compliance for publication.

(b) Environmental Health Specialist (Wastewater Pretreatment)

The Environmental Health Specialist is responsible to the IPP Coordinator and assists in various technical aspects of the monitoring and enforcement of the IPP. The Environmental Health Specialist is responsible for coordinating field, laboratory, administrative and clerical personnel in the performance of their respective duties. The Environmental Health Specialist is responsible for detecting non-compliance through the review of monitoring data and the performance of site inspections and informing the IPP Coordinator of violations. The Environmental Health Specialist develops and monitors the pretreatment database including the User Inventory and coordinates with laboratory staff regarding sampling and analysis performed by the Authority.

(c) Environmental Compliance Investigator

The Environmental compliance Investigator is responsible for both field and office tasks. These tasks include inspecting industrial user facilities; preparing industrial waste surveys; and assisting the Environmental Specialist in his duties. Environmental Compliance Investigators also assist in the screening of compliance monitoring data including inspection and sampling reports and reports noncompliance to the Environmental Health Specialist.

3. Enforcement Team Members Outside of the IPP Department

(a) Executive Director

The Executive Director is responsible for providing overall guidance and oversight for BCUA's IPP. The Executive Director shall insure that the IPP Unit is provided with the necessary funding and resources to carry out its required activities, and that the staff receives adequate training. The Executive Director shall approve as to form all public notices related to the IPP, and shall review all major enforcement actions, including consent agreements and civil actions. The Executive Director shall provide final approval to all IPP rules, regulations, standards, and fees.

(b) Chief Engineer

The Chief Engineer is responsible for compliance with all terms and conditions of Authority's New Jersey Pollutant Discharge Elimination System (NJPDES) permit and for the overall operation and maintenance of the

treatment plant, effluent quality, sludge quality and disposal. The Chief Engineer shall oversee the development of any rules, regulations, permits and plans associated with the IPP and consult with the IPP Coordinator regarding treatment plant operation and sludge management issues impacted by industrial discharges. The Chief Engineer shall review Consent Agreements, Orders of Show Cause, and other major enforcement actions prior to issuance.

(c) Laboratory Supervisor

The Laboratory Supervisor is responsible for coordinating all aspects of laboratory operations and staffing needed for sampling and analysis required by the IPP Unit, including samples from users, the collection system, and the treatment plant. The Laboratory Supervisor shall coordinate all sampling and analysis such that results are turned around in sufficient time to detect and promptly correct discharge permit violations.

(d) Laboratory Technicians

The Laboratory Technicians are responsible to the Laboratory Supervisor and work in conjunction with IPP Unit staff on the implementation of IPP rules and regulations. Specifically, the Technician performs all pretreatment sampling undertaken by the Authority for monitoring of users.

(e) Consulting Engineer

The Authority's Consulting Engineer, upon request, shall provide technical and other assistance relative to the operation and maintenance of the wastewater treatment facilities under the jurisdiction of the Authority. These include the wastewater treatment plant, sludge treatment and disposal facilities and wastewater collection and conveyance facilities. The Consulting Engineering shall provide technical consultation to the Chief Engineer and IPP Coordinator with respect to IPP operations and enforcement, as necessary.

(f) General Counsel

The Authority's General Counsel advises the Enforcement Team on enforcement matters. The General Counsel shall be consulted on all matters requiring a legal interpretation of the *Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works*; when authorized, assist in the preparation of new rules and regulations, Consent Agreements, Compliance Orders, Orders to Show Cause, summonses, civil administrative penalties and such civil proceedings and actions as are determined to be necessary on behalf of the Authority against non-complying dischargers as directed by the Executive Director, and shall represent the Authority when requested by the Executive Director or his designee at meetings with non-complying dischargers. Nothing herein shall prevent the Executive Director or Commissioners from appointing special counsel when necessary to accomplish the goals of the pretreatment program.

## C. Industrial User Inventory

### 1. Overview

An Industrial User Inventory (IUI) was prepared by the Authority at the inception of the IPP. This was accomplished with the use of an Industrial Waste Survey (IWS) which identified the industries discharging to the Authority's treatment works and the nature of the pollutants involved.

The IUI must be updated annually and submitted to NJDEP in an Annual Report in accordance with *40 CFR Part 403* and Authority's NJDEPS Permit. This update process will be utilized to help determine whether industries within the Authority's Service Area are discharging to the collection system without a valid Industrial Wastewater Discharge Permit.

### 2. Update Process

In order to keep the IUI updated and to utilize the IUI as a compliance tool, a review must be made of any new industries within the service area. Portions of this review should be performed bi-yearly with certain tasks to be performed more or less frequently. The following is a list of review tasks and frequency of occurrence:

<u>Tasks</u>	<u>Frequency</u>
Submit Annual Report with updated IUI to NJDEP	Yearly
Check sites reported as vacant to determine if new occupancy has occurred	Quarterly
Inspect commercial and industrial, areas to identify new tenants	Periodically depending on construction activity
Establish contact with United Water Company to keep informed of new major hookups in the Authority's service area	Bi-yearly
Review Bergen County Telephone Directory	Upon issuance of new directory
Coordinate activity with local building and construction officials to make sure the Authority is notified of building applications, permits and certificates of occupancy issued for industrial sites.	Ongoing

As soon as possible, but within thirty days of the designation of an industrial user as being subject to regulation under the pretreatment program, the IPP Unit shall notify the industrial user of pretreatment standards and requirements. A permit shall be issued to new industrial users within 180 days of identification.

IPP staff shall also monitor reports submitted by dischargers to determine if there are any changes in flow rate of the character or quantity of pollutants discharged by existing industrial users. This data will be verified through annual inspections for existing permittee.

#### **D. Treated Groundwater and Industrial User Monitoring**

##### **1. General**

The monitoring of discharges by Treated Groundwater and Industrial Users is the cornerstone of the Authority's IPP Enforcement program. Monitoring of permittees will take place under two formats - self reporting by the permittee with review by IPP staff and inspection and sampling by the IPP staff. The self-reporting program includes normal self-monitoring and special or accelerated self-monitoring following certain events. Monitoring by the IPP staff includes site inspections as well as sampling and analysis to verify the permittee's own reports. These procedures are described in further detail in Section D.2 - Self-Monitoring and Reporting and Section E.3 - Monitoring and Inspection by Authority. Section E.4 - Report Screening Procedures discusses the Authority's internal review of self-monitoring reports submitted by permittees.

##### **2. Self-Monitoring and Reporting**

###### **(a) Normal Reporting**

Every discharge permit issued by the Authority shall include a provision setting forth the frequency of self-monitoring to be performed by the permittee. The permit shall also set forth those constituents for which sampling, analysis and reporting are to occur. The minimum frequency of sampling and reporting for all permittees and all pollutant parameters regulated by the Treated Groundwater or Industrial Wastewater Discharge Permit shall be once per year. Significant Indirect Users (SIUs) shall report monitoring results monthly. The term Significant Indirect User is defined in Article II of the Rules and Regulations. In the case of an SIU, those pollutant parameters to be reported upon monthly shall be so noted in the Treated Groundwater or Industrial Wastewater Discharge Permit issued by the Authority. Significant Indirect Users shall submit a description of the nature, concentration and flow of all other pollutants required to be reported upon at least once every six (6) months.

The Authority shall establish self-monitoring frequencies for each permittee on a case by case basis except that in no event will the monitoring frequencies be less than the minimums set forth above. The following factors shall be taken into account in determining the frequency of self-monitoring:

- the Compliance history of the Permittee,
- the ability to verify the compliance of the permittee with pretreatment standards,
- the impact on the operation of the treatment works, including sludge disposal options,
- water quality impacts,
- the flow rate of the permittee's discharge along with the total volume of the discharge,
- the expense of monitoring to both the permittee and the Authority.

In addition to the above, the Authority has adopted, as minimum requirements, the normal reporting requirements and procedures set forth in *40 CFR Part 403.12*, which are incorporated by reference into the Authority's Rules and Regulations. The Authority reserves the right to impose stricter requirements, if, in its reasonable judgement, it is necessary to do so to facilitate proper operation of its own treatment works or comply with any other provision of federal, state, or local law. The minimum reporting requirements of *40 CFR Part 403.12* adopted by the Authority, include, without limitation, the following:

#### Baseline Reports

Within 180 days after the effective date of a Categorical Pretreatment Standard, or 180 days after the final administrative decision made upon a category determination submission under *40 CFR Part 403.6 (a) (4)*, whichever is later, existing Industrial Users subject to such Categorical Pretreatment Standards and currently discharging to or scheduled to discharge to the Authority's treatment works or local sewer system connected thereto shall be required to submit to the Authority a report which contains the following:

- (1) Name and address of the facility, including the name and address of the owner(s) and operator(s);
- (2) A list of any environmental control permits held by of for the facility;
- (3) A brief description of the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by the user, including a schematic process diagram which indicates

points of discharge to the Authority's treatment works or local sewer system connected thereto;

- (4) The measured average daily flow, in gallons per day, to the Authority's treatment works from each of the following :
1. Regulated process streams; and
  2. Other streams as necessary to allow use of the combined wastestream formula of *40 CFR Part 403.6(e)*.

The Authority may allow for verifiable estimates of these flows where justified by cost or feasibility considerations.

- (5) The user shall submit measurements of pollutants as follows:
1. Identification of the Pretreatment Standards and Categorical Pretreatment Standards applicable to each regulated process;
  2. The results of sampling and analysis identifying the nature and concentration (or mass, where required by Standard or the Authority) of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The samples shall be representative of daily operations. In cases where the Standard requires compliance with a Best Management Practice or pollution prevention alternative, the User shall submit documentation as required by the Authority or the applicable Standards to determine compliance with the Standard;
  3. The user shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this section.
  4. Samples are to be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment, the user shall measure the flows and concentrations necessary to allow use of the combined wastestream formula of *40 CFR Part 403.6 (e)* in order to evaluate compliance with pretreatment standards. Where an alternate concentration or mass limit has been calculated in accordance with *40 CFR Part 403.6(e)* this adjusted limit along with supporting data shall be submitted to the Authority.
  5. Sampling and analysis shall be performed in accordance with the techniques prescribed in *40 CFR Part 136* and amendments thereto.

