INVITATION FOR BIDS

Via eProcurement System

IFB NO. 2024-32
ON-CALL WATER AND SEWER CONSTRUCTION

OPENING: MAY 22, 2024 AT 11:00 A.M.
PRE-BID CONFERENCE: APRIL 25, 2024 AT 9:00 A.M.

BUYER: MICHAEL V. DECKER, CPPB
PHONE: 410-313-6375 ▪ EMAIL: mdecker@howardcountymd.gov

HOWARD COUNTY, MARYLAND

OFFICE OF PROCUREMENT AND CONTRACT ADMINISTRATION

6751 Columbia Gateway Drive, Suite 226, Columbia, MD 21046
https://www.howardcountymd.gov/Departments/County-Administration/Procurement-and-Contract-Administration

Outstanding Agency Accreditation Achievement Award NIGP

Achievement of Excellence in Procurement 2023 Award Winner

NOTICE OF LETTING

HOWARD COUNTY, MARYLAND
OFFICE OF PROCUREMENT AND CONTRACT ADMINISTRATION
6751 Columbia Gateway Drive, Suite 226
Columbia, Maryland 21046

INVITATION FOR BIDS NO. 2024-32

ON-CALL WATER AND SEWER CONSTRUCTION

A PRE-BID CONFERENCE WILL BE HELD VIRTUALLY, VIA WEBEX, ON APRIL 25, 2024 at 9:00 A.M. PLEASE VISIT PLANETBIDS FOR THE MEETING LINK.

Opening: May 22, 2024, 11:00 AM

Howard County intends to procure the services of one or more qualified utility contractors to perform on-call construction associated with water and sanitary sewer utility pipelines and appurtenances. Projects may include, but are not limited to, water and sanitary sewer utility construction, repairs, relocations, and extensions including distribution mains, transmission mains, and interceptors, as well as appurtenances such as water valves, fire hydrants, manholes, and service connections. Emergency repairs as well as scheduled capital improvements to the utilities are included. This contract is in SHA Cost Group "D". The value of the individual projects will typically be within the State Highway Administration's Cost Group B, $100,000 to $500,000.

The solicitation with instructions to the bidders will be posted electronically on PlanetBids on April 12, 2024. PlanetBids is the only location where this solicitation will be available. To view, download or print the solicitation, please use the link provided here: Planet Bids, Howard County

For Procurement Questions, Contact: Buyer mdecker@howardcountymd.gov or (410) 313-6375.

Howard County, Maryland
Office of Procurement and Contract Administration
Gateway Building, Suite 226
6751 Columbia Gateway Drive
Columbia, Maryland 21046

INVITATION FOR BIDS NO. 2024-32
ON-CALL WATER AND SEWER CONSTRUCTION

IMPORTANT: ADVISE OFFICE OF PROCUREMENT AND CONTRACT ADMINISTRATION IMMEDIATELY IN THE EVENT ANY OF THE ABOVE SECTIONS ARE MISSING.

INFORMATION FOR CONTRACTORS

INFORMATION FOR CONTRACTORS

CONTENTS

INFORMATION FOR CONTRACTORS

1. SUBMISSION OF BID DOCUMENTS

1.1 Failure to attach the required documents may be cause for rejection of bid.

1.2 Unless otherwise specified, all formal bids submitted shall be irrevocable for 120 calendar days following the bid opening date.

1.3 Proposals made on anything other than the attached documents will not be considered. Changes in phraseology of the proposal, additions, or limiting provisions, will render the proposal nonresponsive and may cause its rejection.

1.4 Each bid shall be accompanied by the Affidavit regarding price fixing, gratuities, bribery, and discriminatory employment practices. When the Contractor is a corporation, a duly authorized representative of said corporation shall execute the Affidavit.

1.5 The Foreign Services Disclosure Form must accompany bids for construction-related services, architectural services, engineering services and energy performance contract services of $2 million or more. Section 12-111 of the Maryland State Finance and Procurement Article requires bidders to local governments to make certain disclosures regarding plans, at the time the bid is submitted, to perform any services under the contract outside the United States. When applicable, the Foreign Services Disclosure form is provided in the solicitation package.

1.6 All bidders must be familiar with the general conditions, terms, and regulations for the bid. In case of conflicts between the contract documents, the order of precedence shall be: (1) Addenda to Invitations for Bids; (2) Information for Contractors; (3) Special Provisions; (4) Plans (Drawings); (5) Technical Specifications; (6) Volume IV Design Manual, Standard Specifications and Details for Construction; (7) SHA Standard "Standard Specifications for Construction and Materials".

1.7 If a discrepancy in or omission from the specifications is found, or if a Contractor is in doubt as to their meaning, or feels that the specifications are discriminatory, the Contractor shall notify the Buyer in writing not later than ten (10) days prior to the scheduled opening of bids. Exceptions taken do not obligate the County to change the specifications. The Issuing Office will notify all Contractors of any changes, additions or deletions to the specifications by addenda. The County will not consider any exceptions to the terms, conditions and specifications after the solicitation closing date and time.

1.8 The submission of a proposal on this work and service will be considered as a representation that the bidder has carefully investigated (1) all conditions which affect or may, at some future date, affect the performance of the work or services covered by the proposal, (2) the entire area to be serviced as described in the attached specifications and other contract documents and that the bidder is fully informed concerning the conditions to be encountered; and (3) the character, quality and quantity of work to be performed and equipment and materials to be furnished. Also, that the bidder is familiar with all Federal, State, and County laws, all codes and ordinances of the County which in any way affect

the prosecution of the work or persons engaged or employed in the work or the materials and equipment used in the work.

1.9 Any quantities given under the various items of the proposal are approximate only and subject to increase or decrease, as provided in the contract, without changing the unit prices to be paid for the work.

1.10 The County reserves the right to reject any or all proposals, and to waive informalities as the interest of the County may require.

2. PERFORMANCE/PAYMENT BOND

A performance bond and payment bond in the amount of $2,000,000.00 shall be required of the successful bidder within 10 days after award notification. Said bond shall be issued by a surety company subject to approval of Howard County.

3. BIDDER'S QUALIFICATIONS

3.1 Bidders shall have at least 5 years continuous experience in the construction of water mains and sanitary sewer mains and appurtenances. Bidders shall have completed gravity sanitary sewer installations of 8-inch diameter or larger totaling 5,000 linear feet within the past 3 years under the supervision of the Bidder's Project Manager or Construction Superintendent to be assigned to this project. In addition, bidders shall have completed water main installations of 8-inch diameter or larger totaling 5,000 linear feet within the past 3 years (with a minimum of 1,000 linear feet of 8-inch diameter or larger PVC C-900 pressure pipe) under the supervision of the Bidder's Project Manager or Construction Superintendent to be assigned to this project.

Bidders shall document this experience on the Qualifications Questionnaire and provide a detailed list of recently completed projects meeting the specified experience requirements. The experience of owner(s) may be imputed to a newly formed company/contractor provided the owner(s) has/have at least 10 years of demonstrated experience of reliability and meets the criteria set forth herein.

Bidders shall designate a primary contact person within the company (project manager / superintendent / estimator) with the authority to act and speak on behalf of the company regarding work efforts required by the County. The primary contact person shall have a minimum of 10 years of experience in water and sewer construction and have acted in a similar capacity in at least 6 of the sewer/water installations listed above. The Contractor shall document the required experience of the contact person on the Qualifications Questionnaire.

