DEPARTMENT OF THE ARMY
U.S. ARMY ABERDEEN PROVING GROUND
Aberdeen Proving Ground, Maryland 21005-5001

APG Regulation
No. 200-41

03 January 2000

Environmental Quality
WATER QUALITY MANAGEMENT

1. PURPOSE. This regulation assigns responsibilities and establishes policies and procedures for the control of non-domestic discharges to the surface waters, and the Aberdeen and Edgewood Area wastewater treatment plants through waste minimization practices and pretreatment standards.

2. SCOPE. This regulation applies to all Commanders, Directors, and heads of all U.S. Army Garrison, Aberdeen Proving Ground (USAGAPG), tenant and user activities that have the ability to discharge non-domestic wastewater to surface waters, and/or the Aberdeen Area or Edgewood Area Sanitary Sewer Systems.

3. EXPLANATTION OF ABBREVIATIONS AND TERMS. Abbreviations and special terms used in this regulation are explained in the glossary.

4. RESPONSIBILITIES.

a. Commanders, Directors, and all Heads of Activities will ensure compliance with this regulation.

b. Chief, Environmental Compliance Division (ECD), Directorate of Safety, Health and Environment (DSHE), USAGAPG will:

* This regulation supersedes APG Regulation 200-41, 20 May 1996.

(1) Develop water quality-based local discharge limits for Aberdeen and Edgewood Areas of Aberdeen Proving Ground (APG).

(2) Determine which activities are categorical as defined by part 403 through 473, title 40, Code of Federal Regulations (40 CFR 403 through 473), available for review at the ECD, building 4304. Such determinations will also take place at the time of a change in the regulations or when new activities commence.

(3) Ensure that non-domestic and/or categorical users comply with the pretreatment standards and regulations here within and as defined by the Standard Operating Procedures for the Investigation and Enforcement of Non-Domestic Non-Complaince Discharges at U.S. Army Garrison, Aberdeen Proving Ground, which are available for review at DSHE, building 4304.

(4) Provide assistance and guidance to users in determining whether or not a facility is considered to be a non-domestic user as defined by the Standard Operating Procedures for the Evaluation and Review of New Non-Domestic Discharges at U.S. Army Garrison Aberdeen Proving Ground, which are available for review at DSHE, building 4304.

(5) Ensure compliance with U.S. Army Garrison, Aberdeen Proving Ground's National Pollutant Discharge Elimination System (NPDES) permits.

(6) Prepare water quality regulations as deemed required.

(7) Reserve the right to:

(a) Inspect facilities annually to determine compliance with this regulation.

(b) Conduct random periodic sampling of facilities to determine compliance with 40 CFR 403 through 473, or local limits as defined in this regulation and further outlined in the Standard Operating Procedures for Periodic Sampling and Inspection of Non-Domestic Discharges at U.S. Army Garrison Aberdeen Proving Ground, available for review at the ECD building 4304.

c. Each Non-domestic User/Activity will:

(1) Have the right to self-certify at the Commander/Director level in lieu of sampling all parameters or

specified parameters if the non-domestic user/activity is a non-categorical industrial user. Categorical industrial users cannot self-certify in lieu of sampling unless it is explicitly stated in the categorical regulation for that category of industry.

(a) Self-Certification for all parameters. Such a certification will be signed and dated by the Commander/ Director of the tenant activity and will state "Based on my inquiry of the person or persons directly responsible for managing compliance with U.S. Army Garrison, Aberdeen Proving Ground Regulation, APGR 200-41. I certify that personnel at Facility/Building # _____ located at the Aberdeen Proving Ground, have not at any time discharged non-domestic wastewater as defined by APGR 200-41. I also understand that a failure to comply with the above certification is a violation of APG's NPDES permit (Section III.B.10.d) and upon conviction can be punished by a fine of not more than $10,000 or by imprisonment for not more than six months or by both.

(b) Self-Certification for specified parameters. Such a certification will be signed and dated by the Commander/Director of the tenant activity and will state "Based on my inquiry of the person or persons directly responsible for managing compliance with U.S Army Garrison, Aberdeen Proving Ground Regulation (APGR) 200-41. I certify that personnel at Facility/building # _____ located at the Aberdeen Proving Ground, have not discharged non-domestic wastewater as defined by APGR 200-41 that has the potential to contain any of the following pollutant parameters above their respective limitations:_____

I also understand that a failure to comply with the above certification is a violation of APG's NPDES permit (Section III.B.10.d) and upon conviction can be punished by a fine of not more than $10,000 or by imprisonment for not more than six months or by both.

(2) Conduct sampling and analysis at a sampling point(s) approved by DSHE, which is necessary to demonstrate compliance with this regulation.

(3) Maintain any treatment system components such as pumps, mixers, and sensors employed to meet the requirements of this regulation.

(4) Acquire the adequate treatment and monitoring systems to meet the requirements of this regulation when and if needed.

(5) Provide all notification requirements as required by this regulation.

(6) Ensure that pretreatment operators receive necessary certifications, if the facility meets the definition of a significant user, as required in COMAR 26.06.01.05 "Certification" (available for review at the ECD, building. 4304).

(7) Responsible for the financial obligations associated with demonstrating compliance with this regulation.

(8) Responsible to meet all requirements defined within U. S. Army Garrison Aberdeen Proving Ground Standard Operating Procedures for the Investigating and Enforcement of Non-Domestic Non-Compliance Discharges, the Evaluation and Review of New Non-Domestic Discharges, and the Periodic Sampling and Inspection of Non-Domestic Discharge.

5. PROCEDURES.

a. Policy. The Federal Water Pollution Control Act, enacted in 1972, and subsequent amendments, requires discharges to the Nation's Waterways be of a nature and quality which will maintain the chemical, physical and biological integrity of said waters. In order to achieve the goals of the Act, operators of wastewater treatment plants are required to identify and control the discharges from industrial users of the wastewater treatment facility and conveyance system. Wastewater treatment plants are subject to interference, upset and pass-through from discharges originating from industrial sources. One of the goals of the Act is to prevent such detrimental occurrences through the use of a pretreatment program. All industrial users at both the Aberdeen and Edgewood Areas of the Aberdeen Proving Ground, will control, modify or pretreat their waste streams to a degree which will ensure compliance with this regulation and protect the wastewater treatment plants. A second goal of the Act is to prevent the discharge of liquid waste or wastewater that will have a negative effect on the water quality of the Nation's waterways.

b. Prohibited Discharges of Liquid Waste or Wastewater.

(1) Prohibited discharge. No person will discharge or intentionally allow the discharge, escape or introduction of any liquid waste or wastewater onto any property or waterway within or originating from Aberdeen Proving Ground, unless such discharge is permitted under the Act as defined herein, any state law or regulations, Army regulations, or APG regulations.

(2) Non-intentional allowed discharge or escape. An accidentally allowed discharge, escape or introduction of liquid waste or wastewater will be any discharge, escape or introduction:

(a) That occurs because of circumstances, which reasonably could not have been foreseen by a person or facility exercising reasonable care;

(b) That is not a reoccurring discharge or escape of liquid waste or wastewater by the same person or facility within a 180-day period;

(c) That is not the result of a failure to take action as recommended by the DSHE or other regulating authority with regard to proper storage, containment, transport or deposit of the type of liquid waste or wastewater in question; and

(d) That was reported immediately upon discovery.

(3) Intentionally allowed discharge or escape. Any discharge, escape or introduction of liquid waste or wastewater which was not reported immediately upon discovery and;

(a) Occurred because liquid waste or wastewater was not stored, contained, transported or deposited in compliance with federal, state, Army or APG regulations; or

(b) That is similar to a discharge or escape of liquid waste or wastewater involving the same person or facility, and similar circumstances as any discharge or escape which occurred during the previous 180-day period; or

(c) That results because a person or facility failed to take any action required or recommended by a federal, state, Army or APG authority with regard to storage, containment, transport or deposit of any liquid waste; or

(d) Was not a non-intentionally allowed discharge or escape.

(4) Prohibited discharges to a Federally Owned Treatment Works (FOTW) The following prohibitions apply to all users of the sanitary sewer regardless of and in addition to any specific pretreatment standards.

(a) No person will discharge or allow to be discharged to the(FOTW) any inflow, which includes but is not limited to, storm water, foundation drain water (sumps), and roof runoff.

(b) No person will connect or permit or allow a connection, which would result in infiltration or inflow into a FOTW, or it's subsystem(s).

(c) The following pollutants will not be introduced into the sanitary sewer system:

1. Pollutants which create a fire or explosion hazard in the treatment plant or its conveyance system. In no case will a waste stream have a flashpoint of less than 60 °C (140 °F) using test methods specified in section 21, part 261, title 40, Code of Federal Regulations (40 CFR 261.21), which is available for review at the ECD, building. 4304. These pollutants include but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, pyrogenic and explosive materials.