6. The Authority may allow the submission of a baseline report that utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures.
  7. The baseline report shall indicate the time, date and place of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the Authority's treatment works.
  8. A statement, reviewed by an authorized representative of the user and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance and/or additional pretreatment is required for the user to meet the pretreatment standards.
- (6) If additional pretreatment and/or operation and maintenance will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and or operation and maintenance. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

#### New Sources

New sources of discharge, and sources that become Industrial Users subsequent to the promulgation of an applicable Categorical Standard, shall be required to submit to the Authority a report which contains the information listed in Baseline Reports of this section. New sources shall also be required to include in this report information on the method of pretreatment the source intends to use to meet appealable pretreatment standards. New sources shall give estimates of the information requested in (iv) and (v) of the Baseline Reports section.

#### Report on Compliance with Categorical Pretreatment Standard Deadline

Within 90 days following the date for final compliance with applicable Categorical Pretreatment Standards, or in the case of a new source, following commencement of the introduction of wastewater into the Authority's treatment works, interceptor sewers or local sewers connected thereto, any Industrial User subject to treatment standards and requirements shall submit to the Authority a report containing the information described in the Baseline Reports section. For Industrial User subject to equivalent mass or concentration limits established by the Authority in accordance with the procedures in *40 CFR Part 403.6* (c), this report shall contain a reasonable measure of the user's long term production rate. For all other Industrial Users subject to

Categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the sampling period.

Periodic Reports on Continued Compliance for Industrial Users  
Subject to Categorical Pretreatment Standards

- (1) Any Industrial User subject to a Categorical Pretreatment Standard, or, in the case of a new source, after commencement of the discharge into the Authority's treatment works, interceptor sewers or local sewers, shall submit to the Authority during the months of June and December unless required more frequently in the pretreatment standard or by the Authority or NJDEP, a report indicating the nature and concentration of pollutants in the effluent which are limited by such categorical pretreatment standards. In addition, this report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharge reported except that the Authority may require more detailed reporting of flows. At the discretion of the Authority and in consideration of such facts as local high or low flow rates, holidays, budget cycles, etc., the Authority may agree to alter the months during which the above reports are to be submitted.
- (2) Where the Authority has imposed mass limitations on Industrial Users as provided for by *40 CFR Part 403.6 (d)*, the Periodic Report on Continued Compliance shall indicate the mass of pollutants regulated by pretreatment standards in the discharge from the Industrial User.
- (3) For Industrial Users subject to equivalent mass or concentration limits established by the Authority in accordance with the procedures in *40 CFR Part 403.6(c)*, the Periodic Report on Continued Compliance shall contain a reasonable measure of the user's long term production rate. For all other Industrial Users subject to Categorical Pretreatment Standards expressed only in terms of allowable pollutant discharge per unit of production (or other measure of operation), the report required by Periodic Report on Continued Compliance shall include the user's actual average production rate for the reporting period.

Notice of Potential Problems, Including Slug Loading

All users shall notify the Authority immediately of all discharges that could cause problems to the Authority's treatment works, including any slug loadings. A slug loading is any discharge of a non-routine,

episodic nature, including, but not limited to an accidental spill or a non-customary batch discharge.

#### Monitoring and Analysis to Demonstrate Continued Compliance

(1) Except in the case of Non-Significant Categorical Users, the reports required in this section shall contain the results of sampling and analysis of the Discharge, including the flow and the nature and concentration, or production and mass where requested by the Authority, of pollutants contained therein which are limited by the applicable Pretreatment Standards. This sampling and analysis may be performed by the Authority in lieu of the Industrial User. Where the Authority performs the required sampling and analysis in lieu of the Industrial User, the User will not be required to submit the compliance certification required under Article V N. In addition, where the Authority itself collects all the information required for the report, including flow data, the Industrial User will not be required to submit the report.

(2) If sampling performed by an Industrial User indicates a violation, the user shall notify the Authority within 24 hours of becoming aware of the violation. The User shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Authority within 30 days after becoming aware of the violation. Where the Authority has performed the sampling and analysis in lieu of the Industrial User, the Authority will perform the repeat sampling and analysis unless it notifies the User of the violation and requires the User to perform the repeat analysis. Resampling is not required if:

- (i) The Authority performs sampling at the Industrial User at a frequency of at least once per month, or
- (ii) The Authority performs sampling at the User between the time when the initial sampling was conducted and the time when the User or the Authority receives the results of this sampling.

(3) The reports required in this section shall must be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period. The Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements. Grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds. For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the Authority. Where time-proportional composite sampling or

grab sampling is authorized by the Authority, the samples must be representative of the discharge and the decision to allow the alternative sampling must be documented in the Industrial User file for that facility or facilities. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: For cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil & grease the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the Authority, as appropriate.

(4) For sampling required in support of baseline monitoring and 90-day compliance reports, a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the Authority may authorize a lower minimum. For the reports required by this section, the Authority shall require the number of grab samples necessary to assess and assure compliance by Industrial Users with Applicable Pretreatment Standards and Requirements.

(5) All analyses shall be performed in accordance with procedures established by the Administrator pursuant to section 304(h) of the Act and contained in 40 CFR part 136 and amendments thereto or with any other test procedures approved by the Administrator. (See, §§ 136.4 and 136.5.) Sampling shall be performed in accordance with the techniques approved by the Administrator. Where 40 CFR part 136 does not include sampling or analytical techniques for the pollutants in question, or where the Administrator determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures, including procedures suggested by the Authority or other parties, approved by the Administrator.

(6) If an Industrial User subject to the reporting requirement in this section monitors any regulated pollutant at the appropriate sampling location more frequently than required by the Authority, using the procedures prescribed in paragraph (5) of this section, the results of this monitoring shall be included in the report.

Reporting Requirements for Users Not Subject to Categorical Pretreatment Standards.

The Authority shall require appropriate reporting from those users with discharges that are not subject to Categorical Pretreatment Standards. Significant Non-categorical Industrial Users must submit to the Authority at least once every six months (on dates specified by the Authority) a description of the nature, concentration, and flow of the pollutants required to be reported by the Authority. In cases where a local limit requires compliance with a Best Management Practice or pollution prevention alternative, the User must submit documentation required by the Authority to determine the compliance status of the User. These reports must be based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in part 136 and amendments thereto. This sampling and analysis may be performed by the Authority in lieu of the significant non-categorical Industrial User.

Record-keeping Requirements.

- (i) Any user subject to reporting requirements shall maintain records of all information resulting from any monitoring activities required by this section, including documentation associated with Best Management Practices. Such records shall include for all samples:
  - 1. the data, exact place, method, and time of sampling and the names of the person or persons taking the samples;
  - 2. the dates analyses were performed;
  - 3. who performed the analyses;
  - 4. the analytical techniques/methods used; and
  - 5. the results of such analyses.
- (ii) Any user subject to reporting requirements shall be required to retain for a minimum of 5 years any records of monitoring activities and results (whether or not such monitoring activities are required by this section) and shall make such records available for inspection and copying by the Authority and NJDEP. This period of retention shall be extended during the course of any unresolved litigation regarding a user or when requested by the Authority or NJDEP.

Discharge of Hazardous Wastes.

- (i) The user shall notify the Authority, the USEPA Regional Waste Management Division Director, and NJDEP in writing of any discharge into the Authority's treatment works, intercepting sewer or local sewer of a substance, which, if otherwise disposed of, would be a hazardous waste under *40 CFR Part 261*. Such

notification must include the name of the hazardous waste as set forth in *40 CFR Part 261*, the USEPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the user discharges more than 100 kilograms of such waste per calendar month to the Authority's treatment works, intercepting sewer, or local sewers, the notification shall also contain the following information to the extent such information is known and readily available to the user: An identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve months. All notifications for existing sources must take place within 180 days after the discharge of the listed or characteristic hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications for changed discharges must be submitted in accordance with the Special Reporting requirements of this Appendix D. The notification requirement in this section does not apply to pollutants already reported under self-monitoring.

- (ii) Dischargers are exempt from the requirement of paragraph (i) of this section during a calendar month in which they discharge no more than fifteen kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in *40 CFR Part 261, 261.30 (d) and 261.33 (e)*. Discharge of more than fifteen kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in *40 CFR Part 261.30 (d) and 261.33 (e)* requires a one-time notification. Subsequent months during which a user discharges more than such quantities of any hazardous waste does not require additional notification.
- (iii) In the case of any new regulations under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the Authority, the EPA Regional Waste Management Division Director, and NJDEP of the discharge of such substance within ninety (90) days of the effective date of such regulations.
- (iv) In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

### Special Reporting

Each Treated Groundwater or Industrial Wastewater Discharge Permit shall require the permittee to provide additional self-monitoring reports as follows:

1. Report any exceedance of an effluent limitation that causes injury to persons, or damage to the environment, or poses a threat to human health or the environment, within two (2) hours of its occurrence, or of the permittee becoming aware of its occurrence.
2. Within twenty-four (24) hours of an event described in 1. above, or of an exceedance, or of becoming aware of an exceedance of an effluent limitation for a toxic pollutant, a permittee shall provide such additional information on the discharge as may be required by the Authority, including an estimate of the danger posed by the discharge to the environment, whether the discharge is continuing, and the measures taken, or being taken, to remediate the problem and any damage to the environment, and to avoid a repetition of the problem.
3. A permittee shall be required to file monthly reports if the permittee:
  - (7) in any month commits a Serious Violation or fails to submit a completed discharge monitoring report and such failure to report continues unabated following thirty (30) days notice from the Authority; or
  - (8) exceeds an effluent limitation for the same pollutant at the same discharge point source by any amount for four (4) out of six (6) consecutive months (in the case of a permittee who files monthly reports.

The monthly reporting requirement shall apply to those constituents that triggered the violations. The reporting requirements stipulated in the permit shall be restored if the permittee has not committed any of the violations for six (6) consecutive months. The term "Serious Violation" shall be as defined in Article II of the Authority's Rules and Regulations.