This contract includes on-call emergency responses. All bidders are advised that, should they be called upon in an emergency, they must make every reasonable effort to assist the County with manpower (a minimum of a four-man crew consisting of a foreman, backhoe operator, truck driver, and laborer) and all equipment for emergency repairs of water and/or sewer mains on a 24 hours/day, 365 days/year basis. In the spirit and context of this contract the bidders' reasonable effort shall be defined as the willingness and capability to provide a crew and necessary equipment on site within 4 hours of an emergency call. Supervisory personnel must be readily available by office and cellular telephone. A

primary and secondary point of contact shall be provided. Bidders shall provide on the Qualifications Questionnaire, the names and telephone numbers of their designated emergency supervisory personnel.

3.2 The Qualifications Questionnaire shall be completed by all Bidders. Only the information contained in the Qualifications Questionnaire will be considered in evaluating the Bidder's qualifications. Attachments (unless specifically requested), company brochures or submittals in any other format will not be considered in evaluating the qualifications of the Bidder. Bidders may reproduce sections of the Qualifications Questionnaire form as needed to provide the required information necessary to adequately demonstrate their experience.

3.3 The County reserves the right to check references furnished and consider the responses received in determining award of this bid. The County will not contact Bidders for clarifications of illegible information, wrong names, wrong phone numbers, or wrong addresses provided by Bidders on the Qualifications Questionnaire. Incomplete submittals or unverifiable information may not be considered in the evaluation.

3.4 The County reserves the right to inspect the Bidders' equipment, request resumes or past work experience of key personnel or to interview key personnel to be assigned to the contract.

3.5 Contracts shall be awarded to the lowest responsive and responsible bidder meeting all the specifications. In accordance with Howard County Code Sec. 4.117 (a) (4), the quality of performance of previous contracts or services shall be considered in determining the lowest responsive and responsible bidder. The County reserves the right to reject any bid deemed not responsible or non-responsive.

4. ESTIMATED QUANTITIES

4.1 The estimated quantities stated are provided as a general guide for bidding and are not guaranteed. Actual quantities may be more or less than those estimated. The County reserves the right to add, change or delete items as deemed necessary.

4.2 The estimated value per project is $100,000.00 to $500,000.00. Task order limits shall not exceed $750,000.00 per project.

4.3 The estimated annual value of each awarded contract is $2,000,000.00 per year.

5. METHOD OF AWARD

5.1 Howard County intends to make one or more award(s) to the lowest responsive responsible bidder(s) meeting all the specifications, having submitted all the required documents, and meeting all necessary experience and reference requirements for the total bid.

5.2 When a need arises, the County will contact a Contractor to provide a proposal using the fees submitted in their bid necessary to complete the required work. If the County and the Contractor cannot come to an agreement on the level of effort involving labor, equipment, and materials required for the task, or if that Contractor cannot provide the services

requested within a timely fashion, the County may request a proposal from a second Contractor.

5.3 The assignment of work shall be at the sole discretion of the County. The bidder(s) shall waive any claim against the County for extra compensation or damages arising out of assignment of work by the County.

6. WORK SCHEDULE

6.1 The County observes a five-day workweek and the following holidays:

New Year's Day
Martin Luther King, Jr. Day
President's Day
Good Friday
Memorial Day
Juneteenth
Independence Day, Fourth of July
Labor Day
Indigenous People's Day
Veterans Day
Thanksgiving Day
Friday after Thanksgiving
Christmas Day

6.2 If any holiday occurs on Sunday, the following Monday shall be considered a holiday. If the holiday occurs on Saturday, the Friday immediately preceding shall be considered a holiday.

6.3 The Contractor will not be permitted to work on the above-mentioned holidays or Saturdays unless requested 48 hours in advance by written notice. The Engineer will authorize this in writing and the Contractor will not be charged for the inspector's time. In the event that the Contractor fails to work its forces as indicated in its written request, it shall be charged a minimum of one-half (1/2) day for inspection time at the overtime rate.

6.4 The normal number of working hours per day on this contract will be limited to nine (9), unless otherwise authorized by the Engineer in writing.

6.5 In case of emergency, which may require that work be done on Saturdays, Sundays, Holidays, or longer than nine hours per day, the Contractor shall request permission of the Engineer to do so. If, in the opinion of the Engineer, the emergency is bona fide, he will grant permission to the Contractor to work such hours as may be necessary. Also, if in the opinion of the Engineer a bona fide emergency exists, he may direct the Contractor to work such hours as may be necessary whether the Contractor requests permission to do so or not.

6.6 All work shall be coordinated with the County's Engineer, or his designee. The Engineer will notify the Contractor at least 5 working days in advance (except for emergency situations) of requiring a crew to begin work. In addition, the Contractor shall be required to observe the following:

6.6.1 The Contractor shall provide the Engineer with at least 24 hours' notice, by

telephone, prior to the start of any work under this contract. Failure to provide such notification will be considered unsatisfactory performance and may result in termination of the contract.

6.6.2 In the event that the Contractor's scheduled work is delayed or canceled for any reason, the Contractor shall notify the Engineer by 7:30 A.M. on the scheduled starting day.

6.7 The amount of liquidated damages for the contract shall be $500.00 per calendar day. The County and the Contractor will establish a not-to-exceed duration for each project which shall be included in the Contractor's task order proposal. This requirement will not be applicable to emergency work.

7. PROHIBITIONS AGAINST DISCRIMINATION

The Contractor and all subcontractors shall not engage in any unlawful employment practice prohibited by law in connection with the work to be done under this contract. The Contractor shall not discriminate against any employee or applicant on the basis of race, creed, color or national origin. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to race, creed, color or national origin.

8. COOPERATIVE PURCHASING

8.1 The County reserves the right to extend all of the terms, conditions, specifications, and unit or other prices of any contract resulting from this bid to any and all public bodies, subdivisions, school districts, community colleges, colleges and universities including non-public schools. This is conditioned upon mutual agreement of all parties pursuant to special requirements which may be appended thereto. The supplier/Contractor agrees to notify the issuing body of those entities that wish to use any contract resulting from this bid and will also provide usage information, which may be requested.

8.2 The County assumes no authority, liability or obligation, on behalf of any other public or non-public entity that may use any contract resulting from this bid. All purchases and payment transactions will be made directly between the Contractor and the requesting entity. Any exceptions to this requirement must be specifically noted in the bid response.

9. PROTEST

Any protest concerning the award of an Agreement shall be decided by the County. Protests shall be made in writing to the Issuing Office and shall be filed within ten days of issuance of award notification. A protest is considered filed when received by the Issuing Office. The written protest shall include the name and address of the protestor, identification of the procurement, a statement of the specific reason for the protest and supporting exhibits. The Issuing Office will respond to the written protest within ten days. The County's decision is final.

10. AUTHORITY

Solicitations are issued pursuant and subject to the provisions of Article VIII, Howard County Charter; Sections 4.100 through 4.123, Howard County Code, 2003; and the rules and regulations as prescribed by the County.

11. MARYLAND REGISTRATION

Contractors must be registered to do business in, and must be in good standing in, the State of Maryland. Contractors not registered must obtain registration information from the Maryland Department of Assessments and Taxation website at: www.dat.state.md.us/ or by calling 410-767-1184 or Toll Free 888-246-5941.

12. BACKGROUND CHECKS AND INVESTIGATIONS

12.1 If a Contractor's employees are on-site in County buildings working without a County escort, each employee of the Contractor shall agree to a background check or investigation consisting of national criminal database search covering misdemeanors and felonies and the release of that information to the County in the event that it is required.

12.2 The Contractor shall assume the cost to have background checks completed for each employee assigned to each facility. The County may bill the Contractor $100 for each standard background check. Public safety buildings require a higher level of security and in-depth background checks referred to as "investigations". The County may bill the Contractor $250 for each in-depth background investigation. This fee, when billed to the Contractor, shall be payable to the County prior to the check or investigation being conducted.