2. Pollutants which will cause corrosive structural damage to the Wastewater Treatment Plant (WWTP) and/or the collection system(s). Discharges can not have a pH concentration less than 5.0 SUs under any circumstance, or a pH greater than 11.0 SUs unless the user monitors for pH continuously, in which case a pH violation will be construed as any excursion greater than 11.0 SUs for more than 15 minutes at any one time, or more than 30 minutes in aggregate, for any calendar day. Boiler blow-downs must comply with these limits at all times.

3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the FOTW or its conveyance system resulting in interference, including but not limited to, ashes, cinders, mud, straw, shavings, metal, glass, rags, shop towels, feathers, tar, plastics, wood, or manure.

4. Any spill, batch discharge, or slug load, including oxygen/chemical demanding pollutants (BOD_5, COD), released in a discharge and at a flow rate and/or pollutant concentration which will cause one or more of the following: interference; contamination of the sludge at the FOTW; pass-through a FOTW, inadequately treated, into any receiving waters, or otherwise adversely effecting the receiving stream of a FOTW; pose a health threat to any workers on the FOTW or constitute a hazard to humans or animals; or be otherwise incompatible with a FOTW.

5. Heat in the discharge to the sanitary sewer that exceeds 60 °C (140 °F) or in amounts which will endanger worker safety or inhibit biological activity in the treatment plant resulting in interference. In no case heat, in such quantities that the temperature at the WWTP exceeds 40 °C (104 °F) unless the Environmental Compliance Division, in conjunction with the Maryland Department of the Environment, approves alternate temperature limits.

6. Any pollutant or wastewater which contains a toxic or poisonous substance in sufficient quantity, either singly or by interaction with other pollutants, to cause one or more of the following: interference; contaminate the sludge at a FOTW; pass-through a FOTW; pose a health threat to any workers on the FOTW or constitute a hazard to humans or animals; contaminate the sludge as to restrict the disposal option(s) selected by the FOTW; or be otherwise incompatible with the FOTW.

7. Any pollutants or wastewater which are highly reactive and/or result in the presence of toxic gases, vapors or fumes within the FOTW in a quantity that may cause acute worker health and safety problems.

8. Any chemical surety materials as defined in the glossary.

9. Any pollutant which is considered a hazardous waste (as defined in section 3, part 261, title 40, Code of Federal Regulations (40 CFR 261.3) in accordance with the Federal Facilities Compliance Act Section 3023 "Federally Owned Treatment Works" Paragraph (b) "Prohibition."

10. Any pollutant or wastewater containing radionuclide concentrations greater than natural background levels unless approved by the Directorate of Safety, Health and Environment, see paragraph 5g(8).

11. Any substance, which may cause a violation of the Garrison's NPDES Permit(s) or render as hazardous, the sludge produced by the wastewater treatment plant(s).

12. Fixer solutions from photoprocessing or similar operations, unless disposed of through a silver recovery unit. The total combined effluent from the facility housing the recovery unit, will not have a silver concentration greater than 0.10 mg/L for the Aberdeen Area or Edgewood Area at the point the

effluent enters the sanitary sewer and before dilution by other sources.

13. Uncontrolled petroleum-based products, non-biodegradable cutting oil, or products of mineral oil origin, except the incidental amounts which are generated during washing operations of equipment and facilities. The facility's total petroleum hydrocarbon concentration will not exceed 100.0 mg/L.

14. Any trucked or hauled pollutants, except as permitted by ECD at the designated discharge points.

c. Standards for Discharging to FOTWs.

(1) Any operation determined to be a categorical industrial operation (40 CFR 403 through 473), available for review at ECD, building 4304 and amendments thereto, are required to meet the pretreatment requirements for that particular categorical industry.

(2) New federal categorical pretreatment standards. Upon the promulgation of a federal categorical pretreatment standard for a particular industrial category, if the new standard is more stringent than limitations imposed under paragraphs 5c(3)(a) or 5c(4)(a), the new standards will immediately and automatically supersede the limitations imposed below for the applicable industrial user, and the industrial user will provide whatever pretreatment systems or facilities are necessary to meet the new standards within the time limits prescribed by the Act as defined herein.

(3) All laboratories, non-categorical users, and categorical users for which no pretreatment standard exists, that are located in the Aberdeen Area, are required to meet the following water quality-based local discharge standards:

(a)

Parameter	Daily Maximum Limit
BOD_5	908.0 mg/L
Cadmium, Total (T)	0.10 mg/L
Chouromium (T)	0.70 mg/L
Copper (T)	0.80 mg/L
Cyanide (T)	1.30 mg/L
Lead (T)	0.30 mg/L
Mercury (T)	0.002 mg/L
NH_3 - Ammonia	40.00 mg/L
Nickel (T)	1.40 mg/L

Phosphorus	31.3 mg/L
Silver (T)	0.10 mg/L
Total Toxic Organics (TTO)	2.13 mg/L
Total Petroleum Hydrocarbons (TPH)	100.0 mg/L
Total Suspended Solids (TSS)	1320.0 mg/L
Zinc (T)	5.50 mg/L
pH	5.0-11.0 Std Units

(b) In the event that an industrial user monitors their pH continuously, a pH violation will be construed as any excursion greater than 11.0 SUs for more than 15 minutes at any one time, or more than 30 minutes in aggregate, for any calendar day. The pH will not be less than 5.0 SUs at any time. (See paragraph 5g(1)(a) and (b).)

(4) All laboratories, non-categorical users, and categorical users for which no pretreatment standard exists, that are located within the Edgewood Area, are required to meet the following water quality-based local discharge standards:

(a)

Parameter	Daily Maximum Limit
BOD_5	566.0 mg/L
Cadmium, Total (T)	0.10 mg/L
Chouromium (T)	0.50 mg/L
Copper (T)	0.30 mg/L
Cyanide (T)	3.60 mg/L
Lead (T)	0.10 mg/L
Mercury (T)	0.002 mg/L
NH_3 - Ammonia	40.0 mg/L
Nickel (T)	0.20 mg/L
Phosphorus	45.0 mg/L
Silver (T)	0.10 mg/L
Total Toxic Organics (TTO)	2.13 mg/L
Total Petroleum Hydrocarbons (TPH)	100.0 mg/L
Total Suspended Solids (TSS)	595.0 mg/L
Zinc (T)	1.00 mg/L
pH	5.0-11.0 Std Units

(b) In the event that an industrial user monitors their pH continuously, a pH violation will be construed as any excursion greater than 11.0 SUs for more than 15 minutes at any

one time, or more than 30 minutes in aggregate, for any calendar day. The pH will not be less than 5.0 SUs at any time. (See paragraphs 5g(1)(a) and (b).)

(5) Laboratories discharging to a FOTW.

(a) Laboratory solutions are prohibited from disposal to the sanitary sewer if they meet any of the following conditions or characteristics:

1. Solutions (which in this case refer to wastes directly generated from a laboratory operation(s) and which are containerized or somehow segregated from the laboratory's normal wastewater effluent) demonstrating hazardous characteristics as defined by (40 CFR 261), are listed hazardous wastes, and/or are contaminated by listed hazardous wastes.

2. Decontaminated surety liquid and 3X decontaminating solutions.

(b) Non-hazardous laboratory waste solutions and other non-domestic wastewaters will be evaluated on a case-by-case basis by the Environmental Compliance Division. This evaluation will consider the potential for impacting sewage treatment operations, toxicity, biodegradability, and potential for impact on the receiving water. An exception to this case is in the use of automated analytical equipment which discharge small volumes of organic-contaminated liquids. Unless there is a process change, these solutions require analysis and approval on an initial basis and must renew discharge guidance approval on an annual basis. An EAP Form 1223-R, Request for Sewer Discharge Guidance, will be used when requesting the discharge of organic laboratory solutions or other organic-containing wastewaters (a copy for reproduction purposes is located at the back of this regulation). Guidance will not be given without the submittal of this completed form. Analytical data must accompany the form; including a Total Toxic Organic (TTO) analysis for solutions containing organics using EPA Methods 608, 624 and 625 located in section 3, part 136, title 40, Code of Federal Regulations (40 CFR 136.3) Table IC, pH, and other data necessary to characterize the solution.

1. Inorganic solutions, which are considered nonhazardous, must meet the water quality-based local discharge limits and are limited to a maximum daily volume of 4 liters per laboratory per day.