4. A permittee shall report to the Authority any Serious Violation within thirty (30) days of the violation, together with a statement explaining the nature of the serious violation and the measures taken to remedy the cause or prevent a recurrence of the serious violation.
5. A permittee shall notify the Authority in advance of the quality and quantity of all new introductions of pollutants into the Authority's

treatment works or a local sewer system and of any substantial change in the pollutants introduced into a facility by an existing user of the facility. The notification shall estimate the effects of the changes on the effluents to be discharged into the facility.

(b) Signature

All Treated Groundwater or Industrial Wastewater Discharge Permit conditioned submittals, including but not limited to Compliance or Self Monitoring Reports and Compliance Schedule Reports shall be signed:

(1) By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

(ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) By a general partner or proprietor if the Industrial User submitting the reports is a partnership, or sole proprietorship respectively.

(3) By a duly authorized representative of the individual designated in this section if:

(i) The authorization is made in writing by the individual described in this section;

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

(iii) the written authorization is submitted to the Authority.

(4) If an authorization under this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the

company, a new authorization satisfying the requirements of this section must be submitted to the Authority prior to or together with any reports to be signed by an authorized representative.

## **E. Monitoring and Inspection by the Authority**

### **1. Right of Entry**

The Authority shall have the right of entry to all premises in which a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept, for purposes of inspection, sampling, copying or photographing.

### **2. Inspecting and Sampling**

#### **(a) Normal Sampling and Inspection**

The Authority shall have the right to perform an inspection and sample the effluent of a permittee at such times and at such frequencies as the Authority deems necessary to confirm compliance with pretreatment requirements.

Each permitted facility shall, at a minimum, be inspected by the Authority at least once per year. Such inspections shall be performed within six (6) months following a permittee's submission of an application for a permit, permit renewal, or, in the case of a new facility, issuance of a permit therefor. If for any reason a scheduled inspection cannot be made, the inspection shall be rescheduled within thirty (30) days of the originally scheduled inspection or, in the case of a temporary shutdown, of resumed operation. Sampling and inspection need not, in the Authority's discretion, be performed at the same time, so long as each takes place within the required interval.

The sampling and inspection program shall include:

- i) A representative sampling of the effluent for each permitted facility, except that in the case of facilities or works that are not Significant Indirect Users, sampling pursuant to this paragraph shall be conducted at least once every three years;
- ii) An analysis of all collected samples by a State owned and operated laboratory, or a certified laboratory other than one that has been or is being used by the permittee, or that is directly or indirectly owned, operated or managed by the permittee;

- iii) An evaluation of the maintenance record of the permittees' treatment equipment;
- iv) An evaluation of the permittee's sampling techniques;
- v) A random check of written summaries of test results, prepared by the certified laboratory providing the test results for the immediately preceding 12 month period, signed by a responsible official of the certified laboratory, certifying the accuracy of the test results; and
- vi) An inspection of the permittee's sample storage facilities and techniques if the sampling is normally performed by the permittee.

(b) Significant Noncomplier

The term "Significant Noncomplier" shall be as defined in Article II of the Authority's Rules and Regulations. The facility of a permittee identified as a Significant Noncomplier shall be subject to an inspection by the Authority, which inspection shall be in addition to the normal sampling and inspection. The inspection shall be conducted within sixty (60) days of receipt of the discharge monitoring report that initially results in the permittee being identified as a Significant Noncomplier. The inspection shall include a random check of written summaries of test results, prepared by the certified laboratory providing the test results, for the immediately preceding twelve (12) months period, signed by a responsible official of the certified laboratory certifying the accuracy of the test results. A copy of each summary shall be maintained by the permittee. The inspection shall be for the purpose of determining compliance. The Authority must, at a minimum, conduct one (1) inspection per year pursuant to this subsection, and may elect not to make an inspection hereunder, if an inspection has been made within six (6) months of the period within which an inspection is required to be conducted under this subsection.

3. Confidentiality

Except as otherwise provided in section 3 of P.L. 1963 c 73 (C.47:1A-3), any records, reports or other information obtained by the Authority pursuant to this section or section 5 of P.L. 1972, c.42 (c.58:11-53), including any correspondence relating thereto, shall be available to the public: however, upon a showing satisfactory to the commissioner of NJDEP by any person that the making public of any report or information, or a part thereof, other than effluent data, would divulge methods or processes entitled to protection as trade secrets, the Authority shall consider such record, report or information, or part thereof, to be confidential, and access thereto shall be limited to

authorized officers or employees of NJDEP, the federal government and the Authority.

## Report Screening Procedures

### (a) Overview

An important aspect of user monitoring by IPP staff is the monitoring and review of self-monitoring reports submitted by permittees. In some cases the reports will detail episodes of user non-compliance, in other cases the report itself (or lack thereof) will be the source of non-compliance. Thorough and timely review of all reports submitted to the Authority is therefore important to the enforcement of the IPP.

### (b) Report Types

The following is a list of the types of reports which are submitted to the Authority and require IPP staff review:

- Normal Self Monitoring Reports
- Special Self Monitoring Reports
- Authority Inspection and Sampling Reports
- Compliance Schedule (Milestone) Reports
- Sludge Discharge Control Plan Reports

### (c) Screening Procedures

All Reports submitted to the Authority will be logged in by IPP staff and compared with submission dates contained in the user's Treated Groundwater or Industrial Wastewater Discharge Permit. Also, all analytical data provided will be compared with the applicable categorical or local limits and to any additional prohibited discharge standards that may apply. All other information provided will be compared with conditions of the Treated Groundwater or Industrial Wastewater Discharge Permit and the User's file. All violations are to be identified.

The following is a partial list of potential reporting violations which should be reviewed during the screening process:

- (1) Failure to submit a report.
- (2) Improper or no signature or certification.
- (3) Report submitted late.
- (4) Report covers inappropriate time period.
- (5) Deficiency in required analytical data including parameters reported, the number of measurements for each parameter, the method of analysis, the sampling procedures and discharge concentrations.
- (6) Failure to notify the Authority of an effluent limit violation or a slug discharge.

It shall be a goal of the Authority to review all reports and identify all violations within five (5) working days of receipt of the report or, in the case of reports not submitted or reports submitted late, within five (5) working days of the due date of the report. The appropriate enforcement action should be initiated within fifteen (15) days of detection of the violation.

It shall be the responsibility of the Environmental Health Specialist to report all suspected violations detected, as a result of an inspection, to the IPP Coordinator. The Environmental Health Specialist shall confirm whether or not a violation has occurred. In addition, the Environmental Health Specialist shall screen all self-monitoring reports. In the event that a violation is confirmed or suspected, the Environmental Health Specialist shall bring the violation to the attention of the IPP Coordinator for initiation of the appropriate enforcement action in accordance with the requirements of this ERP.

Once a violation is detected, the IPP Coordinator shall assign an Environmental Health Specialist to investigate the non-compliance, participate in preparation of the enforcement response, and monitor and report on a regular basis, the violator's compliance with remedies and compliance schedules set forth in any order or agreement resulting from an enforcement action.

Separate files shall be maintained for each permittee containing all reports, identifying all violations, and setting forth all enforcement actions taken against the permittee.

### **III. ENFORCEMENT RESPONSE PLAN**

#### **A. Overview**

The primary responsibility of the IPP staff is to monitor and enforce all applicable pretreatment standards and requirements. The process of enforcement starts with the compilation and evaluation of user information. The identification of noncompliance and selection of appropriate enforcement actions is next. The basic activities to be undertaken by the Authority in connection with enforcement of pretreatment requirements are as follows:

- Establish Enforcement Response Plan (ERP) including delegation of responsibilities, enforcement procedures, time frame of response, and degree of enforcement.

- Provide information to all appropriate members of IPP Enforcement Team and stress documentation of non-compliance events and enforcement response follow-ups.
- Maintain and update Industrial User Inventory (IUI).
- Conduct inspections and sampling of all users.
- Conduct proper screening of all reports, inspection information, pretreatment standards and other applicable information.
- Perform an enforcement evaluation and select the appropriate enforcement action in response to noncompliance events.

## **B. Enforcement Policy**

The Authority's goals in undertaking any enforcement action are to secure compliance with pretreatment requirements and, when appropriate, recover damages suffered by the Authority and the environment in which its ratepayer live and work. To this end, the Authority has set forth in its Rules and Regulations a series of enforcement actions to be used by the IPP Department (see the Authority's *Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Authority Treatment Works*, Article VI - Enforcement).

The range of enforcement responses available to the Authority are established by the Act and the State Act. In deciding which enforcement response to select, the Authority will give consideration to the following criteria:

- Magnitude of the violation.
- Duration of the violation.
- Effect of the violation on the receiving water.
- Effect of the violation on the Treatment Works.
- Compliance history of the Permittee.
- Good faith of the Permittee.

Each of these criteria is discussed below.

### **1. Magnitude of the Violation**

Serious Violations must be dealt with in a manner that will result in timely compliance. In response to a Serious Violation, or an act of Significant Noncompliance, the Authority shall at a minimum issue a Notice of Violation. The terms Serious Violation and Significant Noncompliances are defined in Article II of the Authority's Rules and Regulations.

## Duration of the Violation

Violations that continue over prolonged periods of time will be dealt with through escalating enforcement actions, regardless of the severity of the violation itself. If necessary, compliance will be achieved through civil action and/or termination of service.

### 2. Effect of the Violation on Receiving Waters

Any violation which results in a pass through of the Authority's treatment works, causes a violation of the Authority's NJPDES permit or has a toxic effect on the receiving waters will merit swift and strong action by the Authority. This action may include, as appropriate, a Compliance Order, Consent Agreement, Show Cause Hearing, civil action (for injunction, costs, compensatory damages, economic benefits and/or Civil Penalties), Civil Administrative Penalty or recommendation for Criminal Prosecution.

### 3. Effect of the Violation on the Treatment Works

Any violation which results in significant increases in treatment or sludge management costs, which has a significant potential for interfering with or harming Authority personnel, equipment, processes, or operations; or which causes sludge contamination shall be dealt with in the manner set forth in the Effect of the Violation on Receiving Waters section above.

### 4. Compliance History of the Permittee

The compliance history of permittee in violation will be considered when a range of enforcement options is available for a given violation. In general, so long as it is consistent with the need to enforce compliance with pretreatment requirements, less severe enforcement responses may be taken against permittees with good compliance histories while more severe enforcement actions shall be taken against permittees with poor compliance histories.