12.3 The background checks or investigations shall include all employees, new employees, subcontractors and replacement employees to be completed prior to assignment of a building. The checks or investigations will be conducted by the County. The Contractor shall submit the proper forms (provided by the County) to the appropriate County agency, which will be determined if background checks or investigations are necessary.

12.4 The Contractor shall not assign any individual convicted of the following offenses which shall include, but are not limited to: Abduction, Homicide, Rape, Aggravated Assault, Sex Offender, Assault with Intent to Murder, or Assault with Intent to Rob.

12.5 The Contractor shall not assign any individual convicted, or having incomplete probation for the following offenses which shall include, but are not limited to: Burglary, Breaking and Entering, Carrying or Wearing a Weapon, Destruction of Property, Possession of a Controlled Dangerous Substance with Intent to Distribute, Explosives, Kidnapping, Theft/Larceny, Maiming, Manslaughter, Sexual Assault, Hate Crimes, Robbery, and Distribution of a Controlled Substance.

12.6 The Contractor reserves the right to seek exception to the above guidelines governing acceptability for assignment to the facility by providing documented specifics pertaining to convictions of the employee in question. The County will, at its sole discretion, accept or reject the requested exception.

13. INSURANCE

The Contractor shall be required to purchase and maintain during the life of the Agreement, including any subsequent renewal terms, Commercial General Liability Insurance, Automobile

Liability Insurance, and Worker's Compensation Insurance with limits of not less than those set forth below:

13.1 Commercial General Liability Insurance: Combined Single Liability limits of $1,000,000 each occurrence and $1,000,000 aggregate naming "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured.

13.2 Automobile Liability Insurance: Combined Single Liability limit of $1,000,000 any one accident.

13.3 Worker's Compensation Insurance: Statutory coverage for Maryland jurisdiction, including Employer's Liability coverage, with a limit of at least $100,000.

13.4 The Contractor shall assure that all subcontractors or independent contractors performing services in accordance with this solicitation carry identical insurance coverage as required of the Contractor, either individually or as an Additional Insured on the policies of the Contractor. Exceptions may be made only with the approval of the County. The Contractor shall indemnify the County for any uninsured losses relating to contractual services involving subcontractors, including workers' compensation claims.

13.5 The Contractor shall provide the County with Certificates of Insurance within ten days of award notification, naming "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured on the certificate. Failure to provide the certificates as required shall result in rejection of award by the County. Such certificates shall provide that the County be given at least 30 days prior written notice of any cancellation of, intention to not renew, or material change in such coverage.

13.6 The providing of any insurance required herein does not relieve the Contractor of any of the responsibilities or obligations assumed by the Contractor in the Agreement awarded or for which the Contractor may be liable by law or otherwise.

13.7 Failure to provide and continue to enforce such insurance as required above shall be deemed a material breach of the Agreement and shall operate as an immediate termination thereof.

13.8 Failure to comply with this requirement at any time during the initial term and any subsequent renewals may be sufficient cause for termination for default.

14. INTEGRATION AND MODIFICATION

This solicitation, the Contractor's response to this solicitation, subsequent Purchase Order(s), and, if applicable, the legal Agreement represents the entire understanding between the parties. Any additions or modifications shall only be made in writing and executed by both parties.

15. AGREEMENT

15.1 The County and Contractor must execute an Agreement resulting from the award of this solicitation. In order to expedite this process, a sample standard Agreement is attached for review as part of this solicitation. Exceptions, if any, to the County's standard Agreement,

Section E, must be noted in the bid to be considered during evaluation. The County will not accept any exceptions to the Agreement after the opening date and time of this solicitation. Exceptions to the County's standard Agreement may result in rejection of the bid.

15.2 Do not fill in or sign the sample Agreement attached. The County will prepare an Agreement specific to this solicitation for execution by the successful Contractor.

16. GOVERNING LAW

16.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.

16.2 The laws of Maryland and Howard County shall govern the resolution of any issue arising in connection with the contract, including, but not limited to, all questions on the validity of the contract, the capacity of the parties to enter therein, any modification or amendment thereto, and therights and obligations of the parties hereunder.

17. AMERICAN MANUFACTURED GOODS REQUIRED FOR PUBLIC WORKS

17.1 The Contractor shall comply with Section 14-416 of the Maryland State Finance and Procurement Article which requires a Contractor or subcontractor to use or supply American Manufactured goods in the performance of a contract for (a) constructing or maintaining a public work; or (b) buying or manufacturing machinery or equipment that is to be installed at a public work site, as the same may be amended from time to time.

17.2 This section does not apply: (a) if the County determines that: (i) the price of the American manufactured goods exceeds the price of a similar manufactured good that is not manufactured in the United States by an unreasonable amount; (ii) the item or a similar item is not manufactured or available for purchase in the United States in reasonably available quantities; (iii) the quality of the item or a similar item manufactured in the United States is substantially less than the quality of a comparably priced, similar, and available item that is not manufactured in the United States; or (iv) the procurement of a manufactured good would be inconsistent with the public interest; or (b) to emergency life safety and property safety goods.

17.3 The Contractor shall certify to the County whether the offered goods and/or services are provided in the United States.

18. AVAILABILITY OF FUNDS

The contractual obligation of the County under this Agreement is contingent upon the availability of appropriated funds from which payment for this Agreement can be made.

19. DISPUTES

In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the County Purchasing Agent or Designee shall be final and binding on all parties. All other disputes arising under or related to the Agreement will be resolved, to the extent possible, by negotiation and settlement between the parties. Pending resolution, the Contractor shall proceed diligently with performance of the Agreement unless otherwise directed in writing.

20. NON-ASSIGNMENT OF AGREEMENT

Neither the County nor the Contractor shall assign, sublet or transfer its interest or obligations under the resulting Agreement to any third party, without the written consent of the other. Nothing herein shall be construed to create any personal or individual liability upon any employee, officer or elected official of the County, nor shall the resulting Agreement be construed to create any rights hereunder in any person or entity other than the parties to this Agreement.

21. PUBLIC INFORMATION/PROPRIETARY/CONFIDENTIAL INFORMATION

21.1 The County operates under a public information law, which permits access to most records and documents.

21.2 Bids will be available for public inspection after the award announcement, except to the extent that a Contractor designates trade secrets or other proprietary data to be confidential. Material designated as confidential must be readily separable from the remainder of the bid to facilitate public inspection of the nonconfidential portion of the bid. A Contractor's designation of material as confidential will not necessarily be conclusive, and the Contractor may be required to provide justification why such material should not be disclosed, on request, under the Maryland Access to Public Records Act, State Government Article, Sections 10-611 through 10-628, of the Annotated Code of Maryland.

22. CONTRACT PERIOD

22.1 This is a requirements type contract for one year commencing on or about June 1, 2024 after approval and proper execution of the contract documents, with a renewal option for 5 additional years, in one year increments, exercisable at the sole discretion of the County.

22.2 In the event the County exercises its option to renew this contract beyond the initial one-year period, the prices for the renewal term shall be the price bid for the initial contract plus the adjustment defined in Paragraph 18, Price Adjustment.

23. PRICE ADJUSTMENT

23.1 Prices offered shall be firm against any increase for one year from the effective date of this Agreement. Prior to the commencement of subsequent renewal periods, it shall be the Contractor’s responsibility to notify the Issuing Office in advance of any requested price changes.

23.2 Requests for price adjustments must be submitted to the Issuing Office, not the User Agency.

23.3 The County will entertain requests for escalation in accordance with the current Consumer Price Index at the time of the request or up to a maximum 5% increase on the current pricing, whichever is lower. (For purposes of this section, "Consumer Price Index" shall be the Consumer Price Index-All Urban Consumers (CPI-U), Baltimore-Columbia-Towson, MD, All Items, Not Seasonally Adjusted, as published by the United States Department of Labor, Bureau of Labor Statistics.) The County reserves the right to grant or deny the request for a price increase and will do so in writing. If the price increase is approved, the price increase will be effective upon written approval and will remain firm through the renewal period.