2. All solutions which are discharged in accordance with the conditions outlined herein, will be recorded in a continuous log for bi-annual submittal to the Environmental Compliance Division as required in APG's NPDES Permit Numbers 97-DP-2531 and 97-DP-2532. The EAP Form 1224-R, Laboratory Discharge Log, indicates the required reporting information (a copy for reproduction purposes is located at the back of the regulation). The continuous log will be signed and submitted regardless of whether or not a discharge occurred during the period. For periods exceeding two weeks in which no discharge occurs, an entry will be recorded into the discharge log, which states "no discharge," and the dates in which discharge did not occur. The discharge logs must be submitted on a semi-annual basis by fiscal year, and are due on the last day of the month following the end of the 6-month period. (i.e., 30 July and 31 January). At the time an effective sampling program is developed by a tenant, the requirement for maintaining and submitting laboratory discharge logs may be halted for that particular tenant, following concurrence by ECD. Concurrence by ECD to halt maintenance of discharge logs will be tenant-wide only, and will not be given to individual buildings or laboratories. Laboratory solutions, which cannot be discharged in accordance with these standards, must be disposed of through the Hazardous Waste Tracking System (HWTS). For assistance, contact the Hazardous Waste Branch, ECD, DSHE, USAGAPG.

3. Any non-hazardous solutions exceeding 4 liters in volume are no longer considered laboratory wastes. These liquids must comply with the APG water quality-based discharge standards (in subparagraphs (3) and (4) above) in order to be discharged to the sanitary sewer unless prior approval for discharge has been granted by ECD.

(6) Photoprocessors discharging to a FOTW.

(a) Photoprocessing and similar operations are considered non-categorical users and must adhere to the water quality-based local limits for the Aberdeen or Edgewood Areas.

(b) As previously stated in subparagraph b(4)(c) 12 above, fixer solutions from photoprocessing or similar operations, must be disposed of through a silver recovery unit in order to be discharged to the sanitary sewer. The total combined effluent from the facility housing the recovery unit, will not have a silver concentration greater than 0.10 mg/L for the Aberdeen Area and the Edgewood Area at the point the effluent enters the sanitary sewer and before dilution by other sources.

(c) An inventory of photoprocessing equipment and treatment process equipment is required to be submitted to the ECD by 30 September of each year.

(d) Any changes made to the photoprocessing equipment or treatment systems must be reported by 30 September of each year as part of this inventory.

(7) Boiler blow-down discharges. Boiler blow-downs discharged to a FOTW must be within the pH limits of 5.0 and 11.0 Standard Units at their control sampling point(s) in the Edgewood and Aberdeen areas at all times.

(8) Medical waste discharges.

(a) Predisposal Treatment. All "contaminated materials" (i.e. BSL-2/RG-2 and higher) will be sterilized in the lab area where produced prior to disposal. As a good management practice, other wastes contaminated with BSL-1 and RG-1 materials should also be decontaminated at or near the point of generation. Generators that treat special medical waste (SMW) on site must comply with the following:

1. Blood and blood-soiled articles. Small volumes (i.e., 1-2 liters) of blood in liquid form may be treated/disposed of through the sanitary sewer with the prior approval of the DSHE, Environmental Engineering Branch (410-306-2271), or collected in liquid tight containers for off site autoclaving, chemical or microwave sterilization.

2. Sharps. Autoclaving, chemical and microwave (metallic items not included) sterilization.

3. Contaminated Materials. Autoclaving, chemical or microwave sterilization.

(b) Disposal. Except for blood disposed of via the sanitary sewer, all SMW (treated or untreated) and similarly handled items will be disposed of via appropriately permitted medical waste disposal facilities, either on or off post. (NOTE: the U.S. Army Medical Research Institute of Chemical Defense (MRICD) incinerator located on post at building E3081 in the Edgewood Area of APG is a permitted SMW incinerator constructed to principally handle animal carcasses and bedding. When operating, the facility sometimes also accepts modest quantities (approximately 5-10 percent by weight of its annual incinerator load) of microbiological lab wastes, necropsy wastes, blood-

soaked articles, sharps, non-hazardous expired pharmaceuticals and other infectious or potentially infectious items. The MRICD reserves the right to not accept waste streams containing significant quantities of metal, plastic, glass and other materials identified as high slag generators, or as having extremely high or low BTU (British Thermal Unit) content.)

(9) Any other specified discharge standard(s) deemed necessary by the ECD to protect the FOTW, the environment, and/or human health.

d. Compliance Demonstration.

(1) Each non-domestic user is required to demonstrate compliance with the discharge standards through self-monitoring of their wastewater discharges unless the self-certification statement located in paragraph 4c(1)(a) or (b) has been signed and submitted by the Commander/Director in lieu of monitoring for each building and self-monitoring period. Self-certification does apply to those facilities maintaining compliance through pretreatment prior to discharge to the sanitary sewer system i.e. pH neutralization, oil/water separator, etc. Periodic compliance sampling is to be performed on a per building basis and should not be construed as per laboratory or per sink. Quarterly, semi-annual and annual sampling periods will be based on the fiscal year consisting of the period from 01 October through 30 September. Sampling will be performed on a frequency dependent on the facility size and ability to impact the receiving wastewater treatment plant. Sampling events will initially be scheduled on a quarterly, semi-annual and annual basis. Sampling frequency will decrease as described below where consistent compliance can be demonstrated.

(a) Significant Industrial Users (SIUs). Quarterly sampling will be conducted at those facilities considered SIUs. SIUs found to be in compliance with 4 consecutive quarters of sampling may request from the Directorate of Safety, Health, and Environment (DSHE) that the sampling frequency be reduced to semi-annually.

(b) Large Non-categorical/non-SIU industrial users. Semi-annual sampling will be performed at non-categorical/non-SIU facilities with industrial wastewater discharges between 5,000 gallons per day and 24,999 gallons per day. Users found to be in compliance with 2 consecutive semi-annual sampling events may request from the Directorate of Safety, Health, and Environment

(DSHE) that the sampling frequency be reduced to once every two years.

(c) Small industrial users. Small industrial operations, those with discharges of less than 10,000 gallons per day, will be sampled on an annual basis. The monitoring schedule for small industrial operations may request from the Directorate of Safety, Health, and Environment (DSHE) that the sampling frequency be reduced to once every two years, after two years of data has shown consistent compliance with all parameters.

(2) The frequency of sampling for a parameter may be increased by ECD for any of the following reasons:

(a) User has a documented history of noncompliance.

(b) User submits two consecutive self-monitoring reports in which the same parameter in the discharge has a concentration above its local limit for either the Aberdeen or Edgewood Area.

(3) Compliance demonstration will be achieved by a minimum of 3 consecutive days of composite sampling per applicable sampling period. Sampling and analysis will follow the "Guidelines Establishing Test Procedures for the Analysis of Pollutants," (40 CFR 136), available for review at the ECD, building. 4304. Flow proportional composite sampling will be performed for all pollutants with the exception of pH, total petroleum hydrocarbons, cyanide and volatile organics. If flow proportional composite sampling is not possible or is improbable, time proportional composite sampling may be performed. The following is a schedule of required parameters and the frequencies at which they must be analyzed.

(a) Monitoring frequencies and sample type for each parameter:

Parameter	Sample Type	Frequency
BOD_5	24-hour Composite	1/day for 3 days
Cadmium	24-hour Composite	1/day for 3 days
Chromium	24-hour Composite	1/day for 3 days
Copper	24-hour Composite	1/day for 3 days
Cyanide	Grab	1/3-day period
Lead	24-hour Composite	1/day for 3 days
Mercury	24-hour Composite	1/day for 3 days
NH_3 - Ammonia	24-hour Composite	1/day for 3 days
Nickel	24-hour Composite	1/day for 3 days

Pesticides/PCBs (Method 608)	24-hour Composite	1/3-day period
Phosphorus	24-hour Composite	1/day for 3 days
Semi-volatile Organic Compounds (Method 625)	24-hour Composite	1/3-day period
Silver	24 hour Composite	1/day for 3 days
TPH	Grab	1/3-day period
TSS	24-hour Composite	1/day for 3 days
Volatile Organic Compounds (Method 624)	Grab	1/3-day period
Zinc	24-hour Composite	1/day for 3 days
pH	Grab	1/day for 3 days

(b) A sum of the concentrations above 0.01 mg/l of the semi-volatile organic compounds, the volatile organic compounds, and pesticides/PCBs equates to the regulated pollutant limit defined as the Total Toxic Organics (TTO). Concentrations below 0.01 mg/l are not included in the sum. All three of these samples must be collected on the same day during the 3-day monitoring period.

(4) Non-domestic users must submit their self-monitoring report to DSHE for approval.

(5) Exemption/Self-Certification.

(a) Existing non-categorical, non-domestic users will have the right to self-certify as stated in paragraph 4c(1)(a) and (b) for all parameters or individual parameters of a sampling period for which the user has:

1. Determined that no non-domestic discharge had occurred at the facility during the sampling period; or

2. Determined that no potential existed for exceeding the limits of specified pollutant parameters during the sampling period. See the Glossary, "non-domestic user" for an explanation of what is considered as a potential to contain pollutants.

