



STATE OF WEST VIRGINIA
STATE WATER RESOURCES BOARD

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Board Secretary

January 12, 1981

The Honorable A. James Manchin
Secretary of State
Capitol Building
Charleston, WV 25305

Dear Mr. Secretary:

Enclosed are the Administrative Regulations promulgated by the State Water Resources Board regarding requirements governing water quality standards and regulations setting forth special regulations under Chapter 20 - 5 and Chapter 20 - 5A.

I hereby certify that the attached regulations are true and accurate copies of official regulations adopted by the Board on December 30, 1980.

Very truly yours,

John C. Ailes
John C. Ailes, Chairman
State Water Resources Board

JCA/feh

Enclosures 2

FILED IN THE OFFICE OF
SECRETARY OF STATE
THIS DATE 1-12-81

*obsolete
valid Feb 12, 1981
to July 25, 1981*

CHAPTER 3 - SPECIAL REGULATIONS

Series 3
Filed 1-12-81
to JUNE 25, 1981

Section 1. Reporting Spills and Accidental Discharges

1.01 It is recognized that spills and accidental discharges of sewage, industrial wastes and other wastes are contrary to the language and intent of the State Law and Federal Law and that these spills and accidental discharges may occur from time to time, notwithstanding efforts to prevent them.

It is further recognized that such spills and discharges are likely to have adverse effects upon the quality of the waters of the State impairing existing and future uses of those waters. The State Water Resources Board hereby declares it mandatory that, in order to minimize the adverse effects which the above described occurrences may have upon users of waters of the State, the following procedures shall be followed:

(a) Each and every person who may cause or be responsible for any spill or accidental discharge of pollutants into the waters of the State shall give immediate notification to the designated spill telephone number of the Department of Natural Resources, Division of Water Resources.

(b) Such notification shall set forth the time and place of such spill or discharge, type or types and quantity or quantities of the material or materials therein, action or actions taken to stop such spill or discharge and to minimize the polluting effect thereof, the measure or measures taken or to be taken in order to prevent a recurrence of any such spill or discharge and such additional information as may be requested by the Division of Water Resources. A written verification of such notification shall be submitted upon request of the Division of Water Resources.

(c) It shall be the responsibility of each industrial establishment or other entity discharging directly to a stream to have available the following information pertaining to those substances that are employed or handled in its operation in sufficiently large amounts as to constitute a hazard in case of an accidental spill and discharge into a public stream:

- (1) Potential toxicity in water to man, animals and aquatic life;
- (2) Details on analytical procedures for the quantitative estimation of such substances in water; and
- (3) Suggestions on safeguards or other precautionary measures to nullify the toxic effects of a substance once it has gotten into a stream.

1.02 Section 1 (a) and (b) shall also apply to spills to the waters of the State resulting from accidents to common carriers by highway, rail and water.

1.03 Failure to furnish such information as required by Section 9, Article 5A, Chapter 20, Code of West Virginia shall be punishable under Section 19, Article 5A, Chapter 20, Code of West Virginia.

1.04

(a) It shall be the responsibility of any person who causes or contributes in any way to the spill or accidental discharge of any pollutant or pollutants into State waters to immediately take any and all measures necessary to contain such spill or discharge.

(b) It shall further be the responsibility of such person to take any and all measures necessary to clean-up, remove, and otherwise render such spill or discharge harmless to the waters of the State.

(c) When the Chief determines it necessary for the effective containment and abatement of spills and accidental discharges, the Chief may require the person or persons responsible for such spill or discharge to monitor affected waters in a manner prescribed by the Chief until the possibility of any adverse effect on the waters of the State no longer exists.

Section 2. Coin-Operated and Other Commercial Laundries

2.01 The increasing appearance of coin-operated and other commercial laundries, particularly in unsewered areas, has led to a variety of wastewater treatment problems. In order to establish minimum requirements governing construction of such wastewater handling facilities and in accordance with Chapter 20, Article 5A, Code of West Virginia, the following Administrative Regulations are established.

2.02 Coin-operated laundries and other commercial laundries located within the corporate limits of a West Virginia municipality, town, or within the boundaries of a Public Service District, or Sanitary District, or a privately owned installation having an approved sewage treatment facility shall divert wastewater to these systems for treatment.

(a) Laundry discharging directly to sewer: a laundry without pretreatment of the wastewater connected to a sewer requires adherence to local plumbing codes and to any special regulations regarding acceptance of waste at the sewage treatment plant.

(b) Laundry with pretreatment and discharge directly to sewer: the laundry shall provide equipment for removal of lint from the water.