24. METHOD OF PURCHASE

24.1 For work performed in conjunction with capital improvement projects and programs, the Contractor shall provide a separate cost estimate for each work assignment. The cost estimate shall be based on the unit prices bid for labor and equipment plus approved material and subcontracting costs. In addition to the cost estimate, the Contractor may be requested to provide a cost per linear foot, a cost per item breakdown, a lump sum cost or a combination of per item and lump sum costs for payment purposes. The County will direct the Contractor as to the form of the cost breakdown for each specific project. A notice to proceed and release purchase order will be issued for each such project.

24.2 For work performed in conjunction with the County's operation and maintenance program the Contractor will be required to provide a construction cost estimate based on the unit prices provided in the bid. A notice to proceed and release purchase order will be issued for each such project.

24.3 For work performed under an emergency or urgent basis, as requested by the County, a telephone call from the County will authorize the initiation of work. This verbal authorization will be followed by written confirmation and release purchase order. Payment will be made on a time and materials basis in accordance with the unit prices provided in the bid.

25. BILLING AND PAYMENT UNDER PROPOSAL UNIT PRICES

25.1 Labor:
Only individuals who actually worked on the construction project shall be billed to the project and individuals shall only be billed for hours actually worked on the construction project.

When work is completed prior to the end of the working day or when work is stopped by order or approval of the Engineer because of inclement weather or other reason, payment will be made based on the hourly rates bid in the Proposal as follows:

1. Work in progress less than 4 hours - payment for 4 hours at the hourly rate for each employee.
2. Work in progress more than 4 hours but less than 8 hours - payment for 8 hours at the hourly rate for each employee.
3. Work in progress more than 8 hours on any 1 day - for that labor authorized in excess of 8 hours, payment at the hourly rate plus 50 percent.

The hourly rates bid in Line Items tab, Section 1 – LABOR COST in the online e-bidding system, shall include the cost of payroll burden, overhead, insurances and profit for that labor classification for an 8-hour work day. For work hours on the job site exceeding 8 hours per day by order of the engineer, the hourly labor rates will be 150% of the bid rate. For work on holidays or weekends by order of the engineer, the hourly labor rates will be 150% of the bid rate.

25.2 Equipment:

Dump Truck, Pickup Truck and Rubber-Tired Backhoe/Loader: Payment will be made based on the hourly rates bid in the Proposal as follows:

1. For use or standby up to 4 hours - payment for 4 hours.
2. For use or standby for 4 to 8 hours - payment for 8 hours.
3. For use or standby in excess of 8 hours - payment for actual number of hours.

The hourly rates bid in Line Items tab, Section 2 – EQUIPMENT COST in the online ebidding system, shall include the cost of operation, maintenance, insurances, overhead and profit for that item or piece of equipment; including the associated costs for fuel, oil, grease, tires, etc. and shall not receive a Mark-Up adjustment.

Other equipment authorized by the Engineer to be provided by the Contractor shall be charged to the County at the rates listed in the Heavy Construction Costs with RSMeans data book. The RSMeans data book utilized shall be the latest at the time the proposal is submitted for the specific task. The rate for the specific item of equipment authorized to be provided shall be converted to an hourly equipment rental rate. The rate shall include the associated costs for fuel, oil, grease, tires, etc. and shall not receive a mark-up adjustment. Payment for equipment authorized by the engineer shall be made as stated in the previous paragraph for Dump Truck, Pickup Truck and Rubber-Tired Backhoe/Loader.

For specialized water/sewer construction equipment not listed as a bid item under the solicitation, or not having rental rates listed in the Heavy Construction Costs book, the Contractor shall provide unit cost rates for such equipment subject to review and approval by the County.

25.3 Materials:

Materials and material pricing shall be approved prior to start of work efforts under this contract. The Contractor shall be responsible for the payment of all taxes associated with any and all work under this contract. To ensure fair pricing, the Contractor may be asked to provide pricing from 2 or more suppliers for the same or similar items meeting the County's specifications. The County reserves the right to reject materials or material suppliers based on price, schedule or past performance on County projects.

Materials authorized by the County to be purchased by the Contractor and incorporated into the work efforts such as pipe, valves, manholes, stone, concrete, paving, etc., shall be reimbursed based on the Contractor's actual cost plus a percentage of the material cost as the Contractor's Mark-Up.

The Contractor shall provide marks ups percentages on the Line Items tab, Section 3 CONTRACTOR'S MARK-UP in the online e-bidding system, the mark-up percentage that the Contractor will accept for materials authorized by the County for installation under this contract. In no case shall the Contractor's Mark-Up percentage for materials exceed 10%.

25.4 Travel Time:
Hourly rates for labor and equipment apply to a designated work site. Payment will be authorized for time to transport personnel and/or equipment to the job site at the beginning of the work-day or from the job site at the end of the work day. Payment for travel time shall not exceed 45 minutes to transport personnel and/or equipment to the job site at the beginning of the work-day or 45 minutes at the end of the work day. Hourly charges shall apply in the event the Contractor is directed to deploy personnel and/or equipment between 2 or more job sites.
The travel time will be reimbursed as straight time for labor and equipment, and will not count towards the 8-hour job site workday.

25.5 All invoices for work performed shall include the following information: purchase order number, name of County Project Manager, name of Department and Bureau for whom the work was done, itemized list of labor type, labor hours, equipment type, equipment hours, unit bid prices, extension of each bid item, materials furnished and material invoices or material payment receipts.
Daily work order tickets, prepared by the Contractor and signed by the County Inspector, shall accompany each invoice. The work order tickets shall include a description of work completed and all labor and materials used.

26. SUBCONTRACTING

26.1 The Contractor may subcontract items of work with the approval of the County. Examples of such work may include engineering and surveying services for construction stakeout, roadway resurfacing, rock blasting, installation of cathodic protection systems, taps on prestressed concrete cylinder pipe and minor engineering efforts.

26.2 If subcontracted services are required, the Contractor shall submit for approval, the names of the subcontractors, identifying the work to be subcontracted, and the subcontractors' cost estimates as part of the Contractor's total price proposal to perform the overall task. All subcontractors and costs shall be approved in advance of any work. To ensure fair pricing for subcontracted work, the Contractor may be asked to provide pricing from 2 or more subcontractors for the same service. The County reserves the right to reject a subcontractor based on price, schedule or the subcontractor's past performance on County projects.

26.3 Following completion of the subcontractor's work, the Contractor shall provide copies of the subcontractor's invoices to evidence that the work has been completed along with the quantities and cost for that work. The County will reimburse the Contractor for the cost of the approved subcontracted work plus a percentage of the subcontracted cost as the Contractor's Mark-Up. The Contractor shall provide on the Schedule of Prices, in Section F of this Invitation for Bid, the Mark-Up percentage that the Contractor will accept for subcontracted work under this contract. In no case shall the Contractor's Mark-Up percentage for subcontracted work exceed 15%.

GENERAL CONDITIONS

GENERAL CONDITIONS

The Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction, approved and adopted on May 30, 2017 and all subsequent amendments, are hereby made a part of this contract. Where reference is made herein or on the Contract Drawings to the Standard Specifications, or Details, it shall be interpreted to refer to the above Howard County Specifications.

Where reference is made to the General Conditions, it shall refer to the General Conditions contained in the above referenced Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction.