(6) As previously stated in paragraph 4c(7), all users/activities will be responsible for the financial obligations associated with demonstrating compliance with this regulation.

(7) Users who question whether or not their discharge effluent is classified as non-domestic, may contact the ECD for clarification.

(8) Users maintaining compliance through the use of pH neutralization pretreatment systems, with a continuous pH recording meter as is required in paragraph 5g(1)(a) below, must also furnish the complete pH recording charts to EEB. These charts for the compliance period, should be submitted at the same time and frequency as self-monitoring reports.

(9) Right of Entry.

(a) Chief, ECD or his representative will have the right of entry upon or through any premises discharging non-domestic wastewater for the purpose of ensuring compliance with this regulation or to gather information pertinent to the requirements of this regulation including document copying. All right of entry and document copying will be in compliance with Aberdeen Proving Ground Regulation 380-5, Information Security Program, regarding protection of national security.

(b) All safety equipment necessary to the specific user operations and which would be required during any compliance determination, will be supplied by the user with the exception of personal safety shoes.

e. Toxic Organic/Surety Management Plan.

(1) Each categorical industrial user or facility, which the DSHE deems necessary, will develop and submit to the ECD a Toxic Organic/Surety Management Plan.

(2) Toxic Organic/Surety Management Plans must be submitted to ECD prior to 31 December and must contain the following information in order to meet ECD approval:

(a) A complete inventory of all toxic organic chemicals and/or surety materials in use or identified in the wastewater from regulated process operations.

(b) Descriptions of methods of disposal for each inventoried compound.

(c) Procedures for ensuring that the regulated toxic organic or surety materials do not spill or routinely leak into the sanitary sewer or environment.

(3) The toxic organics to be identified are those of the Priority Pollutants listed in Appendix A and surety materials are those defined in the glossary. Material Data Safety Sheets of each suspected solvent/material can be used to determine only those in which toxic organics or surety materials exist.

(4) The toxic organic/surety management plans are due to ECD by 31 December If a plan is not approved by ECD, it must be resubmitted within 90 days of receiving feedback on deficiencies.

(5) The toxic organic/surety management plan will be updated within 90 days of becoming aware of a process or inventory change that could potentially effect the estimated identities and quantities of toxic organic pollutants or surety materials discharged to the sanitary sewer from the regulated process.

f. Septage. All septic waste haulers will be considered industrial users for the purpose of this regulation. Tenants/organizations discharging non-domestic wastes into septic tanks and septic holding tanks are required to meet the standards set forth in this regulation with the exception of BOD_5 and TSS limits. Transported wastes will only be discharged at the approved septage discharge points, coordinated through the Waterworks Division, Directorate of Public Works, USAGAPG.

g. Standard Conditions.

(1) Pretreatment Systems. If pretreatment is necessary to meet the requirements of this regulation, such treatment systems will be operated and maintained in a manner which assures pollutant removal is in accordance with the designed operating parameters of the system. System maintenance should be scheduled during non-operational hours. If maintenance is required during operating times, wastewater discharges will cease or be reduced in an attempt to mitigate any adverse impacts on the wastewater treatment plant or conveyance system resulting from the discharge of untreated waters. Mitigation attempts may include reducing or terminating flows and operations, temporary wastewater holding facilities, or an identical backup pretreatment system. If maintenance requires greater than 4 hours during which time the discharge is not in compliance with the quality restrictions of this regulation, then discharges will cease until maintenance is complete.

(a) Facilities using neutralization systems as part of their pretreatment system, must have a continuous pH-recording

meter to ensure that the wastewater is complying with the pH range as listed in subparagraphs c(3)(a)&(b) and c(4)(a)&(b) above.

(b) The preventive maintenance logs must be posted adjacent to the meter and submitted to ECD at the same time and frequency as self-monitoring reports.

(c) Required preventive maintenance on the pH meter, which includes calibrating the meter and washing the electrode probe on a monthly basis, must be recorded on logs. These logs must be submitted with the charts to ECD on a quarterly basis.

(2) New Users. New users of the sanitary sewer system that require discharge of wastewater that has the characteristics of being non-domestic, or users with a significant addition to their discharge, must first submit the EAP Form 1232, New User Discharge Authorization (a copy for reproduction purposes is located at the back of this regulation). The form must be submitted to ECD 180 days prior to the scheduled commencement of discharge. Authorization will not be considered without the submittal of the completed form. The new user is not authorized to discharge until such time that approval has been granted by the ECD. The following steps must be taken in order to be eligible for approval of discharge to the sanitary sewer:

(a) Complete the New User Discharge Authorization Form and submit it to the ECD 180 days before scheduled discharge. If the average concentration of pollutants in the discharge is unknown, a pilot-scale test may be conducted in which the wastewater is containerized instead of discharged to the sanitary sewer so that analytical data of the pollutant concentrations can be obtained.

(b) Once the ECD has completed a review of the New User Discharge Authorization form and all applicable questions and concerns have been answered and satisfied, the ECD will schedule a matrix inspection of the facility to ensure that there are no potentials for non-intentional discharges of concentrated pollutants to the sanitary sewer.

(c) Facilities scheduled for a matrix inspection should review the floor drain policy listed in paragraph 5g(9) and complete a self-audit to ensure that the potential for a non-intentional discharge of concentrated pollutants to the sanitary sewer does not exist.

(d) Any findings or concerns identified during the matrix inspection or self-audit must be addressed prior to gaining approval for discharge by the ECD. Once approval is granted, the new user may discharge as specified herein.

(3) Bypass of Pretreatment Facilities. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternative exists. Bypasses, which do not exceed the discharge limits established by this regulation, are permitted only if the bypass is necessary to perform maintenance on the system. All planned bypass events will be reported to the ECD and the receiving wastewater treatment plant in writing at least 5 working days prior to the bypass. If an unanticipated bypass occurs, the ECD and wastewater treatment plant superintendent will immediately be verbally notified followed by written notification to both within 24 hours. The superintendent for the Aberdeen and Edgewood Area wastewater treatment plants can be notified at 410-278-2335 and 410-436-3702, respectively. Notification of bypass will include reasons for bypass, steps taken to mitigate, bypass duration, and if the condition creating the bypass has been corrected.

(4) Dilution to Meet Standards. Increase of process water beyond what is normally required and for the sole purpose of meeting the discharge limits established by this regulation, is strictly prohibited and illegal.

(5) Removed Substances. Solids, sludge, filter backwash and any other materials removed from the waste stream will be disposed of in accordance with Section 405 of the Act and Subtitles C and D of RCRA. Hazardous sludge disposal will be coordinated through the Hazardous Waste Management Branch, ECD.

(6) Hazardous Waste.

(a) All users will notify the ECD in writing of any discharge into the sewer which, if otherwise disposed of, would be a hazardous waste under part 261, title 40, Code of Federal Regulations (40 CFR 261) and/or COMAR 26.13, available for review at ECD, building 4304. Exclusions from the definition of a hazardous waste are given under section 3(a)(2)(IV), part 261, title 40, Code of Federal Regulations (40 CFR 261.3(a)(2)(IV)). The notification will contain:

1. Name of hazardous waste.

2. The EPA hazardous waste number.

3. Type and volume of discharge (batch, continuous, etc.).

4. Identification of hazardous constituents.

5. Estimation of mass and concentration of constituents.

6. Estimation of future discharges for the next 12-month period.

(b) Notification is only required one time unless the waste characteristics or volumes change as in paragraph 5g(7).

(c) Notification is not required if the monthly discharge is below 15 kilograms of hazardous waste unless the discharged waste is an acute waste section 33, part 261, title 40, Code of Federal Regulations (40 CFR 261.33 and/or COMAR 26.13.02.19.E) for which any volume must be reported. Code of Federal Regulations is available for review at the ECD, building. 4304.

(7) Notification of Changed Discharge. All users will promptly notify the ECD in advance of any substantial change in the volume or characteristic of pollutants in their discharge, including the listed or characteristic hazardous wastes for which each user has submitted notification of discharge under subparagraph (5) above.

(8) Discharge of Radionuclide Materials. All users desiring to discharge material with radionuclide concentrations greater than natural background levels must request approval in writing from DSHE, ECD, Health Physics Office, prior to any discharge. Background levels for APG are 2.1 pCi/L for Gross Alpha, and 2.4 pCi/L for Gross Beta. (Background levels are referenced from report number EA12IWPDP30 entitled "Reference Sampling and Analysis Program at the U.S. Army Aberdeen Proving Ground Groundwater Reference Data Report" completed in November of 1995 by ICF Kaiser Engineers.) Request must include the following:

(a) Radionuclide name and concentration.