2.03 Coin-operated and other commercial laundries located outside of the corporate limits of a West Virginia municipality, town or the boundaries of a Public Service District or Sanitary District not served by an approved sewage treatment facility shall either divert wastewater to an approved sewage treatment facility or shall be governed by the following:

(a) Construction and operation of such treatment facilities shall meet the following minimum requirements in addition to those described elsewhere by law or

- (1) Substantial removal of all settleable solids.
- (2) Ninety percent removal of 5-day biochemical oxygen demand.
- (3) Chlorination of final effluent is required at the initial installation. A chlorination contact chamber shall provide a contact period of at least 15 minutes with a residual of 0.5 mg/l of chlorine at maximum flow.
- (4) Laundry discharging water to a receiving stream used primarily for recreational pursuit and supporting sport fisheries shall in addition to items (a) through (c) provide tertiary treatment of additional BOD removal to 10 mg/l. Dechlorination may be necessary to meet water quality standards (see Section 8, Chapter 1).

(b) Laundry with no wastewater discharge: a laundry may be located where no discharge of the wastewater can be made to a sanitary sewer or a receiving stream. In these cases, holding tanks shall be provided for wastes and the waste must be transported to an approved wastewater treatment plant for treatment.

2.04 The following systems are non-allowable and will not be permitted:

- (a) Septic tanks with or without leach fields.
- (b) Cess pools.
- (c) Direct or indirect discharge of untreated or inadequately treated laundry wastewater to the waters of the State.

Section 3. Coin-Operated and Other Commercial Car Washing Establishments

3.01 The increasing appearance of coin-operated and other commercial car washing establishments, particularly in unsewered areas, has led to a variety of wastewater treatment problems. In order to establish minimum requirements governing construction of such wastewater handling facilities and in accordance with Chapter 20, Article 5A, Code of West Virginia, the following Administrative Regulations are established.

3.02 Coin-operated and other commercial car washing establishments located within the corporate limits of a West Virginia municipality, town, or within the boundaries of a Public Service District, Sanitary District or privately owned installation having an approved sewage treatment facility shall divert wastewater to these systems for treatment:

(a) Car wash with discharge directly to sewer: a car wash discharging to the sewer without pretreatment of the wastewater requires adherence to local plumbing codes and to any special local regulations regarding acceptance of waste at the sewage treatment plant.

(b) Car wash with pretreatment system discharging directly to sewer: a device to prevent large items from entering the sewer lines shall be required. A settling tank shall be required to remove

settleable solids from the wastewater.

(c) Coin-operated and other commercial car washing establishments located within the corporate limits of a West Virginia municipality, town or within the boundaries of a Public Service District or Sanitary District having an approved sewage treatment facility and not wishing nor required to utilize this facility must proceed under Section 3.03 of this regulation.

3.03 Any coin-operated or other commercial establishment located outside the corporate limits of a West Virginia municipality or town or outside the boundaries of a Public Service District or Sanitary District or within the corporate limits of a West Virginia municipality or town or the boundaries of a Public Service District or Sanitary District not served by an approved sewage treatment facility shall either divert wastewater to an approved sewage treatment facility or shall be governed by the following:

(a) Construction and operation of such treatment facilities shall meet the following minimum requirements in addition to those prescribed elsewhere by law or

- (1) Substantial removal of all settleable solids.
- (2) Ninety percent removal of 5-day biochemical oxygen demand.
- (3) Chlorination of final effluent is required at the initial installation, if domestic sewage is to be treated within the installation. A chlorination contact chamber shall provide a contact period of at least 15 minutes with a residual of 0.5 mg/l of chlorine at maximum flow. Dechlorination may be necessary to meet water quality standards (see Section 8, Chapter 1).

- (4) A grease trap shall be installed and properly maintained within the system to prevent oils and grease entrapment with wastewater effluent.
- (5) A grit removal chamber shall be installed in such a manner to be readily cleaned.
- (6) A car wash discharging wastewater to a receiving stream used primarily for recreation pursuits and supporting sport fisheries shall in addition to items (1) through (6) provide tertiary treatment in addition to secondary treatment. Tertiary treatment provides for additional BOD removal to 10 mg/l in the effluent.

(b) Car wash with no wastewater discharge: car washes may be located where no discharge of the wastewater can be made to a sanitary sewer or receiving stream. In these cases, holding tanks shall be provided for wastes and the wastes must be transported to an approved wastewater treatment plant for treatment.

(c) Car wash re-using wastewater: car washes employing a reuse system shall provide removal facilities for settleable materials. These materials must be transported to an approved disposal site.