SPECIAL PROVISIONS

SPECIAL PROVISIONS

CONTENTS

SPECIAL PROVISIONS

1. GENERAL

A. The Special Provisions are hereby made a part of the contract. In the event of a conflict between this and any portions of the contract documents, refer to the Section titled SECTION A, INFORMATION FOR CONTRACTORS, and Section 4.02 of the General Conditions, Howard County Design Manual Volume IV Standard Specifications and Details for Construction.

B. The Contractor shall maintain on the site at all times copies of the following documents: complete construction plans, complete construction specifications, all addenda issued during the bidding process, the latest edition of the Howard County Design Manual Volume IV Standard Specifications and Details for Construction with all amendments, State Highway Administration Standard Specifications for Construction and Materials latest edition and the current applicable Maryland Standards and Specifications for Soil Erosion and Sediment Control and latest supplements for the duration of construction of this contract.

2. SCOPE OF WORK

A. On-call construction of miscellaneous water and sewer projects. The value of the individual projects will typically be within the State Highway Administration's Cost Group B. The projects may include but are not limited to utility construction involving:

- Water main extensions
- Sewer main extensions
- Installation of valves, manholes and fire hydrants
- Installation of water and sewer service connections
- Emergency contract service work
- Emergency work/repairs on water distribution and transmission mains, sewer distribution and interceptors, and water and sewer appurtenances

The County intends to use the services of the on-call utility contractors for performance of work required under the various capital improvement programs and projects, the water and sewer operation and maintenance program and for and during emergency contract service work. The County will prepare plans and/or specifications when necessary. The Contractor shall prepare a construction cost estimate for each project for the County's review based on the unit prices provided in the proposal. If the estimate is acceptable, the County will initiate a Purchase Requisition for the work effort. Upon receipt of the Purchase Order, the Contractor shall schedule the work effort within 10 working days unless authorized by the Engineer to modify this schedule. The Contractor shall provide all materials, equipment and labor necessary for the construction of the facilities including all appurtenances and incidental items of work as required on the plans, specifications, the Howard County Standard Specifications and Details for Construction, and/or as directed by the Engineer. A separate purchase order will be issued to the Contractor authorizing each project.

B. The plans and specifications are intended to cover a complete project including the testing of pipelines, equipment and appurtenances. It should be distinctly understood that failure to mention specifically any work which would naturally be required to complete the project shall not relieve the Contractor of his responsibility to perform such work.

C. The Contractor shall confine his operation within the limits of new work to be done as indicated on the drawings and to any other areas as approved by the Engineer for storage or disposal of material, access, field offices and other features required for performing the work.

D. Capital Improvement Projects and Programs:

Examples of such work may include routine water and sewer extensions, small scale capital projects, capital projects involving planned work on water or sewer mains and appurtenances.

E. Emergency Work and work performed under the County's Operation and Maintenance Program done on an "as-needed" basis:

1. Examples of such work may include installation of service connections, fire hydrant installations or relocations, taps on transmission mains, installation of temporary water and sewer services, installation of by-pass pumping, and test pitting existing utilities, minor relocations of water and sewer mains, and emergency response services.

2. All work will be coordinated through, inspected and approved by the County's Engineer or his designee who will represent the County during the work efforts. All supervision of construction activities shall be provided by the Contractor.

3. Personnel: The typical crew which the Contractor is to furnish shall consist of a minimum of 1 foreman, 1 backhoe operator, 1 truck driver and 1 laborer. The actual crew size employed on a particular assignment may vary according to requirements as designated by the Engineer. The County reserves the right to final decision regarding the make-up of the crew and the crew size.

4. Equipment: The Contractor shall own the following equipment at a minimum: a water main tapping machine, a backhoe (sized to job, typically a 1 cubic yard, 60hp, 17-foot reach rubber-tired backhoe/loader), a crawler mounted (track) hydraulic excavator with a minimum operating weight of 66,000 lbs, capable of lifting/placing a 20-foot section of 48-inch diameter class 54 ductile iron pipe or prestressed concrete cylinder pipe, a 125 cubic foot/minute air compressor, two 50 foot length air hoses, a pavement breaker (over 70 pounds), a rock drill (heavy 2" bit), a dump truck (8 cubic yard capacity), a pick-up truck (3/4 ton capacity), a sewer manhole Kor-N-Seal machine, a 6'x8' double wall (4") trench shield (box) and an air missile. The equipment employed on a particular assignment may vary according to the project requirements. The Engineer reserves the right to make the final decision regarding the equipment employed.

5. All necessary non-powered hand tools will be furnished by the Contractor at no cost to the County. The Contractor shall furnish minor traffic-control equipment such as flags, traffic cones, men working signs, etc., at no cost to the County.

6. The Contractor shall furnish the crew with all necessary safety equipment at no cost to the County. Such equipment includes, but is not necessarily limited to: hard hats, safety shoes, goggles, and vests.

7. The Contractor shall be responsible for obtaining all site-specific permits and for notifying all concerned local and State regulatory agencies including "Miss Utility".

8. The Contractor shall purchase all materials required for the work. Paving of road cuts shall be the responsibility of the Contractor.

9. At the discretion of the Engineer, the Contractor may be directed to stop work at a particular site and start work at another site or to stop work for the day.

3. TEST DRILLING PRIOR TO SUBMISSION OF BIDS

Any Contractor desiring to conduct test drilling prior to submitting bids shall contact the Bureau of Engineering, Construction Inspection Division prior to performing any test drilling. The Contractor shall be responsible for obtaining all required permits, rights of entry, permission statements and notification of proper authorities including Miss Utility prior to conducting any test drilling. For test drilling within the State Highway Administration (SHA) rights-of-way, it shall be the Contractor's responsibility to obtain permission from the SHA to perform test drilling prior to submission of bids. For test drilling within Howard County road rights-of-way, it shall be the Contractor's responsibility to obtain required permit(s) from the Bureau of Engineering, Construction Inspection Division to perform test drilling prior to the submission of bids. The Contractor shall be solely responsible for all damages and repairs and restoration of surfaces disturbed during the test drilling operations.

4. MONTHLY PAYMENTS

Monthly payments will be made in accordance with Section GC-9.03, Progress Payments, of the General Conditions.

5. ADDENDA

A. Should one or more addenda be issued during the bidding period of this contract, registered perspective bidders will receive email notification that an addendum has been issued.

1. Prior to bid submission, all Addenda(s) must be acknowledge within the bidding system.

2. If you have submitted a bid prior to an Addenda being issued, once the Addendum has been issued, your submitted bid is no longer valid, you must acknowledge the Addendum and then re-submit your bid in order to have a valid bid.

B. The bidder may verify the number of addenda(s) issued by checking the Howard County Purchasing website https://www.howardcountymd.gov/procurement-contract-administration, by contacting the Howard County Office of Purchasing, telephone 410-313-6370 or the Department of Public Works, Bureau of Engineering, Utility Design Division, telephone (410) 313-2040.

6. CONSTRUCTION STAKEOUT

A. Survey benchmarks and traverse point locations are noted on the plans along with the corresponding elevations and coordinate locations. A stakeout table is shown on the plans providing coordinate locations of the various components of the proposed facility. The Contractor shall protect the benchmarks and traverse points during construction of the facility.

B. The Contractor shall perform construction stakeout using the services of a Professional Land Surveyor or Property Line Surveyor licensed in the State of Maryland (Licensed Surveyor). The Contractor shall provide all necessary lines, grades and elevations for the proposed construction and conform his work thereto. The Contractor shall furnish all necessary materials and labor for the setting of all stakes, grade-boards, lines, forms, etc., which may be required for the proper construction of the work.