(b) Quantity of the material.

(c) Description of the material (i.e., scintillation fluid).

(d) Type of discharge (batch, continuous, etc.).

(e) Location of desired discharge.

(9) Floor Drain Policy.

(a) For new facilities:

1. Floor drains must only be installed when the need for the floor drains can be demonstrated by providing justification to ECD during the design/review process.

2. In facilities where operations use or generate oil, lubricants, greases, and/or hydraulic fluids, floor drains will be connected to an appropriate sized oil/water separator prior to discharging to the sanitary sewer.

3. Floor drains will not be installed in or in the proximity of bulk material storage areas.

(b) In existing facilities:

1. Floor drains may be utilized if it can be shown that there is a legitimate need. All essential floor drains will be hard-piped to the sanitary sewer.

2. All non-essential floor drains and floor drains that exist in close proximity to bulk material storage areas, near process tanks, wet industrial operations, and painting operations must be permanently plugged to prevent unwarranted discharge to the sanitary sewer system unless a legitimate need can be demonstrated.

(c) The final determination will be made by DSHE of whether or not there is a legitimate need for floor drains in an existing or new facility.

(d) In all areas in which floor drains are operational, appropriate spill absorbent or containment material must be kept near each drain so that spills can be prevented from entering the drains.

(e) Emergency showers and eyewashes do not require the installation or use of a floor drain. These are used only in an emergency and the water from their use can be mopped up.

Eyewashes may be hard-piped to the sanitary sewer or bermed where applicable.

(f) Floor cleaning in areas where floor drains exist:

1. Floors must be dry swept in lieu of washing, except in areas where washing is required for sanitary purposes (i.e. bathrooms, lunchrooms, kitchens, etc.).

2. If floor washing is a necessity, traps must be installed in floor drains to collect particulate matter and other debris in the discharge.

3. Oil/water separators must be installed where the use or generation of oils and greases is occurring.

4. Traps and separators will be the responsibility of the building occupant to clean and maintain on a regular schedule.

(10) Public Car Wash Policy.

(a) Prior to commencement, the Garrison must approve the car wash as a charity event.

(b) The parking lot area at the Post Theater (building 3245) is the preferred location for the event. Use of this location does not require DSHE approval. However, use of any other location will require DSHE approval.

(c) Regardless of the site, discharges must meet the chlorine discharge policy.

(d) Site runoff should be controlled by hay bales or equivalent as required to meet the chlorine discharge policy.

(e) Operators should take measures to minimize the volume of water used.

(f) Environmentally safe detergents must be used.

(11) Power Washing Policy. This policy is currently being developed for future incorporation into this regulation.

(12) Hydrostatic Testing Fluid Discharge Requirements and Best Management Practices.

(a) All users desiring to discharge wastewater used in the hydrostatic testing of new tanks, pipes or pipelines regardless of intended use, and used tanks, pipes, and pipelines used to store or convey petroleum products shall comply with the requirements and best management practices listed in subparagraphs 5g (12).

(b) The discharger will notify the Environmental Compliance Division at 410-306-2271 and obtain approval from the wastewater program manager before discharging any hydrostatic testing fluid or wastewater resulting from the cleaning of new or used tanks.

(c) All hydrostatic test water must be discharged to the sanitary sewer and must meet the requirements specified in paragraph 5g(11)(e). The sewer discharge requirements in paragraph 5g(11)(e) cannot be met, or if the location or volume of the hydrostatic testing fluid prevents discharge to the sanitary sewer, it may then be discharged to surface waters in accordance with the requirements in paragraph 5g(11)(g) and the best management practices in paragraph 5g(11)(h).

(d) Cleaning. All used vessels will be cleaned before they are filled with test water. Any wastewater resulting from cleaning may be discharged to the sanitary sewer provided that it meets the requirements in paragraph 5g(11)(e) of this regulation. Cleaning wastewater not meeting these requirements may be disposed of as an industrial or hazardous waste as appropriate.

(e) Water use. All water for testing must be fresh water obtained from a potable water supply system or other surface water source. When other surface water sources are used, the raw water intake shall be placed off the bottom and a screen will surround the intake to minimize the intake of solids. All users shall avoid collecting water when turbidity levels are significantly above normal.

(f) Requirements for Discharge to the Sanitary Sewer.

1. Users must obtain approval from the Environmental Compliance Division prior to discharging hydrostatic testing fluid or cleaning fluid to the sanitary sewer.

2. The volume of discharge will not exceed 25,000 gallons per day and 100,000 gallons total.

3. All wastewater must meet the local discharge limits for the pollutants reasonably expected to be present in the discharge. Local discharge limits are given in paragraph 5c(3) and 5c(4) of this regulation.

4. All Directorate of Public Works and tenant contractors must certify in writing that the requirements for hydrostatic testing outlined in this regulation have been met prior to discharging any fluid. The provisions and certification statements are included on EAP Form 1223-R (a copy for reproduction purposes is located at the back of this regulation). This form must be signed by the discharger and must be approved by Wastewater Program Manager in the Environmental Compliance Division prior to discharge.

(g) Requirements for Discharge to Surface Waters.

1. Users must obtain approval from Wastewater Program Manager in the Environmental Compliance Division prior to discharging hydrostatic testing fluid to surface water. Cleaning fluid will not be discharged to surface water. Any wastewater resulting from cleaning must be discharged to the sanitary sewer in accordance with the requirements in subparagraph (f) above.

2. All testing fluid must remain in the vessel until it has been determined that the wastewater complies with the limits presented in paragraphs 5g(11)(g)3 and 4., below. If the vessel must be put into service immediately, the fluid must then be stored in tanks or 55 gallon drums until compliance with the surface water discharge limitations has been determined. During the discharge the testing fluid must be sampled in accordance with paragraph 5g(11)(g)5.

3. Test water that is chlorinated or comes from a chlorinated supply must comply with a total residual chlorine limit of <0.1 mg/L. If the wastewater is chemically dechlorinated, the dissolved oxygen in the fluid must be greater than or equal to 5.0 mg/L, and the pH must be in the range of 6.5 to 8.5 SU.

4. The discharge shall not cause the temperature of the receiving waters to exceed 18 °C (90 °F) beyond a mixing zone of 50 feet radially from the point of discharge. When the receiving water already exceeds 18 °C, the temperature of the discharge shall not exceed the ambient temperature.

5. The discharger shall collect three evenly-spaced grab samples over the period of the discharge and individually analyze them for the parameters detailed in subparagraphs 3 and 4 above.

6. All Directorate of Public Works and tenant contractors must certify in writing that the requirements and applicable best management practices required for discharging hydrostatic testing fluids to surface waters outlined in this regulation have been met prior to discharging any fluid. The provisions and certification statements are included on EAP Form 1233-R (a copy for reproduction purposes is located at the back of this regulation). This form must be signed by the discharger and must be approved by the Wastewater Program Manager in the Environmental Compliance Division prior to discharge.

(h) Best Management Practices for Discharge to Surface Waters

1. Hydrostatic testing fluid shall not be discharged to a pond, lake, or any seasonal tributary.

2. Hydrostatic testing fluid shall be discharged at a point on-shore at least 50 feet from the shoreline to minimize the likelihood of contaminants reaching aquatic biota.

3. Where possible, hydrostatic testing fluid will be discharged to a grassed area or swale.

4. When releasing into storm drain(s), hydrostatic testing fluid shall be released into a drain at the farthest possible distance from the outfall to dissipate any residual chlorine in the wastewater.

5. Prior to discharging hydrostatic testing fluid from a vessel or pipeline, the discharger shall install a suitable energy dissipater at the outlet(s), and utilize appropriate erosion protection measures such as sandbags, rocks, and hay bales to ensure that there will be no erosion or scouring of the natural surface or channels within the affected area as a result of the discharge.

6. The rate of discharge shall be controlled to avoid erosion.

7. Flow control measures, as defined in the glossary of this regulation, shall be taken where required to ensure that the discharge does not impact any adjacent properties.

8. Any barriers, structures, or objects installed for erosion or flow control will be removed from the site after the discharge of hydrostatic testing fluid is completed.