3.04 The following systems are non-allowable and will not be permitted:

- (a) Septic tanks with or without leach fields.
- (b) Cess pools.
- (c) Direct or indirect discharge of untreated or improperly treated wastewater from coin-operated and other commercial car washing establishments to the waters of the State.

Section 4. Water Purification Wastewater Control Measure

4.01 Waste Disposal: provision must be made for proper disposal of wastes from water treatment plants. Such wastes include but are not limited to those emanating from sanitary facilities, laboratories, clarification facilities, softening facilities, and filter backwash. Discharges shall be governed by Chapter 20, Article 5A, Code of West Virginia and the following regulations:

(a) The following means of waste and sludge disposal may be considered:

(1) Lagoon design must provide the following:

- (i) Location above the 25-year flood level;
- (ii) Dikes, deflecting gutters or other means of diverting surface water when necessary;
- (iii) A minimum depth of 4 to 5 feet;
- (iv) Multiple cell;
- (v) Adjustable decanting devices; and
- (vi) Convenient cleaning.

(2) Sludge beds for lime softening sludge or other sludges must provide the following:

- (i) Location above the 25-year flood level;
- (ii) Multiple beds, each designed for at least one year's storage;
- (iii) Size of sludge beds will be governed by the concentration of solids to be disposed of with an ultimate depth of 12 inches dry basis
- (iv) Distribution channels may be required for spreading sludge over entire area;

- (v) Easy access roads and loading ramps with proper under drains must be provided; and
 - (vi) Tank Truck: trucking wet sludge to agricultural lands or disposal areas requires proper handling, vehicles and equipment to permit hauling and spreading without creating of nuisances. It is necessary to provide sludge holding facilities for use during times that trucks cannot operate.
- (3) Community Wastewater Treatment Facility: discharges to sewer systems and their treatment facilities depend on type of treatment, rate of discharge, plant design capacity, character of waste, and local conditions.
- (4) Other Methods: these include holding tanks, vacuum filters, centrifuging and re-calcining. Detailed studies must be made to justify their use.
- (5) Sanitary Waste: the sanitary waste from water treatment plants, pumping stations, etc., must receive treatment. Waste from these facilities must be discharged either directly to a sanitary sewer system with approved treatment or to an individual waste disposal facility providing suitable treatment. The effluent must be acceptable for discharge to the surface or ground waters.

Section 5. Waste Load Allocations for Sewage Discharges

5.01 Purpose. Waste load allocations for sewage discharges are to be issued by the Chief to potential applicants for a Water Pollution Control Permit to assist with planning of wastewater treatment works

which will meet prescribed effluent requirements and not violate State Water Quality Standards for the receiving waters. Applications for the waste load allocation shall be made prior to the initiation of any planning of any facilities which will produce or result in a wastewater discharge to the State's surface waters. Waste load allocations are not intended to, and shall not to interpreted to be an advance approval of wastewater treatment facilities which may be proposed nor is it an assurance that a Water Pollution Control Permit will be issued. It is emphasized that waste load allocations are issued on major effluent criteria only for planning purposes.

5.02 Application forms may be prescribed by the Chief requiring submission of necessary information and data by the applicant to enable the Division of Water Resources to make a waste load allocation determination. Such determination shall be valid for a period of time specified by the Chief. Reapplication for a new waste load allocation will be required upon expiration of the preceding waste load allocation unless application for a Water Pollution Control Permit has been filed.

5.03 Waste load allocations shall prescribe the concentration and quality of significant wastewater substances and physical, chemical, or biological conditions for the proposed discharge. The waste load limitations shall represent 30-day and 7-day average values for biochemical oxygen demand, solids, nitrogen, and other criteria defining the load, except for pH and dissolved oxygen which are instantaneous limits if it is deemed necessary to assure protection of water uses immediately downstream from the point of discharge to the receiving waters.

5.04 Waste load allocations for the achievement of water quality standards shall normally be based on a specified low flow. The design flow for this purpose shall be the minimum mean 7-consecutive day flow with a 10-year return frequency.

5.05 In cases where a waste discharge is proposed to a wet weather stream or to a stream with a zero mean 7-consecutive day drought flow with a 10-year return frequency, the allocation shall define the treatment plant effluent quality which shall be equal to or better than existing quality of water in the nearest downstream segment of the stream having a minimum mean 7-consecutive day flow of greater than zero with a return frequency of 10 years but in no case less than the established water quality standard for this segment.

5.06 More stringent requirements may be specified by the Chief where necessary to protect downstream uses or where special conditions such as recreation or water supply impoundments or danger to aquatic or animal life exists.