### 5. Good Faith of the Permittee

So long as it is consistent with the need to enforce compliance with pretreatment requirements, the permittee's good faith intention to remedy its non-compliance coupled with actions which give support to this intention may be considered in determining which enforcement response to invoke.

The following subsection discusses the range of enforcement responses available to the Authority.

## **Enforcement Responses**

### 6. Clarification Request/Warning

In situations where information or data has been provided to the BCUA that may be an inadvertent omission or a typographical error, a Clarification Request or Warning may be issued. Also, a late submission of a Self-Monitoring Report that is beyond the control of the user may fall under this category.

The Clarification Request or Warning can take the form of a letter or be as informal as a telephone call or meeting. The use of this type of enforcement response depends on the compliance history of the user in question and the nature of the error, omission or lateness. The Clarification Request or Warning may be made by the Environmental Health Specialist or the IPP Coordinator.

A Clarification Request or Warning must be responded to by the user in question within five (5) days of issuance or conversation or else a Notice of Violation or Compliance Order will be issued.

Nothing herein shall conflict with the Authority's obligation to impose Civil Administrative Penalties for serious violations, violations that cause the violator to be a significant noncomplier, or omission of effluent parameters from discharge monitoring reports.

### 7. Notice of Violation

Except as noted above for cases where a Clarification Request or Warning is appropriate, or the violation is subject to a grace period, any violation of the Authority's Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit, Consent Order, Compliance Order or other order or agreement by a user will result in at least the issuance of a Notice of Violation (NOV).

An NOV is issued by the IPP Coordinator and should be prepared immediately upon discovery of noncompliance and delivered to the user within fifteen (15) working days of the detection.

The NOV should be either hand delivered, obtaining a verification of receipt from the user, or sent certified mail return receipt requested.

Copies of the NOV should be transmitted to the Environmental Health Specialist for permittee file (with delivery receipt).

The NOV shall identify the violation that is believed to have occurred and shall include notice of the potential statutory penalties associated with such violation.

Within ten (10) days of receipt of an NOV, the user in violation is to submit to the IPP Coordinator an explanation detailing the time(s) and date(s) that the violation occurred and a plan, including specific actions to be taken and a schedule for these actions, for the satisfactory correction of ongoing violations and prevention of future violations.

#### 8. Increased Self-Monitoring and Reporting

In situations where a user violates conditions in a Treated Groundwater or Industrial Wastewater Discharge Permit or the Authority's Rules and Regulations, relative to the discharge of pollutants, the IPP staff may feel additional monitoring and reporting is necessary. This monitoring and reporting is over and above that required in a Treated Groundwater or Industrial Wastewater Discharge Permit, Compliance Order, Consent Agreement or the mandatory special reporting discussed in this ERP.

The notification to institute Increased Self-Monitoring and Reporting shall be issued in the form of a Compliance Order. The requirement for increased self monitoring and reporting will generally be instituted for users with recurring violations, significant discharge limit violations or other discharge violations significant in nature. The extent of this monitoring will be related to the degree of the violation and will continue until such time as the violation has been demonstrated to be corrected and nonrecurring.

#### 9. Compliance Order

A Compliance Order is typically issued when a permittee is in violation and the correction of the violation requires operational, monitoring, construction, repair or process changes. A Compliance Order may also be utilized to require users to develop management practices, spill prevention plans or other related IPP requirements. A Compliance Order shall be issued by the IPP Coordinator.

The Compliance Order will include the following:

- The provision(s) of the Authority's Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit or other permit or order which the user is violating.
- Discussion of the action which caused the violation.

- Requirement to attain compliance with the Authority's Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit or other permit or order which is being violated.
- Schedule for attaining compliance.
- Requirement for increased monitoring and reporting (optional).
- Notice to the permittee of his right to hearing.
- A statement regarding penalties and assessments which will be sought through appropriate enforcement action in the event of violation of the Compliance Order or any of its milestones.
- Other requirements deemed necessary and appropriate to address the attainment of compliance such as the installation of pretreatment technology.

A Compliance Order should be either hand delivered, obtaining a verification of receipt from the permittee, or sent by certified mail, return receipt requested. Copies of the Compliance Order should be transmitted to the following:

Chief Engineer  
 General Counsel  
 Environmental Health Specialist for permittee file (with delivery receipts)

A permittee receiving a Compliance Order may request a hearing with the Authority within ten (10) days of receipt of the Compliance Order. The request will include the portions of the Order that will be contested and the factual and legal basis for the hearing.

#### 10. Consent Agreement

The Executive Director is authorized to enter into Agreement on the Authority's behalf with permittees to remedy noncompliance with the Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permits or Compliance Orders. The Consent Agreement shall set forth the specific action to be taken by the user to correct noncompliance within a scheduled time period. The Agreement can also include (1) provisions for payment of compensation for costs of investigation, inspection or monitoring incurred by the Authority in the establishment of the noncompliance event; (2) costs for removing, correcting or terminating adverse effects on water quality; (3) compensatory damages for loss to the environment; (4) other actual damages; and (5) the amount of economic benefits accruing to the violator as a result of noncompliance.

The Consent Agreement provides for a negotiated settlement with the noncompliant user. It generally is utilized when the user assumes responsibility for its noncompliance and is willing to correct its cause or compensate the Authority for resulting damages.

A Consent Agreement shall be approved as to form by the Authority's General Counsel.

Copies of the Consent Agreement should be transmitted to the following:

Executive Director  
Chief Engineer  
IPP Coordinator  
General Counsel  
Environmental Health Specialist for permittee file (with delivery receipt)

#### 11. Order to Show Cause

The Authority may order any permittee in noncompliance with the Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit, Order or Agreement to show cause why a proposed enforcement action should not be taken. An Order to Show Cause covering the following will be served to the permittee:

- Time and place of hearing.
- Proposed enforcement action.
- Reasons for the enforcement action.
- Request that the permittee show cause why the proposed enforcement action should not be taken.

The Order to Show Cause should be either hand delivered, obtaining a verification of receipt from the permittee, or sent certified mail return receipt requested at least ten (10) days before the Hearing. Copies of the Order to Show Cause should be transmitted to the following:

Chief Engineer  
IPP Coordinator  
General Counsel  
Environmental Health Specialist for permittee file (with delivery receipt)

An Order to Show Cause shall be issued by the IPP Coordinator with approval as to form by the Authority's General Counsel. The procedures for the Show

Cause Hearing shall be set forth under Article VI of the Rules and Regulations.

## 12. Civil Litigation

### (a) Civil Action

Should the Authority find that a permittee has violated or is violating the Authority's Rules and Regulations, a Treated Groundwater or Industrial Wastewater Discharge Permit, Compliance Order of Consent Agreement, the Authority is authorized to commence a civil action in the Superior Court of New Jersey, Bergen County, for appropriate relief for any such violation. A civil action will generally be pursued in situations where the Authority cannot obtain the applicable remedy through a Consent Agreement and when the Authority has incurred significant costs in investigating or remedying the violation or there has been significant damage to the environment.

The types of relief the Authority can pursue under a civil action include the following:

- A temporary or permanent injunction.
- Recovery of costs incurred through investigation, inspection or monitoring which the Authority used to establish the violation.
- Recovery of costs incurred in preparing and litigating the case.
- Recovery of costs incurred by the Authority associated with removing, correcting or terminating the adverse affects upon water quality caused by the unpermitted discharge of pollutants.
- Assessment against a violator of the actual amount of any economic benefits accruing to the violator from a violation, including the amount of any savings realized from avoided capital or non capital costs; the return earned or that may be earned on such costs; any benefits accruing to the violator as a result of a competitive market advantage enjoyed by reason of the violation; any other benefits resulting from the violation; or any other remedy allowed by federal or state law.

Except in an emergency situation involving the discharge or threat of discharge of pollutants which reasonably appears to present an imminent endangerment to the health or welfare of persons, endangerment to the environment, or threat to the operation of the Authority's treatment works, a civil action may be commenced only with the approval of the

Commissioners of the Authority upon the recommendation of the Executive Director.

(b) Civil Penalty

Either separately or in conjunction with a civil action, the Authority may, through General Counsel, commence a summary pursuant to the Penalty Enforcement Law (*N.J.S.A. 2A:58-1 et seq.*) in the Superior Court of New Jersey, Bergen County for the assessment of a Civil Penalty in an amount not to exceed \$50,000.00 per day for a violation of the Authority's Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit, Compliance Order or Consent Agreement, or for a failure to pay a civil administrative penalty or assessment, in whole or in part, when due and owing. The decision to seek imposition of a Civil Penalty and the amount of the penalty to be sought will be made with regard to the seriousness of the violation and the conduct of the violator.

Each violation of the Authority's Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit, Compliance Order or Consent Agreement conditions or failure to pay Civil Administrative Penalties constitutes an additional, separate and distinct violation. In addition, the unpermitted discharge of each separate pollutant will constitute an additional separate and distinct violation. Each day during which a violation continues constitutes an additional, separate and distinct violation.

The penalties to be sought pursuant to this subsection will be based on the seriousness of the violation and the conduct of the violator. The amount of the penalty shall be determined in accordance with this Enforcement Response Plan.

(c) Civil Penalty in the Amount of \$5,000 or Less

When the amount of a Civil Penalty is \$5,000 or less, the Executive Director is authorized to issue a summons to the violator. The summons shall be enforceable in the municipal court of the territorial jurisdiction in which the violation occurred.