C. The Contractor shall provide a stakeout of the proposed facilities as indicated in the contract documents and prepare all necessary cut sheets. The stakeout and cut sheets shall be provided at a minimum spacing of 50-foot intervals. Stakeout and cut sheets along curved alignments shall be provided at a minimum spacing of 25 foot. Cut sheets shall be prepared based on the lines and grades shown on the contract drawings; any modifications required to comply with approved laying schedules shall be the responsibility of the Contractor. Two (2) copies of the cut sheets shall be provided to the Engineer a minimum of 2 days prior to their use.

D. The Contractor shall preserve and maintain in proper position all stakes, grade-boards and lines until authorized to remove them. In case any are disturbed, the Contractor shall reset those so disturbed at his expense.

E. Any work done without cut sheets, lines, levels and instructions having been given by a Licensed Surveyor, or without the supervision of the inspector, shall not be estimated or paid for except when such work is authorized by the Engineer. Work so done may be ordered removed and replaced at the Contractor's cost.

F. Finished surfaces, in all cases, shall conform to the lines and grades as shown on the approved plans. Manhole frames, valves, boxes, etc. shall be set to conform with the finished grade of the street, or as shown on the drawings.

G. The Contractor shall define the right-of-way, easement line or limits of disturbance (L.O.D.) of the project promptly upon request.

7. FIXED PRICE CONTINGENT ITEMS

Fixed price contingent items have been included as part of this contract as shown in the proposal. The County hereby reserves the right to unlimited increases or decreases to the quantities of the fixed price items without unit price increases for the duration of this contract. Reference is made to Section 130 - Fixed Price Contingent Items of the Standard Specifications.

8. SUBSURFACE DATA

Howard County has obtained data concerning subsurface materials or conditions through the use of soundings, test pits, test borings or other methods for its own use in designing the project. The County does not guarantee the accuracy or completeness of the data, which is available to others for information purposes. Boring and test pit data included in the Specifications as an Appendix are provided for information only. The Contractor shall release the County and Engineer from any responsibility or obligation as to its accuracy or completeness or for any additional compensation for work performed under this contract due to assumptions based on use of such furnished information. The Contractor shall assume all responsibility in excavating for this project and shall not rely on subsurface information obtained directly or indirectly from the Engineer or from the County. Bidders shall make their own investigations of existing subsurface conditions. Neither the County nor the Engineer will be responsible in any way for additional compensation for excavation work performed under the contract due to Contractor's assumptions based on subsurface or test pit data prepared solely for the Engineer's use.

9. EXCAVATION

A. Excavation work under this contract is unclassified, and includes (without limitation thereto) excavation and removal of all soil, shale, rock, boulders, existing foundations, fill and every kind of subsurface condition encountered in the contract area. Excavation work under this contract also includes the removal of surface and groundwater.

B. No extra or additional compensation for excavation will be paid under this contract for work included in the bid proposal at the time of bidding.

10. CLASS 3 EXCAVATION

For the purpose of this contract, Class 3 Excavation shall pertain only to excavation below subgrade as specified in Section 1000.03.05(e) of the Standard Specifications.

11. BORROW EXCAVATION FOR TRENCH BACKFILL

A. For open cut installation of utilities within roadways, the Contractor’s attention is directed to the trench compaction requirements during backfill. The Contractor shall utilize the onsite material for backfilling trenches provided it meets the requirements in the Howard County Design Manual IV, Section 1000. Excavated material that is above the optimal moisture level and otherwise suitable will not be considered as unsuitable material. Soil that is above the optimal moisture content shall be spread, dried and used for trench refill.

B. If in the opinion of the Engineer, road site conditions do not allow adequate time for spreading and drying of excavated material that is above the optimum moisture content to achieve the required soil compaction, the Engineer may direct the Contractor to use the contingent borrow excavation for trench backfill under Section 130, Fixed Price Contingent items, of the Standard Specifications.

C. Where soil moisture tests have indicated areas of concern, a bid item for trench backfill using borrow excavation has been included in the contract. The bid item, Borrow Excavation for Trench Backfill, if included in the contract, may only be used at the

discretion and at the direction of the Engineer. The Contractor shall have no recourse should the Engineer determine that the use of the bid item, Borrow Excavation for Trench Backfill, is not appropriate.

D. Method of Measurement: Backfill using the bid item Borrow Excavation for Trench Backfill will be measured in cubic yards, based on the allowable Trench Payment Widths for the size pipe installed.

E. Basis of Payment: Borrow Excavation for Trench Backfill when measured as provided above will be paid for at the contract unit price per cubic yard, which price and payment will constitute full compensation for furnishing, excavating, hauling, depositing and compacting of the material and the disposal of unsuitable material, and clearing, grubbing, sloping, draining and reclamation of pits; the formation and compaction of embankments, backfills, subgrade, and all work and materials except as otherwise specified; the disposing of all unsuitable spoil material; and for all labor, equipment, tools and incidentals necessary to complete the item. No payment will be made for material required in excess of the allowable Trench Payment Width.

12. USE OF EXPLOSIVES

On a project where the use of explosives is allowed, the use of explosives shall be governed by the provisions of Section 7.21 of the General Conditions and Section 201.03.12, Use of Explosives, of Volume IV, Standard Specifications and Details for Construction.

13. PERMITS

A. All work shall be performed in accordance with the permit requirements of the various issuing agencies.

B. Should the use of explosives be allowed and special permits are required, it shall be the Contractor's responsibility to secure such permits.

C. Issuance of the Sediment and Erosion Control Permit shall be covered by the provisions of the Standard Specifications.

D. Should work be required within State right of way, all work therein shall be performed in accordance with Howard County's Utility Blanket Permit issued by the Maryland Department of Transportation State Highway Administration (MDOT SHA). Included in Appendix A is the MDOT SHA Utility Blanket Permit for Howard County and Utility Permit General Provisions with Acknowledgement.

E. Should a Maryland Department of the Environment National Pollution Discharge Elimination System (NPDES) permit for stormwater be required for the project, the County will acquire the permit. Prior to construction, the NPDES permit will be transferred from the County to the Contractor and the Contractor shall be responsible for meeting all requirements specified in the permit. All work shall be performed in accordance with the NPDES permit requirements. Included in Appendix B is the Fact Sheet (October 28, 2014) for the NPDES Permit and the Standard Inspection Form For the Maryland Department of the Environment General Permit For Stormwater Associated With Construction Activity.

14. UTILITY RELOCATIONS

The County will contact utility companies and make arrangements for the relocation, bracing or other protection of their facilities. The Contractor shall coordinate with the utility companies to schedule the relocating, bracing or protecting of the utility companies facilities.

15. MAINTENANCE OF TRAFFIC

A. The Contractor shall adhere to the requirements of Sections GC-7.08 and GC-7.09 of the General Conditions and all work necessary for the performance of maintenance of traffic shall be conducted in accordance with the requirements outlined therein. The Contractor's attention is also directed to the fact that the following maintenance of traffic requirements must be strictly followed.

1. No more trench than one-half the roadway width shall be open at any time, across a given street, so that traffic is always maintained.

2. Pedestrian access to all properties shall be maintained at all times.

3. Vehicular access to all properties shall be maintained at all times.

4. Traffic shall be maintained using methods, signs, barricades, lights, and incidental materials as approved in the latest manual on Uniform Traffic Control Devices and the Howard County Standard Specifications and Details for Construction and subsequent revisions. The maintenance procedures shall include, but not be limited to:
   a. Adequate warning signs.
   b. Placement of approved drum, Type I or Type II barricades every ten (10) feet between the traveled way and the construction area.