APPENDIX A

PRIORITY POLLUTANTS

Volatiles

Acenaphthene
Acrolein
Acrylonitrile
Benzene
Benzidine
Bromoform
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
2-Chloroethyl vinyl ether
Chloroform
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorobromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-trans-Dichloroethylene
1,2-Dichloropropane
Vinyl chloride
1,3-Dichloropropene
2,6-Dinitrotoluene
Ethylbenzene
Methyl bromide (bromomethane)
Methyl chloride (chloromethane)
Methylene chloride
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene

Base, Neutral Extractables

4-Bromophenyl phenyl ether
2-Chloronaphthalene
4-Chlorophenyl phenyl ether
Pyrene
3,3-Dichlorobenzidine
2,3-o-Phenylene Pyrene
Phenanthourene
4,6-Dinitro-o-cresol
Fluorine
2,4-Dinitrotoluene
Bis (2-chloroethoxy) Methane
Bis (2-chloroethyl) Ether
Bis (2-chloroisopropyl) Ether
Hexachlorobenzene
Hexachlorobutadiene
Bis (2 ethylhexyl) Phthalate
Hexachloroethane
Isophorone
Naphthalene
Nitrobenzene
1,2-Diphenylhydrazine
N-Nitrosodimethylamine
N-Nitrosodiphenylamine
Parachlorometa cresol
Di-n-octyl pthalate
Dimethyl pthalate
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (TCDD)
Acenaphthylene
Anthouracene
Hexachlorocyclopentadiene
N-nitrosodi-n-propylamine
Fluoranthene

Acid Extractables

2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,4,6-Trichlorophenol

1,2-Benzanthouracene
3,4-Benzofluoranthene
11,12-Benzoflouranthene
1,12-Benzoperylene
3,4-Benzopyrene
Butyl benzyl phthalate
Chourysene
1,2,5,6-Dibenzanthouracene
Di-n-butyl phthalate
Diethyl phthalate

Pesticide

Alpha-BHC
Beta-BHC
Delta-BHC
Gamma-BHC
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Aldrin
Dieldrin
Chlordane
4,4-DDT
4,4-DDE
4,4-DDD
Endrin
Endrin aldehyde
Toxaphene
Heptachlor

PCBs

PCB-1242
PCB-1254
PCB-1221
PCB-1232
PCB-1248
PCB-1016

GLOSSARY

Act
The Federal Water Pollution Control Act, as amended by the Clean Water Act and the Water Quality Act of 1987, and all amendments to and all federal regulations promulgated pursuant to the above Acts. Section 1251, title 33, United States Code (33 USC 1251).

BOD_5
The amount of oxygen consumed in a standard BOD_5 test without the use of a nitrification inhibitor at 20 degrees centigrade(20 °C)on an unfiltered sample.

Bypass
The intentional diversion of waste streams from any portion of an industrial user's or Federally Owned Treatment Works (FOTW) treatment facility.

Categorical Industrial User
Any industrial user subject to the Federal Categorical Pretreatment Standards established pursuant to 40 CFR §403.5 and as defined in paragraph 3k.

COD
Chemical Oxygen Demand.

COMAR
Code of Maryland Regulations.

Composite Sampling
The combining of individual samples obtained at hourly or smaller intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite.

Domestic Sources
Sources from which wastewater contributed to the sanitary sewer is consistent with that usually associated with strictly residential and administrative areas.

ECD
Environmental Compliance Division, Directorate of Safety, Health, and Environment (DSHE), USAGAPG.

Federal Categorical Pretreatment Standard, Categorical Pretreatment Standard, Pretreatment Standard or Standard
Any regulation containing pollutant discharge limits promulgated by the Environment Protection Agency (EPA) in accordance with §307(b) and (c) of the Act as defined herein, which applies to industrial users. This term includes prohibitive discharge limits established pursuant to Section 5, part 403, title 40, Code of Federal Regulations (40 CFR 403.5) or any revision thereto.

Federal Facilities Compliance Act (FFCA)
Applicable sections of the Act govern Federally Owned Treatment Works (FOTWs) under the Clean Water Act and Resource Conservation and Recovery Act (RCRA) regulations in the same manner that Publicly Owned Treatment Works (POTWs) are regulated.

Federally Owned Treatment Works (FOTW)
A facility owned and operated by a department, agency, or instrumentality of the federal government treating wastewater, a majority of which is domestic sewage, prior to discharge in accordance with a permit issued under section 402 of the Federal Water Pollution Control Act. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage, sludge or industrial (non-domestic) wastes of liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a FOTW treatment plant.

Flow Control Measure
A measure taken to regulate fluid motion.

Grab Sample
An individual sample collected in less than 15 minutes.

Hydrostatic testing
All pre-operational system leakage and hydrostatic pressure testing and all system leakage and hydrostatic pressure testing performed during the service life of the pressure boundary in compliance with the American Society of Mechanical Engineers (ASME) Code, Section XI.

Industrial User
Any facility discharging wastewater or that is capable of discharging wastewater, which is not of comparable strength, origin and/or flow of typical domestic sources.

Interference
A discharge which, alone or in conjunction with a discharge or discharges from other sources,

(1) Inhibits or disrupts the wastewater treatment plant, its treatment processes or operations, or its sludge processes, use or disposal; or

(2) Causes a violation of any requirement of the FOTW's National Pollution Prevention Elimination System (NPDES) permit or prevention of sewage sludge use or disposal in compliance with Section 405 of the Act, Subtitles C and D of RCRA, the Clean Air Act, the Marine Protection, Research and Sanctuaries Act or any state or local regulations issued thereunder. These regulations are available for review at the ECD, building. 4304.

Laboratory
A facility where the handling or use of hazardous chemicals and multiple chemical procedures occur. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.

Laboratory Solutions/Wastes
Wastes directly generated from a laboratory operation(s) having a volume of less than or equal to 4 liters per day, and which are containerized or somehow segregated from the laboratory's normal wastewater effluent.

National Pollutant Discharge Elimination System (NPDES)
The national system for issuing permits as designated by the Clean Water Act. The permit is designed to control all discharges of pollutants from point sources into U.S. waterways.

New Point Source
Any building, structure, facility, or activity from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under section 307(c) of the Clean Water Act. The pretreatment standards will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

(1) The building, structure, facility, or activity is constructed at a site at which no other source is located; or

(2) The building, structure, facility, or activity totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(3) The production or non-domestic wastewater generating processes of the building, structure, facility, or activity is 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 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.

Non-domestic User
A user of the sanitary sewer system at the Aberdeen or Edgewood Area whose wastewater has the potential to contain pollutants in amounts as to not resemble that of a domestic source. "Potential to contain pollutants" includes users in which the capability and possibility of discharging non-domestic wastewater not only exists, but is probable due to the type of operations, direct/indirect process wastewater connections to the sanitary sewer, vicinity of a pollutant source to an open sanitary sewer connection, etc.

Non-domestic Wastewater/Industrial Wastewater
Wastewater having the potential of containing pollutants in amounts or with characteristics as to not resemble that of a domestic source. Characteristics include color, smell, taste, temperature, and pH.

Pass-Through
A discharge of pollutant(s) which cannot be treated adequately by the FOTW and therefore exits into waters of the U.S. in quantities or concentrations which alone or in conjunction with other discharges from other sources, is a cause of a violation of any requirement of the FOTW's NPDES permit.

PCB
Polychlorinated biphenyl

Pretreatment
The reduction of 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 such pollutants into the sanitary sewer. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes or by other means as long as dilution of the wastewater is not involved.

RCRA
Resource Conservation and Recovery Act.

Significant Industrial User
Any industrial user who:

(1) Is a categorical industrial user;

(2) Discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater); or

(3) Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW; or

(4) Is designated by DSHE on the basis that the industrial user has a reasonable potential for adversely affecting the FOTW's operation or for violating any pretreatment standard or requirement; or

(5) Is found by DSHE, the state, or the Environmental Protection Agency to have significant impact either individually or in combination with other contributing industries to the FOTW, on the quality of the sludge, the FOTW's effluent quality, or air emissions generated by the system.

Solid Waste
Any garbage; refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, or semi-solid resulting from industrial, commercial mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Act, as amended, or byproduct material as defined by the Atomic Energy Act of 1954, as amended. For the purposes of this regulation, the term "solid waste" can be defined as any material to be discharged that is not a normal component of the wastewater effluent.

Standard Units (SUs)
Units used in the measurement of pH. The pH is an expression of the intensity of the basic or acidic condition of a liquid. Mathematically, pH is the logarithm (base 10) of the reciprocal of

the hydrogen ion activity. The pH may range from 0 to 14 where 0 is most acidic, 14 most basic, and 7 neutral.

Slug Load
Any discharge at a flow rate or concentration with could cause a violation of any prohibited discharges.

Surety Agents
Any materials designated by the Department of the Army as chemical surety materials, to include blister agents, nerve agents and others identified by the Army. Simulated and experimental surety agents which produce the characteristic effect of surety materials on living tissue/ systems; i.e., blistering, acetylcholinesterase inhibition, etc., but which are not designated as surety agents by the Army, are included as surety agents. Materials which simulate the physical properties (viscosity, freezing point, etc.) of surety agents but which do not produce nor are designed to produce the agent's effect on living tissue/systems are not surety agents.