Copies of the summons should be transmitted to the following:

Chief Engineer  
IPP Coordinator  
General Counsel  
Environmental Health Specialist for permittee file

## Civil Administrative Penalties

- (d) The Executive Director or his designee may assess Civil Administrative Penalties against any person who violates the provisions of PL. 1977, c.74 (*N.J.S.A. 58:10A- 1 et. seq.*), including any applicable grace period in accordance with Article V Section P, including a violation of any rule, regulation or pretreatment standard adopted by the Authority, or assess by Civil Administrative Order, any costs recoverable pursuant to Article VI of the Authority's Rules and Regulations, including the reasonable costs of investigation and inspection, and of preparing and litigating the case before an administrative law judge.
  - (e) The penalties to be assessed pursuant to a Civil Administrative Penalty will be based on the seriousness of the violation and the conduct of the violator. The amount of the penalty shall be determined in accordance with this Enforcement Response Plan.
  - (f) The amount that may be assessed pursuant to a Civil Administrative Order shall include:
    - (i) the reasonable costs of investigation and inspection, and preparing and litigating the case before an administrative law judge; and
    - (ii) the reasonable cost incurred by the Authority in removing, correcting or terminating the adverse effects upon water quality resulting from any unauthorized discharge of pollutants;
- The Authority shall not assess a violator for compensatory damages or economic benefits, as described in subsection c. or Section 10 of P.L. 1977, c.74 (*N.J.S.A. 58:10A-10*).
- (g) In determining whether to assess a Civil Administrative Penalty or Civil Administrative Order hereunder, the Authority shall generally select that response which results in the larger assessment against a violator, although the Executive Director may select the lesser remedy for violators (1) we have no prior violations, and (2) have voluntarily taken good faith measures to mitigate the effect of the violation and prevent future violations.
  - (h) Notice of the penalty or assessment shall be given to the violator in writing, delivered personally or sent by certified mail. Payment of the penalty or assessment shall be due and payable, unless a hearing is requested in writing by the violator, within twenty (20) days of receipt of notice. All notices sent by certified mail shall, if properly addressed, be deemed received within five (5) days of mailing.

- (i) The violator shall have a right to hearing to contest the assessment or penalty. Such requests shall be made to the Executive Director in writing, within twenty (20) days of receipt of the notice of penalty or assessment. Upon receipt of such a request, the penalty or assessment shall be deemed a contested case and shall be submitted to the Office of Administrative Law for an administrative hearing in accordance with sections 9 and 10 of P.L. 1968, c.410 (*N.J.S.A. 52:14B-9 and 52:14B-10*).
- (j) To request an adjudictory hearing to contest a notice of civil administrative penalty or assessment, the violator shall submit the following information in writing to the Authority.
  - (i) The name, address, and telephone number of the violator and its authorized representative;
  - (ii) The violator's defenses to each of the findings of fact stated in short and plain terms;
  - (iii) An admission or denial of each of the findings of fact. If the violator is without knowledge or information sufficient to form a belief as to the truth of a finding, the violator shall so state and this shall have the effect of a denial. A denial shall fairly meet the substance of the findings denied. When the violator intends in good faith to deny only a part or a qualification of a finding the violator shall specify so much of it as is true and material and deny only the remainder. The violator may not generally deny all of the findings but shall make all denials as specific denials of designated findings. For each finding the violator denies, the violator shall allege the fact or facts as the violator believes it or them to be;
  - (iv) Information supporting the request and specific reference to or copies of other written documents relied upon to support the request;
  - (v) An estimate of the time required for the hearing (in days and/or hours);
  - (vi) A request, if necessary, for a barrier-free hearing location for physically disabled persons;
  - (vii) Proof of compliance with all of the requirements of the Affirmative Defenses section in Article IV of the Authority's Rules and Regulations if the violator intends to:
    - Raise an affirmative defense of any civil administrative penalty or other mandatory civil damages or penalty for the violation of an effluent limitation on the basis that a violation of an effluent

limitation occurred as a result of an upset, an approved anticipated bypass or unanticipated by pass, or a attesting or laboratory error; and

- To request that the Authority determine through an administrative hearing whether or not it agrees with the violator's allegations concerning the matter;

(viii) For a notice of civil administrative penalty assessment pursuant to the Mandatory Civil Administrative Penalties section in Article VI of the Authority's Rules and Regulations:

- Documentation that the violator notified the Authority in writing within thirty (30) days after the date the violator was required to submit the information to the Authority of extenuating circumstances that prevented timely submission of a complete discharge monitoring report;
- Documentation of the violator's correction of the violation by submitting the omitted information with ten (10) days after the violator's receipt of the notice of the omission (failure of the violator to comply with the thirty (30) day notice period shall constitute a waiver of a violator's right to correct the violation within the required ten (10) day period and thus avert liability).

(k) Upon conclusion of the administrative hearing, copies of the administrative law judge's recommended record and decision shall be sent to the Executive Director and each party of record. The Executive Director shall afford each party of record an opportunity to file objections, exceptions and replies thereto. The Authority shall accept the presentation of arguments either orally, or in writing, at its discretion.

(l) The Executive Director shall adopt, reject or modify the recommended report and decision within forty-five (45) days after receipt thereof. Failure by the Executive Director to so act within the forty-five (45) day period shall result in adoption of the decision for the administrative law judge as the final decision of the Executive Director. For good cause shown, and upon certification by the Director of the Office of Administrative Law and the Executive Director, the forty-five (45) day time limit may be extended.

(m) The final decision or order of the Executive Director shall be in writing or stated in the record, and shall include findings of fact and conclusions of law based upon the evidence of record at the hearing of the administrative law judge.

- (n) Parties of record shall be notified by personal service or by mail of any final decision or order. Upon request, a copy of the decision or order shall be delivered or mailed by registered or certified mail to each party of record and to a party's attorney of record.
- (o) A final decision or order of the Executive Director shall be considered a final agency action, and shall be appealable in the same manner as a final agency action of a State department or agency.
- (p) If the penalty or assessment made by the Authority is upheld upon appeal in whole or in part, the Authority shall be paid a daily interest charge on the amount of the judgement from the date of the appeal until that amount is paid in full. The rate of interest shall be that established by the New Jersey Supreme Court for interest rates on judgments, as set forth in the Rules Governing the Courts of the State of New Jersey.
- (q) A Person who is assessed a civil administrative penalty, or is subject to an assessment levied pursuant to the Civil Administrative Penalty section in the Authority's Rules and Regulations, and who fails to contest or pay the penalty or assessment, or fails to enter into a payment schedule with the Authority within thirty (30) days of the date that the penalty or assessment is due and owing, shall be subject to an interest charge on the amount of the penalty or assessment from the date that the amount was due and owing. The rate of interest shall be that authorized pursuant to *N.J.A.C. 7:14-8.3(c)*.
- (r) Any person who fails to pay a civil administrative penalty or assessment, in whole or in part, when due and owing, or who fails to agree to a payment schedule therefor, shall be subject to the civil penalty provisions of the Civil Penalty section of Article VI of the Authority's Rules and Regulations.
- (s) A civil administrative penalty imposed pursuant to a final order shall constitute a debt of the violator or discharger. The Authority may docket the penalty with the clerk of the Superior Court. The penalty, as docketed, shall have the same standing as any judgement docketed pursuant to *N.J.S.A. 2A:16-1*, except that no lien shall attach to the real property of a violator if the violator files an appeal of a final order to the Appellate Division of the Superior Court.
- (t) The Authority may settle any civil administrative penalty assessed pursuant to the Civil Administrative Penalty section of Article VI of the Authority's Rules and Regulations in accordance with the following:
  - (i) The Authority may reduce the civil administrative penalty by up to 50 percent, provided that the penalty as reduced is not less than any

applicable minimum amount set forth in *N.J.A.C. 7:14-8.5(a) or 8.9(c)*.

(ii) In settling a civil administrative penalty, the Authority may consider the following:

- (1) Mitigating or extenuating circumstances not considered in the notice of civil administrative penalty assessment;
- (2) The implementation by the violator of pollution prevention and/or abatement measures in addition to those minimally required by applicable statute or rule;
- (3) The implementation by the violator of measures to clean up, reverse or repair environmental damage previously caused by the violation;
- (4) The full payment by the violator of a specified part of the civil administrative penalty assessed if made within a time period established by the Authority in a compliance order and/or a notice of civil administrative penalty assessment and provided that the violator waives the right to request an adjudicator hearing on the civil administrative penalty; or
- (5) Any other terms or conditions acceptable to the Authority.

(u) Any violator who is seeking a civil administrative penalty payment schedule of more than ninety (90) days shall, as a precondition of that schedule in lieu of full payment upon the civil administrative penalty becoming due and owing, make a request in writing to the Authority for approval.

#### 9. Mandatory Minimum Penalties

The Authority may assess a civil administrative penalty against any indirect discharger of not more than \$50,000 for each violation of each provision of the State Act and for each violation of any rule, pretreatment standard, effluent limitation, administrative order, or permit issued thereto. A violation under this section is non-minor and, therefore, not subject to a grace period, pursuant to *N.J.A.C. 7:14-8.6 through 8.14*. The Authority shall assess a minimum mandatory civil administrative penalty in an amount:

- (a) Not less than \$1,000 for each serious violation as defined under *N.J.A.C. 7:14-8.2*; and
- (b) Not less than \$5,000 for each violation that causes a violator to be, or continue to be, a significant noncomplier as defined under *N.J.A.C. 7:14-8.2*.

10. Civil Administrative Penalties for Discharge Violations

The penalties to be sought pursuant to subsection Civil Penalty and section Civil Administrative Penalties, will be based on the seriousness of the violation and the conduct of the violator and will be assessed at the mid-point of the following ranges unless adjusted upon the discretion of the Authority:

SERIOUSNESS			
<u>CONDUCT</u>	<u>MAJOR</u>	<u>MODERATE</u>	<u>MINOR</u>
MAJOR	\$10,000 - \$50,000	\$ 5,000 - \$25,000	\$ 2,000 - \$13,000
MODERATE	\$ 5,000 - \$10,000	\$ 2,500 - \$ 5,000	\$ 500 - \$ 3,000
MINOR	\$ 500 - \$ 7,500	\$ 500 - \$ 2,500	\$ 250 - \$ 1,250

The seriousness of the violation shall be determined as major, moderate or minor as follows:

(a) Major shall include:

- (i) Any violation of any effluent limitation that is measured by concentration or mass for any discharge exceeding the effluent limitation as follows:
  - (1) By more than 50 percent for a hazardous pollutant;
  - (2) By more than 100 percent for a non-hazardous pollutant; or
  - (3) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment; or
- (ii) The greatest violation of a pH effluent range in any one calendar day which violation deviates from the midpoint of the range by more than 50 percent of the midpoint of the range excluding the excursions specifically excepted where permittee performs continuous pH monitoring; or
- (iii) Any other violation not included in (ii) above which either:
  - (1) Has caused or has the potential to cause serious harm to human health or the environment; or

(2) Seriously deviates from the requirements of the Authority's Rules and Regulations or any rule, pretreatment standard, effluent limitation, administrative order or permit issued pursuant thereto. Serious deviation shall include, but not be limited to, those violations that are in complete contravention of the requirement, or if some of the requirement is met, which severely impair or undermine the operation or intent of the requirement.