5.07 A waste load allocation may be denied when the assimilative capacity of the receiving waters is being fully utilized or if the additional waste load would result in a violation of water quality standards.

5.08 Waste load allocations are not required prior to an application to dispose of treated domestic sewage effluents by land treatment and disposal methods. Applications for a Water Pollution Control Permit for such purpose will be reviewed on a case-by-case basis. Such systems may require a Water Pollution Control Permit from the Chief, Division of Water Resources.

5.09 United States Geological Survey data may be used in

determining the mean 7-consecutive day drought flows with a 10-year recurrence interval but does not preclude the use of other reliable data systems as they become available.

Section 6. Small Wastewater Treatment Plants

6.01 For the purpose of this section, these regulations pertain to sewage treatment plants of 40,000 gallons per day capacity or less.

6.02 Operational reliability for such plants shall be provided in order that pollutants are not discharged during periods of power failure.

6.03 The wastewater treatment structure shall be protected against physical damage for the 25-year flood level and operability be maintained during the 10-year flood level.

6.04 In the case of mine bathhouses, schools, shopping centers, or other wastewater treatment facilities which surcharge the plant on a periodic basis, as opposed to generally constant flows, equalization facilities shall be provided. In cases where the organic loading is of low concentration, supplemental substances may be added, to obtain adequate treatment.

6.05 No construction, installation, modification or operation of a wastewater disposal system (treatment plant, sewers, lift stations and appurtenances) shall be performed until a Water Pollution Control Permit has been issued for the facilities.

Section 7. Permit Application Filing Fee

7.01 A filing fee of fifty dollars (\$50) by check or money order shall accompany the application.

7.02 If the application submitted is determined not to be complete and must be returned to the applicant for more information required by the application form, another filing fee of fifty dollars (\$50) by check or money order shall accompany the filing of a new application.

7.03 Further, a filing fee in the amount of fifty dollars (\$50) is required each time an application is submitted.

7.04 The check or money order shall be made payable to the "West Virginia Department of Natural Resources". The filing fee shall be deposited in the State Treasury to the credit of the State General Fund. The filing fee shall not be returned to the applicant.

Section 8. Outlet Markers

8.01 In accordance with the definitions provided in Chapter 20, Article 5A, Code of West Virginia, the following regulations are established to identify outlets.

8.02 Each holder of a Water Pollution Control Permit shall post a permanent marker at the establishment under permit in accordance with the following:

(a) A marker shall be posted on the stream bank at each outlet covered by the permit.

(b) The marker shall consist of the name of the establishment to which the permit was issued, the permit number, and the outlet number.

(c) The marker shall be a minimum of two feet by two feet and shall be a minimum of three (3) feet above ground level.

Section 9. Oil and Gas Well Drilling Control Measures

9.01 In order to establish minimum requirements governing the handling of surface water and the construction of wastewater handling facilities and in accordance with Chapter 20, Article 5A, Code of West Virginia, the following Administrative Regulations are established.

9.02 The construction of access roads to drilling sites shall meet the following minimum requirements:

(a) Access roads shall be constructed in a manner to direct and carry surface run-off to sedimentation control device(s).

(b) Sedimentation control device(s) shall be sized based on the watershed area, the coefficient of run-off and rainfall intensity based on a 5-year storm.

(c) If possible, uncontaminated surface run-off from undisturbed areas shall be directed or carried away from disturbed areas to prevent it from intercepting contaminated run-off from access roads.

(d) If it is not possible to direct and carry uncontaminated surface run-off from undisturbed areas away without intercepting the contaminated run-off, then the sedimentation control device(s) shall be sized in accordance with the requirements of (b) above with the additional watershed area considered.

(e) Sedimentation control device(s) and access roads not to be used again, shall be reclaimed in accordance with applicable State and Federal law.

(f) All natural drainage areas shall be maintained by the use of temporary culverts and bridges as required.

9.03 The preparation of the drilling site shall meet the following minimum requirements:

(a) The entire drilling site shall be constructed in a manner to prevent surface run-off from adjacent areas from carrying wastes away from the site.

(b) Uncontaminated surface run-off from any highwalls should be directed to natural drainage areas to prevent contamination by run-off from disturbed areas. Contaminated run-off from any highwalls shall be directed to a sedimentation control device(s).

(c) Any sedimentation control device(s) shall be reclaimed in accordance with applicable State and Federal law.

(d) Provisions shall be made within the confines of the drilling site and the drilling site properly graded to collect all surface run-off from the drilling site proper and any material leaked or spilled within the drilling site.