5. One lane of traffic shall remain open at all times.

6. No more than twenty-five (25) feet of trenching and no trenches crossing a roadway shall remain open between the hours 5:00 p.m. and 8:00 a.m. Any trench left open at night shall be covered with steel plates. The size and thickness of the steel plates shall be determined by the Engineer and/or Inspector in the field.

8. The Contractor shall designate a Traffic Manager meeting all requirements of the Maryland Department of Transportation, State Highway Administration and notify the Construction Inspection Division prior to any work being done. The Traffic Manager shall be responsible for the proper implementation and maintenance of the Traffic Control Plan, daily inspections during hours of operation and maintaining regular surveillance over all aspects of traffic control for pedestrian and vehicular safety.

16. OBSTRUCTED AND CLOSED ROADS

In instances where access to residential areas must be obstructed or blocked by construction crews, the Contractor shall do the following:

A. Call the Bureau of Environmental Services (410-313-6444) prior to scheduling work to ascertain the trash collection days for the area. Work shall be scheduled for non-collection days where possible.

B. If construction must be done on trash days, and a temporary road closing is contemplated, the Contractor shall be responsible for bagging and relocating trash to an accessible location.

C. Where the relocation of large amounts of trash is not practical, the Contractor shall inform the Bureau of Environmental Services at least 48 hours ahead of the proposed road closing. The Bureau of Environmental Services will make arrangements to have the trash contractor reschedule collection service to the affected area.

D. When emergencies occur and roads are blocked, contact the Bureau of Environmental Services so arrangements can be made for backup trash collection. Such notification is to be made even when blocked roads have other outlets.

17. PATCHING EXISTING PAVING

A. Patching of existing paving over water mains, water house connections, sewer mains and sewer house connections shall be measured and paid for in accordance with the Design Manual, Volume IV, Sections 1002 through 1005, 1009 and 1010.

B. The existing paving shall be repaired with bituminous concrete surface in accordance with Standard Detail G-4.01. The permanent paving section shall conform to R-2.01 or R-2.02 as applicable.

C. The Contractor shall use cold or hot mix bituminous concrete for temporary paving as noted on the plans or directed by the Engineer.

18. TESTING WATER MAINS

A. The completed water mains shall be filled with water and brought to the test pressure indicated on the plans, in the Standard Specifications or as directed by the Engineer. All testing shall be in strict accordance with Sections 1004.04, 1006, 1007 and 1008, as amended, of the Standard Specifications.

B. The Contractor shall provide all tools, materials, and labor required for the complete testing operations and any corrections required thereafter. Sufficient water to fill the completed water main one time may be obtained from existing water mains at no charge to the Contractor at locations approved by the Bureau of Utilities. All water obtained from County fire hydrants must be metered whether or not a fee is charged for the water. A fire hydrant meter must be obtained from the Bureau of Utilities with all fees and deposits paid in advance by the Contractor, which will be refunded upon return of the meter.

19. TIE-IN TO EXISTING WATER MAINS

A. Connections to the existing public water mains shall be performed in accordance with Section 1002.06 of the Howard County Design Manual Volume IV, Standard Specifications and Details for Construction.

B. The Contractor shall notify the Bureau of Utilities of Howard County, 8250 Old Montgomery Road, Columbia, Maryland 21045, in writing, at least one week prior to making any tie-in to the existing system. The Contractor shall also provide the Engineer with a detailed construction sequence for approval of any tie-in and any proposed shutdown of service or temporary service.

C. The Contractor shall not operate any water main valves on the existing water system.

D. It will be the responsibility of the Contractor to notify all water customers of the County, in writing, who will be without service, a minimum of 72 hours in advance of the scheduled shutdown. Copies of all notices shall be provided to the Engineer and shall include the proposed shutdown times and duration.

20. WATER HOUSE CONNECTIONS

All water house connection construction and installation shall be in strict accordance with Section 1004 of the Standard Specifications, and the applicable Standard Details.

21. SANITARY SEWER MANHOLES

Manhole frames and covers shall be installed flush with applicable cross slopes in paved roadways. Unless otherwise noted on the plans, the tops of all manholes shall be set in the field.

22. SEWER HOUSE CONNECTIONS

All sewer house connections shall be in strict accordance with Section 1009 of the Standard Specifications, and the applicable Standard Details.

23. COST GROUPS

The County may estimate the cost of the contract and classify it as falling within one of a series of cost groups. If the County uses this procedure, the cost group shall be taken from the latest Maryland Department of Transportation, State Highway Administration's Standard Specifications for Construction and Materials. The letter designation will be published as part of the Invitation for Bids.

24. QUALITY CONTROL AND QUALITY ASSURANCE (QA/QC) TESTING

A. The Contractor shall provide QA/QC testing in accordance with Section B – General Conditions – Howard County Design Manual Volume IV, Section 204 – Embankment and Subgrade, Section 501 – Aggregate Base Courses, and Section 503 – Asphalt Paving. This includes trench backfill, aggregate base course compaction, and asphalt density sampling and testing.

B. At the discretion of the County, the County may also choose to perform County-provided testing and/or separate, third party QA/QC testing.

C. No Measurement or payment will be made for this item; the cost shall be included in the unit prices bid for other appropriate contract pay items.

TECHNICAL SPECIFICATIONS

THIS SECTION NOT USED

SAMPLE DOCUMENTS TO BE EXECUTED UPON CONTRACT AWARD

HOWARD COUNTY, MARYLAND
PERFORMANCE BOND

Bond No. _____

_____

Principal **Business Address of Principal**

_____

Surety **Obligee**

HOWARD COUNTY, MARYLAND

a corporation of the State of _____and authorized to do business in the State of Maryland

_____

Penal Sum of Bond (express in words and figures)

_____

Date Bond Executed

Description of Contract

_____
_____
_____
_____
_____
_____
_____
_____
_____

Contract Number:

_____

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, are held and firmly bound unto the Obligee named above in the Penal Sum of this Performance Bond ("or Bond') stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents. However, where a surety is composed of corporations acting as co-sureties, we, the co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit of liabilities is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a contract with Howard County, Maryland ("County"), which contract is described and dated as shown above. The contract and all items incorporated into the Contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the plans, specifications, general provisions, special provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred to as the "Contract," which is specifically incorporated herein by reference as if fully set forth herein, including but not limited to the choice of law and forum provisions of the Contract.

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed and delivered to the County.

NOW, THEREFORE, this Performance Bond shall remain in full force and effect unless and until the following terms and conditions are met:

1. **The Principal shall well and truly perform the Contract, including all warranty or guarantee obligations, and shall discharge any and all liability for latent defects, for which the Surety shall also be liable;**

2. **The Principal and Surety shall comply with the terms and conditions of this Performance Bond;**

3. **If the Obligee notifies both the Contractor and the Surety at their addresses described in this Performance Bond that the Obligee is considering declaring the Contractor in default of the Contractor's obligations under the Contract, then, the Surety, at the Obligee's request, shall arrange a conference with the Principal and the Obligee to discuss methods of performing the Contract. If the Obligee, Principal and the Surety agree, the Principal shall be allowed a reasonable time, as determined by the rights to declare the Principal in default under the contract and terminate the Principal's right to proceed or to avail itself of any other right or remedy under the Contract;**