(b) Moderate shall include:

(i) Any violation, other than a violation of an effluent limitation identified in (ii) or (iii) below, which has caused or has the potential to cause substantial harm to human health or the environment;

(ii) Any violation of an effluent limitation which is measured by concentration or mass of any discharge exceeding the effluent limitation as follows:

(1) By 20 to 50 percent for a hazardous pollutant; or

(2) By 40 to 100 percent for a non-hazardous pollutant;

(iii) The greatest violation of a pH effluent range in any one calendar day which violation deviates from the midpoint of the range by at least 40 percent but no more than 50 percent of the midpoint of the range excluding the excursions specifically excepted where permittee performed continuous pH monitoring; or

(iv) Any violation, other than a violation of an effluent limitation identified in (ii) or (iii) above, which substantially deviates from the requirements of the Authority's Rules and Regulations or any rule, pretreatment standard, effluent limitation, administrative order or permit issued pursuant thereto. Substantial deviation shall include, but not be limited to, violations that are in substantial contravention of the requirements or which substantially impair or undermine the operation or intent of the requirement.

(c) Minor shall include:

(i) Any violation, other than a violation of an effluent limitation identified as major or moderate.

(ii) Any violation of an effluent limitation which is measured by concentration or mass for any discharge exceeding the effluent limitation as follows:

- (1) By less than 20 percent for a hazardous pollutant; or
  - (2) By less than 40 percent for a non-hazardous pollutant; or
- (iii) The greatest violation of a pH effluent range in any one calendar day which violation deviates from the midpoint of the range by less than 40 percent of the midpoint of the range excluding the excursions specifically excepted where permittee perform continuous pH monitoring.
- (d) The conduct of the violator shall be determined as major, moderate or minor as follows:
- (i) Major shall include any intentional, deliberate, purposeful, knowing or willful act or omission by the violator;
  - (ii) Moderate shall include any unintentional but foreseeable act or omission by the violator; or
  - (iii) Minor shall include any other conduct not included in (d) (i) or (d) (ii) above.
- (e) The Authority may move from the midpoint of the range, to an amount not greater than the maximum amount nor less than the minimum amount in the range, on the basis of the following factors:
- (i) The compliance history of the violator:
    - (1) No violations of the same effluent limitation and discharge point at all in the two years immediately preceding the pending violation shall result in a reduction equal to 25 percent of the midpoint.
    - (2) No serious or fewer than four lesser violations of the same effluent limitation and discharge point in the two years immediately preceding the pending violation shall result in a reduction equal to 10 percent reduction of the midpoint.
    - (3) One isolated serious violation or four or more lesser violations of the same effluent limitation and discharge point in the two years immediately preceding the date of the pending violation shall result in an increase equal to 10 percent of the midpoint.
    - (4) Any violation(s) which caused the permittee to become or remain in significant noncompliance or two or more isolated serious violations where such violations are of the same effluent limitation and discharge point in the two years immediately preceding the

date of the pending violation shall result in a 25 percent increase from the midpoint.

- (ii) The measures taken by the violator to mitigate the effects of the current violation or to prevent future violations;
  - (iii) The deterrent effect of the penalty; or
  - (iv) The cooperation of the violator in correcting the violation, remedying any environmental damage caused by the violation and ensuring that the violation does not reoccur;
  - (v) Any unusual or extraordinary costs or impacts directly or indirectly imposed on the public or the environment as a result of the violation;
  - (vi) Any impacts on the receiving water, including stress upon the aquatic biota, or impairment of receiving water uses, such as for recreational or drinking water supply, resulting from the violation; and
  - (vii) Other specific circumstances of the violator or violation.
- (f) In addition to the penalties set forth above, the Authority may also seek costs and interest charges and except in the case of a civil administrative penalty or civil penalty, the amount of any actual economic benefits accruing to the violator from the violation.

#### 11. Civil Administrative Penalty for Submitting Inaccurate or False Information

- (a) The Authority may assess a civil administrative penalty pursuant to this section against each violator who submits inaccurate information or who makes a false statement, representation, or certification in any application, record, or other document required to be submitted or maintained, or who falsifies, tampers with or renders inaccurate any monitoring device or method required to be maintained under the Authority's Rules and Regulations, or any rule, water quality standard, effluent limitation, administrative order or permit issued pursuant thereto. A violation under this section is non-minor and, therefore, not subject to a grace period, pursuant to N.J.A.C. 7:14-8.6 through 8.14.
- (b) Each day, from the day of submittal by the violator of the false or inaccurate information to the Authority to the day of receipt by the Authority of a written correction by the violator shall be an additional, separate and distinct violation.

- (c) The Authority shall assess a civil administrative penalty for violations described in this section based on the conduct of the violator at the midpoint of the following ranges except as adjusted pursuant to (d) below:
  - (i) For each intentional, deliberate, purposeful knowing or willful act or omission by the violator, the civil administrative penalty shall be in an amount up to \$50,000 per act or omission;
  - (ii) For each other violation not identified pursuant to (c) (i) above for which the violator does not correct the violation within 10 days after becoming aware of the violation, the civil administrative penalty shall be in an amount up to \$30,000; and
  - (iii) For each other violation not identified pursuant to (c) (i) above for which the violator corrects the violation within 10 days after becoming aware of the violation, the civil administrative penalty shall be in an amount up to \$1,000.
- (d) The Authority may, in its discretion, adjust the amount determined pursuant to (c) above to assess a civil administrative penalty in an amount no greater than the maximum amount nor less than the minimum amount in the range on the basis of the following factors:
  - (i) The compliance history of the violator;
  - (ii) The number, frequency and severity of the violations;
  - (iii) The measures taken by the violator to mitigate the effects of the current violation or to prevent future violations;
  - (iv) The deterrent effect of the penalty;
  - (v) The cooperation of the violator in correcting the violation, remedying any environmental damage caused by the violation and ensuring that the violation does not reoccur;
  - (vi) Any unusual or extraordinary costs or impacts directly or indirectly imposed on the public or the environment as a result of the violation;
  - (vii) Any impacts on the receiving water, including stress upon the aquatic biota, or impairment of receiving water uses, such as for recreational or drinking water supply, resulting from the violation; and
  - (viii) Other specific circumstances of the violator or violation.

## 12. Civil Administrative Penalty for Failure to Allow Lawful Entry and Inspection

- (a) The Authority may assess a civil administrative penalty pursuant to this section against each violator who refuses, inhibits or prohibits immediate lawful entry and inspection of any premises, building or place by any authorized representative. A violation under this section is non-minor and, therefore, not subject to a grace period, pursuant to N.J.A.C. 7:14-8.6 through 8.14.
  
- (b) Each day, from the initial day of failure by the violator to allow immediate lawful entry and inspection to the day of receipt by the Authority of written notification from the violator that the violator will not refuse, inhibit or prohibit immediate lawful entry and inspection, shall be an additional, separate and distinct violation.
  
- (c) The Authority shall assess a civil administrative penalty for violations described in this section at the midpoint of the following ranges except as adjusted pursuant to (d) below:
  - (i) For refusing, inhibiting or prohibiting immediate lawful entry and inspection of any premises, building or place for which an administrative order to permit exists under the Authority's Rules and Regulations, the civil administrative penalty shall be in an amount up to \$50,000; and
  
  - (ii) For any other refusal, inhibition or prohibition of immediate lawful entry and inspection, the civil administrative penalty shall be in an amount up to \$8,000.
  
- (d) The Authority may, in its discretion, adjust the amount determined pursuant to (c) above to assess a civil administrative penalty in an amount no greater than the maximum amount nor less than the minimum amount in the range on the basis of the following factors:
  - (i) The compliance history of the violator;
  
  - (ii) The number, frequency and severity of the violations;
  
  - (iii) The measures taken by the violator to mitigate the effects of the current violation or to prevent future violations;
  
  - (iv) The deterrent effect of the penalty

- (v) The cooperation of the violator in correcting the violation, remedying the damage caused by the violation and ensuring that the violation does not reoccur;
- (vi) Any unusual or extraordinary costs of impacts directly or indirectly imposed on the public or the environment as a result of the violation;
- (vii) Any impacts on the receiving water, including stress upon the aquatic biota, or impairment of receiving water uses, such as for recreational or drinking water supply, resulting from the violation; and
- (viii) Other specific circumstances of the violator or violation.

13. Civil Administrative Penalty for Failure to Properly Conduct Monitoring or Sampling

- (a) The Authority may assess a civil administrative penalty pursuant to this section against each violator who fails to carry out monitoring or sampling activities or to submit discharge monitoring reports, baseline monitoring reports, or monitoring report forms required by the Authority's Rules and Regulations or any rule, water quality standard, effluent limitation, administrative order or permit issued pursuant thereto. A violation under this section is non-minor and, therefore, not subject to a grace period, pursuant to N.J.A.C. 7:14-8.6 through 8.14.
- (b) Each violation, including each parameter that is required to be monitored, sampled and reported and that is not monitored, sampled and reported and that is not monitored, sampled and reported, is an additional, separate and distinct violation. Each day during which a violation continues shall constitute an additional, separate and distinct violation.
- (c) Except as provided in (e) below, the Authority shall assess a civil administrative penalty for violations described in this section based on the conduct of the violator at the midpoint of the following ranges except as adjusted.
  - (i) For any intentional, deliberate, purposeful, knowing or willful act or omission by the violator, the civil administrative penalty shall be in an amount up to \$50,000;
  - (ii) For any unintentional, but foreseeable act or omission by the violator, the civil administrative penalty shall be in amount up to \$40,000; or
  - (iii) For any other violations the civil administrative penalty shall be in an amount up to \$20,000.