TPH
Total Petroleum Hydrocarbons

Total Toxic Organics (TTO)
The summation of the concentrations of organic compounds listed in appendix A that are present in concentrations greater than 0.01 mg/L.

Total suspended solids (TSS)
The total suspended matter that floats on the surface of or is suspended in water, wastewater, or other liquid and is removable by laboratory filtration and is determined in accordance with EPA Standard Method procedures.

Upset
An exceptional incident in which there is unintentional and temporary noncompliance with the discharge standards established by this regulation because of factors beyond the reasonable control of the industrial user.

Wastewater Treatment Plant (WWTP)
The treatment facilities at both the Aberdeen and Edgewood Areas of Aberdeen Proving Ground which receive both domestic and industrial wastewater. For purpose of APG, a FOTW.

APGR 200-41 03 January 2000

(AMSSB-GSH-EE)

FOR THE COMMANDER:

DAVID G. BURDICK
Adjutant General

DISTRIBUTION:
B2 plus 1 Publications Stockroom, building 346
2 USAGAPG, ATTN: AMSSB-GIM-R
1 SBCCOM, ATTN: AMSSB-SCI-H

SECTION B. WASTEWATER FLOW RATES

1. The following wastewater flow rates to the sanitary sewer are to be provided by the user and must be physically measured unless other verifiable techniques are approved by DSHE.

MAXIMUM DAILY FLOW(GAL/DAY)	ANNUAL DAILY AVERAGE FLOW(GAL/DAY)

2. Show the estimated average quantity of water received and wastewater discharged daily.

	Supplied From		Discharged To	
Water Used For	Gals/Day	Source (1)	Gals/Day	Discharge to (2)
Sanitary				
Process				
Cooling				
Boiler				
Scrubber Water For Air Pollution Control				
Other (3)				
Total Gal/Day				

Notes:

(1) Enter the appropriate code letter indicating the source.

a) Van Bibber Water Treatment Plant
b) Chapel Hill Water Treatment Plant
c) Recycled or Reclaimed Water
d) Groundwater (potable/non-potable)
e) Storm Water
f) Bottled
g) Distilled

NEW USER DISCHARGE AUTHORIZATION FORM

INTRODUCTION

This form is to be used to obtain disposal authorization for new users of the sanitary sewer system which have wastewater characteristics that are non-domestic in nature. The form is called for under APG Regulation 200-41, paragraph 5g(2).

INSTRUCTIONS

Completed forms will be forwarded to the Environmental Compliance Division, DSHE, AMSSB-GSH-EE, USAGAPG. The request will then be reviewed for discharge authorization. If authorization to discharge to the sanitary sewer is denied, the form may be resubmitted if pretreatment or a process change significantly reduces the pollutants of concern. The form must be completed in its entirety and must contain all the required documentation.

SECTION A: GENERAL INFORMATION

1. Tenant and Office Symbol_____Bldg. Number _____

2. POC for this activity (include extension)_____

3. Activity description relating to the need for discharge_____
_____
_____
_____
_____

SIC Code(s) (if known)_____

4. Average annual days per week of activity operation_____

5. Time and duration of discharge to the sanitary sewer

Discharge occurs from _____a.m./p.m. to _____a.m./p.m.

Circle the days of the week that discharge occurs S M T W TH F S

SECTION B. WASTEWATER FLOW RATES

1. The following wastewater flow rates to the sanitary sewer are to be provided by the user and must be physically measured unless other verifiable techniques are approved by DSHE.

MAXIMUM DAILY FLOW(GAL/DAY)	ANNUAL DAILY AVERAGE FLOW(GAL/DAY)

2. Show the estimated average quantity of water received and wastewater discharged daily.

	Supplied From		Discharged To	
Water Used For	Gals/Day	Source (1)	Gals/Day	Discharge to (2)
Sanitary				
Process				
Cooling				
Boiler				
Scrubber Water For Air Pollution Control				
Other (3)				
Total Gal/Day				

Notes:

(1) Enter the appropriate code letter indicating the source.

a) Van Bibber Water Treatment Plant
b) Chapel Hill Water Treatment Plant
c) Recycled or Reclaimed Water
d) Groundwater (potable/non-potable)
e) Storm Water
f) Bottled
g) Distilled

(2) Enter the appropriate code letter indicating the discharge point

a) Edgewood Area WWTP
a) Aberdeen Area WWTP
c) Surface Waters
d) Evaporation
e) Product
f) Transported by Wastewater Hauler

(3) Describe uses other than those listed above:_____

_____

_____

_____

SECTION C. RAW MATERIALS AND CHEMICALS

Give technical and common names of raw materials and chemicals that are used in the activity or other process, which may be discharged to the sanitary sewer. In the case of proprietary compounds, provide the manufacturer's name. Attach Material Safety Data Sheets (MSDS) for each raw material or chemical listed below.

Technical Name	Common Name	Manufacturer's Name

SECTION D. NATURE AND CONCENTRATION OF POLLUTANTS IN WASTEWATER DISCHARGE

Are any of the following pollutants present or suspected of being present in the wastewaters discharged to the sanitary sewer? If yes, indicate by checking the appropriate box.

_____ Acenaphthene
_____ Acrolein
_____ Acrylonitrile
_____ Benzene
_____ Benzidine
_____ Bromoform
_____ Carbon tetrachloride
_____ Chlorobenzene
_____ Chlorodibromomethane
_____ Chloroethane
_____ 2-Chloroethyl vinyl ether
_____ Chloroform
_____ 1,2-Dichlorobenzene
_____ 1,3-Dichlorobenzene
_____ 1,4-Dichlorobenzene
_____ Dichlorobromomethane
_____ 1,1-Dichloroethane
_____ 1,2-Dichloroethane
_____ 1,1-Dichloroethylene
_____ 1,2-transDichloroethylene
_____ 1,2-Dichloropropane
_____ 1,3-Dichloropropene
_____ 2,6-Dinitrotoluene
_____ Ethylbenzene
_____ Methyl bromide (bromomethane)
_____ Methyl chloride (chloromethane)
_____ Methylene chloride
_____ 1,1,2,2-Tetrachloroethane
_____ Tetrachloroethylene
_____ Toluene
_____ 1,2,4-Trichlorobenzene
_____ 1,1,1-Trichloroethane
1,1,2-Trichloroethane
_____ Trichloroethylene
_____ 2-Chlorophenol
_____ 2,4-Dichlorophenol
_____ 4-Bromophenyl phenyl ether
_____ 2-Chloronaphthalene
_____ 4-Chlorophenyl phenylether
_____ Pyrene
_____ 3,3-Dichlorobenzidine
_____ 2,3-o-Phenylene pyrene
_____ Phenanthourene
_____ 4,6-Dinitro-o-cresol
_____ Fluorine
_____ 2,4-Dinitrotoluene
_____ Bis (2-chloroethoxy) methane
_____ Bis (2-chloroethyl) ether
_____ Bis (2-chloroisopropyl) ether
_____ Hexachlorobenzene
_____ Hexachlorobutadiene
Bis (2 ethylhexyl) phthalate
_____ Vinyl chloride
_____ Hexachlorethane
_____ Isophorone
_____ Naphthalene
_____ Nitrobenzene
_____ 1,2-Diphenylhydrazine
_____ N-Nitrosodimethylamine
_____ N-Nitrosodiphenylamine
_____ Parachlorometa cresol
_____ Di-n-octyl phthalate
_____ Dimethyl phthalate
_____ 2,3,7,8-Tetrachloro-dibenzo-p-dioxin(TCDD)
_____ Acenaphthylene
_____ Anthouracene
_____ 1,2-Benzanthouracene
_____ 3,4-Benzofluoranthene
_____ 11,12-Benzoflouranthene

_____ 2,4-Dimethylphenol
_____ 2,4-Dinitrophenol
_____ 2,4-Dimethylphenol
_____ 2,4-Dinitrophenol
_____ 2,4-Dimethylphenol
_____ 2,4-Dinitrophenol
_____ 2-Nitrophenol
_____ 4-Nitrophenol
_____ Pentachlorophenol
_____ Phenol
_____ 2,4,6-Trichlorophenol
_____ Alpha-BHC
_____ Beta-BHC
_____ Delta-BHC
_____ Gamma-BHC
_____ Alpha-endosulfan
_____ Beta-endosulfan
_____ Endosulfan sulfate
_____ Aldrin
_____ Dieldrin
_____ Chlordane
_____ 4,4-DDT
_____ 4,4-DDE
_____ 4,4-DDD
_____ Endrin
_____ Endrin aldehyde
_____ Toxaphene
_____ Heptachlor
_____ Antimony
_____ Arsenic
_____ Barium
_____ Beryllium
_____ Cadmium
_____ Chouromium
_____ Copper
_____ Iron
_____ Lead