(e) Any pits or sumps shall be reclaimed in accordance with applicable State and Federal law.

9.04 The construction of the drilling pits or ponds shall meet the following minimum requirements:

(a) Any drilling pit or pond shall be constructed and maintained so as to prevent seepage, leakage or overflow and to maintain its integrity.

(b) Provisions shall be made for diverting surface water from the drilling pits or ponds.

(c) When an operator is unable to maintain adequate freeboard to prevent overflow from any drilling pit or pond, an additional drilling pit or pond shall be constructed.

(d) If existing soil is not impervious, other impervious materials shall be used for lining.

(e) Blow pipes should have appropriate fittings on the discharge

end to confine the discharged material to the ditch or pond into which it is being directed.

(f) Upon completion of the drilling activity, the ponds shall be allowed to dry up prior to reclamation. Reclamation of the drilling ponds can commence when the material has completely evaporated or evaporated to the point where the pond can be filled in without allowing an overflow and discharge of material.

9.05 No material moved or cut for access roads or site preparation shall be placed in or near any stream.

9.06 When non-productive wells are plugged, the blow-back material from plugging shall be directed to the drilling pond to permit settling.

9.07 Sections 9.02, 9.03 and 9.05 shall not apply to those drilling operations at which Best Management Practices, in accordance with the State's adopted 208 Water Quality Management Plan are being utilized on a site specific basis as determined by the appropriate 208 cooperative with concurrence of the Chief.

Section 10. Acid Mine Drainage Control Measures

10.01 Certain acid mine drainage control measures were adopted by the Ohio River Valley Water Sanitation Commission and promulgated as Resolution No. 5-60, as amended January 10, 1963. The State of West Virginia is a member of the Ohio River Valley Water Sanitation Compact and as such has agreed to carry out the control measures so established. Waters of the State of West Virginia are being polluted by acid discharges from coal mining and related operations hereinafter referred to as "acid mine drainage", contrary to the language and intent of the State Water Pollution Control Law.

10.02 It has been demonstrated that the conscientious application

of certain principles and practices will, under certain conditions, alleviate the pollution from acid mine drainage. Therefore, in furtherance of the policy and procedures of the State Water Resources Board the following measures are hereby adopted by the Water Resources Board for the control of acid mine drainage pollution in the State of West Virginia:

- (a) (1) Surface waters and ground waters shall be diverted where practicable to prevent the entry or reduce the flow of waters into and through workings.
- (2) Water that does gain entry to the workings shall be handled in a manner which will minimize the formation and discharge of acid mine drainage to streams.
- (b) (1) Refuse from the mining and processing of coal which produces a discharge of less than 6.0 pH shall be handled and disposed of at a location above the 25-year flood level or protected from a 25-year flood.
- (2) Such refuse shall be handled and disposed of in a manner which will prevent acid mine drainage.
- (c) Where acid-producing materials are encountered in the overburden in stripping operations, these materials shall be handled so as to prevent the production of acid mine drainage.
- (d) Discharge of acid mine drainage to streams shall be regulated insofar as practicable to equalize the flow of daily accumulations throughout a 24-hour period.
- (e) Upon discontinuance of operations of any mine, all practicable mine-closing measures, consistent with safety requirements, shall be employed to minimize the formation and discharge of acid mine drainage.

(f) Under appropriate circumstances, consideration shall be given to the treatment of acid mine drainage by chemical or other means in order to mitigate its pollution properties.

Section 11. Industrial Discharges to Publicly Owned Treatment Works

11.01 Discharge of industrial process wastewater or other substances to a publicly owned sewerage system operating under authority of an existing valid Water Pollution Control Permit is prohibited unless prior approval is obtained from the Chief in accordance with sub-sections 11.03, 11.04 and 11.05.

11.02 A permittee is responsible for contacting the Chief, Division of Water Resources, regarding the proposed discharge and shall provide such information and data as deemed necessary by the Chief to evaluate said discharge with regard to its impact on the permittee's capacity to meet State requirements on treatment, water quality standards, and reliable operation and maintenance of the treatment works.

11.03 Publicly owned wastewater treatment works contemplating acceptance of an industrial discharge considered by the Chief to be a significant increase or input on the existing or planned publicly owned treatment works will be required to file an application for a new permit.

11.04 Industrial discharges considered by the Chief to be of minor significance to the municipal treatment system may be approved by issuance of an addendum to the existing Water Pollution Control Permit.

11.05 Industrial discharges considered by the Chief to have no significant impact on the existing or planned publicly owned wastewater treatment works may be approved by letter.

11.06 The Chief may prescribe forms necessary to administer this Section.