- (d) The Authority may, in its discretion, adjust the amount determined pursuant to (c) above to assess a civil administrative penalty in an amount no greater than the maximum amount nor less than the minimum amount in the range on the basis of the following factors:
- (i) The compliance history of the violator;
  - (ii) The number, frequency and severity of the violations;
  - (iii) The measures taken by the violator to mitigate the effects of the current violation or to prevent future violations;
  - (iv) The deterrent effect of the penalty
  - (v) The cooperation of the violator in correcting the violation, remedying the damage caused by the violation and ensuring that the violation does not reoccur;
  - (vi) Any unusual or extraordinary costs of impacts directly or indirectly imposed on the public or the environment as a result of the violation;
  - (vii) Any impacts on the receiving water, including stress upon the aquatic biota, or impairment of receiving water uses, such as for recreational or drinking water supply, resulting from the violation; and
  - (viii) Other specific circumstances of the violator or violation.
- (e) For any person's failure to submit a complete discharge monitoring report, the Authority shall assess a civil administrative penalty of not less than \$100.00 for each effluent parameter omitted on a discharge monitoring report, nor greater than \$50,000 per month for any one discharge monitoring report.
- (i) The civil administrative penalty assessed pursuant to (e) above shall begin to accrue on the fifth day after the date on which the discharge monitoring report was due and shall continue to accrue at least for 30 days if the violation is not corrected.
  - (ii) The Authority may continue to assess civil administrative penalties for the failure to submit a complete discharge monitoring report beyond the 30-day period referenced in (e) above until the violation is corrected.

(iii) To contest a civil administrative penalty assessed pursuant to this section, a violator shall submit evidence of extenuating circumstances beyond the control of the permittee, including circumstances that prevented timely submission of a complete discharge monitoring report, or portion thereof, within 30 days after the date on which the effluent parameter information was required to be submitted to the Authority. If the violator fails to submit the required information within this 30-day period, the violator shall have waived its right to contest the civil administrative penalty in this manner and be barred from doing so.

(iv) A violator will not be subject to a civil administrative penalty for the inadvertent omission of one or more effluent parameters in a discharge monitoring report if both of the following conditions are met:

(1) The violator submits the omitted information to the Authority within 10 days after receipt by the violator of notice of the omission; and

(2) The violator demonstrates to the satisfaction of the Authority that the violation for which the Authority assessed the civil administrative penalty was due to an inadvertent omission by the violator of one or more effluent parameters.

#### 14. Criminal Violations

The Authority may refer criminal violations of the State Act (see *N.J.S.A. 58:10a-10f*) to the Bergen County Prosecutor or the Attorney General for the State of New Jersey for criminal action against any person suspected of being in violation of any law subjecting the violator to criminal penalties, which violation has caused or will cause an impact in the Authority service area. The penalties to be sought in connection therein shall be in accordance with *N.J.S.A. 50:10A-10*.

#### 15. Public Notification of Permit Violations

The Authority shall publish annually in the newspaper, in accordance with *40 CFR Part 403.8 (f) (2) (vii)*, a list of the users which were in significant non-compliance with the Rules and Regulations, Treated Groundwater or Industrial Wastewater Discharge Permit conditions or other applicable pretreatment requirements during the twelve (12) previous months. The notification will summarize any enforcement actions taken against the user during the same one-year period. For the purposes of this sub-section, the term "significant noncompliance" shall have the meaning assigned to it in Article II of the Authority's Rules and Regulations.

## **D. Enforcement Response Summary**

### **1. Format**

The Enforcement Response Summary (ERS) summarizes the escalating enforcement responses the Authority will take in response to most anticipated types of user violations and the time periods within which responses will take place. The ERS should be used in conjunction with other Sections of the ERP to determine the most appropriate response, based upon the significance of non-compliance, compliance history of the user and other factors previously discussed. It must be emphasized that the ERS is intended to encourage prompt and efficient implementation of response actions. The ERS cannot be expected to anticipate all types of violators or all remedies appropriate to each violation. As such, the ERS is not intended to restrict the Authority's ability to apply other enforcement responses available by law when warranted by appropriate circumstances.

The ERS is presented in a tabular format for easy reference. The types of violations listed are grouped into three main classifications; discharge violations, reporting violations, and inspection violations. Within each classification, specific types of violations are listed for various events of noncompliance along with the recommended enforcement responses and the title of the individual authorized to undertake that response. The following subsections discuss the terminology used within ERS and certain guidelines regarding its use.

### **2. Description of Terms**

Certain terms and abbreviations used in the ERS are defined below. Specific information related to these terms can be found in other portions of the ERP.

CA -	Consent Agreement
CAP -	Civil Administrative Penalties or Assessments
CE -	Chief Engineer
CO -	Compliance Order
CP -	Civil Penalties
CR -	Clarification Request
CRIM -	Refer for Criminal Prosecution
CVA -	Civil Action
ED -	Executive Director
EHS -	Environmental Health Specialist
GC -	General Counsel
IPC -	Industrial Pretreatment Program Coordinator
IU -	Industrial User
NJWPCA	New Jersey Water Pollution Control Act
SNC	Significant Non-compliance

- Noncompliance - Violations of a Treated Groundwater or Industrial Wastewater Discharge Permit, Authority's Rules and Regulations, Consent Order, Compliance Order and other order or agreement.
- NOV - Notice of Violation.
- Show Cause - Formal meeting requiring the user to appear and demonstrate why the Authority should not institute a proposed enforcement action.
- Significant -
- Non-compliance - Refer to definition in Article II of the Authority's Rules and Regulations.

### 3. ERS Use

The ERS is not intended to prohibit the Authority from undertaking other response actions available pursuant to law in appropriate circumstances. The first step in utilizing the ERS is to determine what category the violation falls under. The categories include Discharge Limit Violation, Reporting Violation and Inspection Violation. These are listed in the first column of the ERS. Next, the specific type of violation will be listed in column two. Column three lists the specific enforcement response(s) applicable to each type of violation found under column two. The Person(s) with final approval authority over the specified enforcement response are listed in column four.

With respect to the personnel column, it should be noted that the personnel listed are those personnel whose final approval is necessary before the action is taken. In almost all circumstances, the enforcement response process will be initiated within the IPP Unit with the goal being to initiate the response action review at as low a level as possible.

ENFORCEMENT RESPONSE SUMMARY				
Non-compliance Event	Nature of the Violation	Enforcement Response	Personnel	Type of viol. & grace period (if any)
<b>I. Discharge Violations</b>				
1. Non-permitted discharge	Up to 10 days late in complying with 180-day filing deadline for renewal of existing permit - no other permit violation	1) Warning phone call or CR with permit application form	1) IPC or EHS	NM
	From 10 days to 90 days late in complying with 180-day filing deadline of existing permit - no other permit violation.	1) Second written warning	1) IPC	NM
	More than 90 days late in complying with 180-day deadline for renewal of existing permit - no other permit violation.	1) Issue final warning of imminent permit expiration.	1) IPC	NM
	Existing permit has expired. Late in filing for renewal of existing permit - no other discharge violations exist.	1) CAP followed up with civil action to enjoin discharge	1) IPC, ED	NM
2. Unpermitted Discharge	No permit and unaware of <i>Rules and Regulations</i> ; no interference or pass through, no harm to environment or BCUA workers.	1) NOV with Application Form	1) IPC	NM
	No permit and is unaware of <i>Rules and Regulations</i> (no purposeful, knowing or reckless violation); causes interference and/or pass through or harm to environment or BCUA workers.	1) NOV 2) CVA with CP 3) If interference or pass through is ongoing, also make immediate service termination.	1) IPC 2) ED 3) CE and ED	NM
	No permit and discharge is in purposeful, knowing or reckless violation of <i>Rules and Regulations</i> , causing interference and/or pass through or harm to environment or BCUA workers.	1) NOV 2) CVA with CP 3) If interference or pass through is ongoing, also make immediate service termination. 4) CRIM	1) IPC 2) ED 3) CE and ED 4) ED	NM
3. Exceedance of local or federal standard (permit limit)	Isolated incident; no serious violation, significant non-compliance or injury or threat to persons or the environment	1) NOV 2) Compliance response/ corrective action plan 3) Increased monitoring and reporting (discretionary)	1) IPC 2) IPC 3) IPC or EHS	NM

<b>ENFORCEMENT RESPONSE SUMMARY</b>				
<b>Non-compliance Event</b>	<b>Nature of the Violation</b>	<b>Enforcement Response</b>	<b>Personnel</b>	<b>Type of viol. &amp; grace period (if any)</b>
3. Exceedance of local or federal standard (permit limit) (Cont'd)	Isolated incident; serious violation, with no pass through, interference or harm to persons or environment	1) NOV 2) CAP 3) Increased monitoring and reporting	1) IPC 2) IPC, ED 3) IPC	NM
	Isolated incident; serious violation with pass through, interference and/or harm to persons or environment, no purposeful, knowing or reckless violation	1) NOV 2) CAP 3) Increased monitoring and reporting	1) IPC 2) IPC, ED 3) IPC	NM
	Recurring incident, serious violation with no pass through, interference or harm to persons or environment, no purposeful, knowing or reckless violation	1) NOV 2) Increased monitoring and reporting 3) CAP	1) IPC 2) IPC 3) IPC, ED	NM
	Recurring incident, serious violation with pass through, interference or harm to persons or environment, no purposeful, knowing or reckless conduct	1) NOV 2) CAP 3) CVA 4) Service termination if violation is not halted 5) Increased monitoring and reporting	1) IPC 2) IPC, ED 3) ED 4) ED 5) IPC	NM
	Recurring incident, serious violation with pass through, interference or harm to persons or environment, with purposeful, knowing or reckless conduct	1) NOV 2) CAP 3) CVA 4) Service termination if violation is not halted 5) Increased monitoring and reporting 6) CRIM	1) IPC 2) IPC, ED 3) ED 4) ED 5) IPC 6) CRIM	NM
	Significant non-compliance (IU meets SNC criteria under <i>40 CFR 403</i> )	1) Public Notice	1) IPC	NM
	Significant non-compliance (IU meets SNC criteria in <i>NJWPLA</i> under <i>NJSA 58:10A-3.w</i> )	1) CAP	1) IPC, ED	NM
<b>II. Reporting Violations</b>				
1. Reporting Violations	Report is improperly signed or certified.	1) Warning phone call or CR	1) IPC or EHS	M – 5 days
	Properly signed or certified report is not submitted by fifth day after report was due following notice by IPP staff	1) NOV 2) CAP 3) CO Note: Penalty waived if complete report is received within 10 days of receipt of NOV.	1) IPC 2) IPC, ED 3) IPC	NM