_____ 1,12-Benzoperylene
_____ 3,4-Benzopyrene
_____ Butyl benzyl phthalate
_____ Chourysene
_____ 1,2,5,6-Dibenzanthouracene
_____ Di-n-butyl phthalate
_____ Diethyl phthalate
_____ Hexachlorocyclopentadiene
_____ N-nitrosodi-n-propylamine
_____ Fluoranthene
_____ PCB-1242
_____ PCB-1254
_____ PCB-1221
_____ PCB-1232
_____ PCB-1248
_____ PCB-1260
_____ PCB-1016
_____ Manganese
_____ Mercury
_____ Molybdenum
_____ Nickel
_____ Selenium
_____ Silver
_____ Thallium
_____ Zinc
_____ Asbestos
_____ Alkyl Epoxides
_____ Hydrochloric Acid
_____ Hydrofluoric Acid
_____ Nitric Acid
_____ Sulfuric Acid
_____ Radioactive Nuclides

SECTION E. AVERAGE POLLUTANT CONCENTRATIONS

For all pollutants indicated as likely being present in the wastewater discharge in Section D, list below the daily concentration average for each. Attach all applicable laboratory data to this form. If the wastewater has not been analyzed for present or suspected pollutants, estimate the concentration of each pollutant. Estimates must be followed-up with at least one day of analytical data within 90 days of completing this form.

Pollutant	Daily Concentration Average, mg/L

SECTION F. PRETREATMENT

1. Does a pretreatment system exist for the facility or activity?

_____YES _____NO

2. If so, give the planned time and duration of the pretreatment system operation

The pretreatment system will operate daily from

_____ a.m./p.m. to _____ a.m./p.m.

3. Describe the system, what is being treated, expected effluent characteristics, and describe any non-water wastes which will be generated._____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Preparer's Signature _____

Date _____

Telephone Number _____

REQUEST FOR SEWER DISCHARGE GUIDANCE

INTRODUCTION

This form is to be used to obtain disposal guidance for laboratory/field operation solutions of organic contaminants as called for under APG Regulation 200-41, paragraph 5c(5)(b)2.

INSTRUCTIONS

Completed forms will be forwarded to the Environmental Compliance Division, DSHE, AMSSB-GSH-EE, USAGAPG. Be sure to list all information required. The request will then be reviewed for discharge approval. If approval to discharge to the sanitary sewer is denied, an alternate source to dispose of wastewater will be provided.

APPROVAL REQUEST

1. POC FOR THIS REQUEST: (printed name/signature/extension)_____
_____
_____

2. TENANT AND OFFICE SYMBOL UNDER WHICH THE DESIRED DISCHARGE WOULD OCCUR _____

3. LOCATION OF DESIRED DISCHARGE: (directorate/building #)_____
_____
_____

4. MATERIAL FOR WHICH DISCHARGE APPROVAL IS SOUGHT: (Include major constituents and their concentrations. The MSDSs and other relevant information, i.e., product labels, must be provided whenever available.) _____
_____
_____
_____
_____
_____
_____
_____

5. ALL AVAILABLE ANALYTICAL DATA FOR THE SOLUTION(S) FOR WHICH DISCHARGE IS REQUESTED MUST BE PROVIDED WITH THIS REQUEST.

6. DESCRIPTION OF SOURCE/PROCESS CREATING WASTE: (Include any known possibility of additional contamination) _____

7. DOES THE MATERIAL EXHIBIT ANY OF THE CHARACTERISTICS OF A HAZARDOUS WASTE (40 CFR 261.21-24) AND/OR IS THE MATERIAL CONTAINED IN THE HAZARDOUS WASTE LISTINGS IN 40 CFR 261.31-33? (If the answer is "yes", explain why the material is not being disposed of via the Hazardous Waste Tracking System. _____

8. VOLUME OF PROPOSED DISCHARGE: (In instances where discharge approval is being requested for more than one solution, provide volume of each solution, not a combined volume)_____

9. FREQUENCY OF PROPOSED DISCHARGE: _____

10. APPROVAL/DISAPPROVAL:

[ ] APPROVED FOR DISCHARGE

APPROVED LOCATION: _____

[ ] Approved for discharge subject to the following conditions:

[ ] This material is not approved for discharge.

_____

Chief, Environmental Compliance Division

LABORATORY DISCHARGE LOG

INTRODUCTION

This form is intended to be used for the purpose of maintaining a record of laboratory discharges to the sanitary sewer which are released in accordance with APG Regulation 200-41, paragraph 5c(5)(b)4.

INSTRUCTIONS

Any discharge of "laboratory solutions" which contain heavy metals, inorganic heavy metal salts, pesticides, and/or inorganics in volumes and concentrations approved for discharge by APG Regulation 200-41, paragraph 5c(5)(b)1 must be recorded. Also, organics approved for discharge by ECD are to be recorded. Information called for below (to include laboratory supervisor's signature) must be completed prior to discharge. Completed forms are to be submitted to the Environmental Compliance Division, DSHE, USAGAPG biannually. The last day of the month following the end of the 6 month period of the fiscal year. (i.e. 30 July and 31 January).

Date	Solution	Volume & Concentration	Supervisor's Signature

REQUEST TO DISCHARGE HYDROSTATIC TESTING FLUID AT ABERDEEN PROVING GROUND

DATE: _____

POC: _____ **PHONE:** _____

DATE OF DISCHARGE: _____ **VOLUME OF DISCHARGE:** _____

LOCATION: _____

DESCRIPTION: _____

_____

_____

_____

Please check the method of discharge and all appropriate BMPs that will be utilized. Sign the appropriate certification statement and send the completed form to:

Director
Environmental Compliance Division
Directorate of Safety, Health and Environment
410-306-2271
FAX: 410-306-2272

☐ **DISCHARGE TO SANITARY SEWER:**

The following requirements must be met to discharge hydrostatic testing or cleaning fluid to the sanitary sewer:

1. The volume of discharge may not exceed 100,000 gallons.

2. All hydrostatic testing and cleaning wastewater must meet the local discharge limits for the pollutants reasonably expected to be present in the discharge. Local limits for the Aberdeen and Edgewood Area sewer systems are given in paragraph 5c(3) and 5c(4) of APGR 200-41.

"I certify that the requirements to discharge hydrostatic testing and/or cleaning fluid to the sanitary sewer have been met. This determination has been made under my direction and supervision."

Signature: _____ **Date:** _____

☐ **DISCHARGE TO SURFACE WATERS:**

The following requirements must be met to discharge hydrostatic testing fluid to surface waters:

1. Test water that is chlorinated or comes from a chlorinated supply must comply with a total residual chlorine limit of <0.1 mg/L. If the wastewater is chemically dechlorinated, the dissolved oxygen in the fluid must be greater than or equal to 5.0 mg/L, and the pH must be in the range of 6.5 to 8.5 SU.

2. The discharge shall not cause the temperature of the receiving waters to exceed 90 °F beyond a mixing zone of 50 feet radially from the point of discharge. When the receiving water already exceeds 90 °F, the temperature of the discharge shall not exceed the ambient temperature.

3. All testing fluid must remain in the vessel until it has been determined that the wastewater complies with the limits given in 1. and 2., above. If the vessel must be put into service immediately, the fluid must then be stored in tanks or 55 gallon drums until compliance with the surface water discharge limitations has been determined.

4. The discharger shall collect three evenly-spaced grab samples over the period of the discharge and individually analyze them for the parameters detailed in 1. and 2., above.

Check the appropriate Best Management Practices that will be implemented:

☐ Hydrostatic testing fluid will not be discharged to a pond, lake, or any seasonal tributary.

☐ Hydrostatic testing fluid will be discharged at a point on-shore at least 50 feet from the shoreline to minimize the likelihood of contaminants reaching aquatic biota.

☐ Hydrostatic testing fluid will be discharged to a grassed area or swale.

☐ Hydrostatic testing fluid will be released into a drain at the farthest possible distance from the outfall to dissipate any residual chlorine in the wastewater.

☐ Prior to discharging hydrostatic testing fluid from a vessel or pipeline, the discharger will install a suitable energy dissipater at the outlet(s), and utilize appropriate erosion protection measures such as sandbags, rocks, and hay bales to ensure that there will be no erosion or scouring of the natural surface or channels within the affected area as a result of the discharge.

☐ The rate of discharge will be controlled to avoid erosion.

☐ Flow control measures will be taken to ensure that the discharge does not impact any adjacent properties.

☐ Any barriers, structures, or objects installed for erosion or flow control will be removed from the site after the discharge of hydrostatic testing fluid is completed.

"I certify that the requirements to discharge hydrostatic testing to surface waters have been met or will be met prior to discharge and that the appropriate best management practices indicated above will be implemented."

Signature: _____ **Date:** _____