<b>ENFORCEMENT RESPONSE SUMMARY</b>				
<b>Non-compliance Event</b>	<b>Nature of the Violation</b>	<b>Enforcement Response</b>	<b>Personnel</b>	<b>Type of viol. &amp; grace period (if any)</b>
1. Reporting Violations (Cont'd)	Isolated late submittal (less than 5 days)	1) Warning phone call	1) IPC or EHS	M – 5 days
	Isolated late submittal (5 days late or more)	1) NOV 2) CAP Note: Penalty waived if complete report is received within 10 days of receipt of NOV.	1) IPC 2) IPC, ED	NM
	Report is submitted more than 30 days after due date (but complete).	1) NOV 2) CAP 3) Public Notice Note: Penalty waived if complete report is received within 10 days of receipt of NOV.	1) IPC 2) IPC, ED 3) IPC	NM
	Reports are always late or no reports at all.	1) NOV 2) Show Cause Order 3) CAP 4) Public Notice	1) IPC 2) IPC,GC 3) IPC, ED 4) ED	NM
	Failure to report spill or changed discharge with no pass through, interference or harm to persons or environment	1) NOV 2) CO with schedule	1) IPC 2) IPC, ED	NM
	Failure to report spill or changed discharge resulting in pass through, interference or harm to persons or environment	1) NOV 2) CAP 3) CO	1) IPC 2) IPC, ED 3) IPC	NM
	Repeated failure to report spills	1) Show Cause Order 2) CAP 3) CVA (for injunction if spills continue) 4) Service termination if spills continue	1) IPC&d GC 2) IPC, ED 3) ED & GC 4) ED & GC	NM
	Falsification	1) CRIM 2) CAP 3) CVA for service termination if violations persist	1) ED 2) ED 3) ED & GC	NM
	2. Failure to Correctly Monitor Flow or Pollutants	No monitoring equipment installed (delay of less than 30 days)	1) NOV 2) CO 3) CAP	1) IPC 2) IPC 3) IPC, ED
No monitoring equipment installed (delay greater than 30 days)		1) NOV 2) CVA with CP 3) Termination of service if violation not corrected	1) IPC 2) ED, GC 3) ED, GC	NM
Isolated failure to monitor all pollutants required by the Treated Groundwater or Industrial Wastewater Permit		1) NOV 2) CAP	1) IPC 2) IPC, ED	NM

<b>ENFORCEMENT RESPONSE SUMMARY</b>				
<b>Non-compliance Event</b>	<b>Nature of the Violation</b>	<b>Enforcement Response</b>	<b>Personnel</b>	<b>Type of viol. &amp; grace period (if any)</b>
2. Failure to Correctly Monitor Flow or Pollutants (Cont'd)	Recurring failure to monitor all pollutants required by the Treated Groundwater or Industrial Wastewater Permit	1) NOV 2) CAP 3) CVA with CP to enjoin further violations	1) IPC 2) IPC, ED 3) ED, GC	NM
	Failure to monitor all pollutants required by the Treated Ground water or Industrial Wastewater Discharge Permit (IU meets SNC criteria under <i>NJWPCA</i> )	1) CAP	1) IPC, ED	NM
	Failure to monitor all pollutants required by the Treated Ground Water or Industrial Wastewater Discharge Permit - IU meets SNC criteria under <i>40 CFR 403</i>	1) Public Notice	1) IPC	NM
3. Improper Sampling	Purposeful knowing or reckless violation	1) NOV 2) CAP 3) CVA and CP if necessary to enjoin further violations 4) CRIM	1) IPC 2) IPC, ED 3) ED, GC 4) ED	NM
4. Discharge Permit - Compliance Schedule	Missed milestone by less than 30 days will not affect meeting final milestone.	1) NOV 2) CO 3) CAP (discretionary)	1) IPC 2) IPC 3) IPC, ED 4) IPC, ED	NM
	Missed milestone by more than 30 days will affect meeting final milestone.	1) NOV 2) CO 3) CAP 4) Public Notice	1) IPC 2) IPC 3) IPC, ED 4) IPC	NM
	Recurring violation or violation of CO schedule	1) NOV 2) CAP 3) CVA if necessary to enjoin further use of connection	1) IPC 2) IPC, ED 3) ED	NM
<b>III. Inspection Violations</b>				
1. Wastestreams are diluted in lieu of treatment	Isolated event, initial violation	1) NOV 2) CO	1) IPC 2) IPC	NM
	Recurring violation	1) NOV 2) CAP 3) Show Cause Order 4) Service termination if violation is not corrected	1) IPC 2) IPC, ED 3) IPC 4) ED	NM

<b>ENFORCEMENT RESPONSE SUMMARY</b>				
<b>Non-compliance Event</b>	<b>Nature of the Violation</b>	<b>Enforcement Response</b>	<b>Personnel</b>	<b>Type of viol. &amp; grace period (if any)</b>
2. Failure to operate facility properly or to mitigate non-compliance or halt production	No serious violation or significant non-compliance, does not result in harm to persons or environment, interference or pass through at treatment plant, no purposeful, knowing or reckless violation	1) NOV 2) CO	1) IPC 2) IPC	NM
	Serious violation, or results in harm to persons or environment, causes interference or pass through at treatment plant, no purposeful, knowing or reckless violation	1) NOV 2) CAP 3) CO with temporary halt in discharge if necessary	1) IPC 2) IPC, ED 3) ED	NM
3. Entry to facility denied by IU	Entry denied or consent withdrawn. Copies of records denied.	1) NOV 2) CAP 3) CVA, CP 4) Termination of service if harm to the environment or persons is reasonably suspected	1) IPC 2) IPC, ED 3) ED & GC 4) ED	NM
4. Illegal Discharge of Pollutants	No harm to persons or environment, no interference or pass through at treatment plant, no purposeful, knowing or reckless violation	1) NOV 2) CAP	1) IPC 2) IPC	NM
4. Illegal Discharge of Pollutants (cont'd)	Serious violation or discharges cause harm to persons or environment, causes interference or pass through at treatment plant	1) NOV 2) CAP 3) Show Cause Order 4) CO with halt in discharge if necessary	1) IPC 2) IPC, ED 3) IPC 4) IPC	NM
	Same as two previous examples, but with purposeful, knowing or reckless violation	1) Add CRIM to above measures	1) ED	NM
	Recurring violation of CO, no purposeful, knowing or reckless conduct	1) CAP 2) CVA to obtain injunction or service termination if necessary to avoid damage to environment or persons, pass through or upset	1) IPC, ED 2) ED & GC	NM
	Same as two previous examples, but with purposeful, knowing or reckless violation	1) Add CRIM to above measures	1) ED	NM

<b>ENFORCEMENT RESPONSE SUMMARY</b>				
<b>Non-compliance Event</b>	<b>Nature of the Violation</b>	<b>Enforcement Response</b>	<b>Personnel</b>	<b>Type of viol. &amp; grace period (if any)</b>
5. Improper Sampling	Isolated, unintentional sampling at incorrect location	2) NOV	1) IPC	NM
	Isolated unintentionally using incorrect sample type	1) NOV	1) IPC	NM
	Isolated, unintentionally using incorrect sample collection techniques	1) NOV	1) IPC	NM
	Recurring sampling at incorrect locations, use of incorrect sample type or incorrect sample collection techniques following issuance of NOV	1) NOV 2) CAP 3) CO	1) IPC 2) IPC, ED 3) IPC	NM
6. Failure to Report Additional Monitoring	Inspector finds additional files, no violation of effluent limitations, isolated incident	1) NOV	1) IPC	NM
	Recurring NOV with no violation of effluent limitations	1) NOV 2) CAP 3) CO	1) IPC 2) IPC, ED 3) IPC	NM
	Recurring violation with violation of effluent limitations	1) NOV 2) CAP 3) CO	1) IPC 2) IPC, ED 3) IPC	NM
7. Inadequate Recordkeeping	Inspector finds files incomplete or missing (no evidence of intent, isolated incident)	1) NOV	1) IPC	NM
	Recurring violation	1) NOV 2) CAP 3) CO	1) IPC 2) IPC, ED 3) IPC	NM

### TIME FRAME FOR RESPONSES

- A. All violations will be identified and documented within sixty (60) working days of receiving compliance information.
- B. Initial enforcement responses (involving contact with the industrial user and requesting information on corrective or preventative actions(s), will occur within fifteen (15) days of violation detection, where possible, but in no event shall response occur more than sixty (60) days from the date of violation detection.
- C. Follow-up actions for continuing or recurring violations will be taken within six (6) months of the initial enforcement response. For all continuing violations, the response will include a compliance schedule.
- D. Violations which threaten health, property or environmental quality are considered emergencies and will receive immediate responses such as halting the discharge or terminating service, but in no event shall exceed two (2) days.

### RESPONSE INITIATION PROCEDURES

Enforcement responses must be approved by the personnel noted under the personnel column in the Enforcement Response Summary. However, all response actions are to be initiated by IPP staff as follows:

- A. It shall be the primary responsibility of BCUA Environmental Health Specialists to detect non-compliance based upon review of self-monitoring data, site inspection, or other information.
- B. The Environmental Health Specialist shall bring questionable or confirmed violations to the attention of the Industrial Pretreatment Program Coordinator (IPC) for action.
- C. If the IPC is authorized to take the appropriate response action, he will. If the approval of the Chief Engineer, Executive Director, or General Counsel is required, he will prepare written recommendations to each person whose approval is required, setting forth the identity of the violator, the expiration date of his permit, all pertinent facts concerning the nature, duration and impact of the violation, and the recommended response action. Each such memorandum shall include a recommended deadline within which action should be taken.

## GENERAL NOTE REGARDING CONSENT AGREEMENTS

The use of consent agreements is not specifically noted in the summary under the Enforcement Response Column. However, this is not to imply that the use of consent agreements is not favored where appropriate. Consent agreements are to be utilized after commencement of initial enforcement actions when its use will serve as an expeditious means of correcting the noted violation(s) and collecting fines and penalties assessed against violators in a timely and cost effective manner.