4. **If the Obligee declares the Contractor in default and terminates the Principal's right to proceed prior to final acceptance by the Obligee of the services (as defined in the Contract), then the Surety shall:**

    a. **Undertake to perform and complete the Contract itself through its agents or through independent contractors; or**

    b. **Obtain bids or negotiated proposals from qualified contractors acceptable to the Obligee for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the Obligee with a contractor selected with the Obligee's concurrence and acceptable to the Obligee to be secured with performance and payment bonds executed by a qualified Surety in a form acceptable to the Obligee, and pay to the Obligee the cost of completion of the Contract in excess of the Balance of the Contract price; or**

    c. **If the cost to complete the Contract is in excess of the balance of the Contract price plus the Penal Sum of the Performance Bond, then either obtain bids or negotiated proposals from qualified contractors acceptable to the Obligee for a contract for performance and completion of the contract, arrange for a contract to be prepared for execution by the Obligee with the contractor selected with the Obligee's concurrence and acceptable to the Obligee, to be secured with performance and payment bonds executed by a qualified Surety in a form acceptable to the Obligee and pay to the Obligee the excess cost of completion up to the Penal Sum of the Performance Bond as the excess costs are incurred by the Obligee; or pay to the Obligee the Penal Sum of the Performance Bond within thirty (30) days of the date when the Surety determines the cost to complete the Contract is in excess of the sum of the Penal Sum of the Performance Bond and the balance of the Contract price.**

5. **If the Surety complies with the obligations contained in paragraph 4 of this Bond, then, the Surety's liability shall be limited to the Penal sum of the Bond.**

6. **If the Surety contests the propriety of the default and termination of the Principal's right to proceed, the Surety shall, nevertheless, comply with the obligations contained in paragraph 4 of this Bond but, in that**

event, the Surety shall be entitled to exercise all of the Principal's remedies under the Contract, including but not limited to asserting any and all claims which the Principal may have.

7. The balance of the Contract price shall be the total amount payable by the Obligee to the Principal under the Contract after adjustments for any approved change orders, including allowance to the Principal of any amounts received or to be received by the Obligee in settlement of insurance or other claims for damage to which the Contractor is entitled, reduced by all payments properly made to and on behalf of the Principal under the Contract and less any deductions made by the Obligee under the Contract for any damages for which the Principal may be liable to the Obligee under the Contract.

8. If, after notice of default under the Contract and termination of the Principal's right to proceed, the Surety does not comply with the obligations contained in paragraph 4 of this Bond, then the Obligee, within fifteen (15) days after notice to the Surety, may have the remaining Contract work completed and the Surety shall be liable for all completion costs and other costs and damages that the Obligee may incur as a result of the Surety's failure to comply with the terms of this Bond.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations under the Bond and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications. Any increase in the Contract amount shall automatically result in a corresponding increase in the Penal Sum, without notice to or consent from the Surety, such notice and consent being hereby waived. Decreases in the Contract amount shall not, however, reduce the penal amount of the Bond unless specifically provided for in the change order.

The Performance Bond shall be governed by and construed in accordance with the laws of the State of Maryland exclusive of its choice of law rules and any reference herein to the Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, the Principal and the Surety have set their hands and seals to the Performance Bond. It is specifically understood and agreed that this Bond shall be a sealed instrument for all purposes. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture have signed below, each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation's seal and to attach hereto a notarized corporate resolution or power of attorney authorizing such action, and each such duly authorized representative to sign below and set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a witness. All of the above has been done as of the date of the Bond shown above.

In Presence of: **Individual Principal**

Witness

..... as to **.....(SEAL)**

Presence of: **Co-Partnership Principal**

Witness

.....(SEAL)

(Name of Co-Partnership)

..... as to **By:.....(SEAL)**

..... as to **.....(SEAL)**

..... as to **.....(SEAL)**

Corporate Principal

.....

Attest:

(Name of Corporation)

AFFIX

..... **By:..... CORPORATE**

Corporate Secretary **President** **SEAL**

.....

(Surety)

AFFIX

Attest: **(SEAL)** **By:..... CORPORATE**

SEAL

..... **Title:.....**

Signature

Bonding Agent's Name:..... **.....**

(Business Address of Surety)

Agent's Address:.....

HOWARD COUNTY, MARYLAND
PAYMENT BOND

Bond No. _____

Principal | **Business Address of Principal**

Surety | **Obligee**

HOWARD COUNTY, MARYLAND

a corporation of the State of _____and authorized to do business in the State of Maryland

Penal Sum of Bond (express in words and figures)

Date Bond Executed

Description of Contract

Contract Number:

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, being authorized to do business in Maryland, and having business addresses as shown above, are held and firmly bound unto the Obligee named above, for the use and benefit of Claimants as hereinafter defined, in the Penal Sum of this Payment Bond stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents. However, where a surety is composed of corporations acting as co-sureties, we, the co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a Contract with Howard County, Maryland, which Contract is described and dated as shown above, and incorporated herein by reference. The contract and all items incorporated into the modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the Contract shall hereinafter be referred to as the "Contract".

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed and delivered to the Obligee.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to all Claimants as hereinafter defined, for all sums justly due, labor and materials furnished, supplied, and reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject to the following conditions:

1. **A claimant is defined to be any and all of those persons supplying labor and materials in the prosecution of the work provided for in the Contract entitled to the protection provided by Sec. 17-101, et seq., State Finance and Procurement Article of the Annotated Code of Maryland ("Maryland Little Miller Act").**

2. **The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every Claimant as herein defined, who has not been paid in full may, pursuant to and when in compliance with the provisions of the Maryland Little Miller Act, sue on this Bond for the use of such Claimant, prosecute the suit to final judgment for such sum or sums as may be justly due Claimant and have execution thereon. The Obligee shall not be liable for the payment of any costs or expenses of any such suit.**

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this Payment Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

This Payment Bond shall be governed by and construed in accordance with the laws of the State of Maryland exclusive of its choice of laws rules and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Payment Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as a sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture have signed below, each member has set forth below the name of the partnership or joint venture, and each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: The corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation's seal and to attach hereto a notarized corporate resolution or power of attorney authorizing such action, and each such duly authorized representative to sign below and set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a witness. All of the above has been done as of the date of this Bond shown above.

In Presence of:
Witness

..... as to

Individual Principal

.....(SEAL)

In Presence of:
Witness

..... as to
..... as to
..... as to

Co-Partnership Principal

.....(SEAL)
(Name of Co-Partnership)

By:.....(SEAL)
.....(SEAL)
.....(SEAL)

Corporate Principal

.....

Attest:

.....
Corporate Secretary

(Name of Corporation)

By:..... AFFIX CORPORATE SEAL
President

(Surety)

Attest: (SEAL)

.....
Signature

Bonding Agent's Name:.....

Agent's Address:.....

By:..... AFFIX CORPORATE SEAL

Title:.....

.....
(Business Address of Surety)

HOWARD COUNTY, MARYLAND
CONTRACTOR AGREEMENT
CA-XX-20XX

THIS AGREEMENT ("Agreement"), is made by and between **[INSERT NAME OF CONTRACTOR, INSERT CONTRACTOR'S ADDRESS – ALL CAPS AND BOLD]**, Insert Phone #] ("the Contractor"), and **HOWARD COUNTY, MARYLAND**, ("the County") as a result of Invitation for Bids No. _____-_____.

RECITALS

This Agreement is subject to all the conditions, covenants, stipulations, terms and provisions contained in the Contract Documents as described in Paragraph 6 of this Agreement. The Contractor has been notified of award, for a sum equal to the aggregate cost of the work, labor, materials, and supplies done or furnished, at the prices and rates respectively named in the attached proposal (also referred to as Contractor's "Bid").

This Agreement fulfills the conditions of the award, which provides that a formal contract should be executed by and between the Contractor and the County evidencing the terms of the award.

AGREEMENTS

1. The Contractor covenants and agrees with the County that it will well and faithfully construct the project known as [Insert Contract Title] , in accordance with each and every one of the conditions, covenants, stipulations, terms and provisions contained in the Contract Documents, at and for a sum equal to the aggregate cost of the work, labor, materials, and supplies done and furnished at the prices and rates respectively named in the Contractor's Bid. The Contractor further covenants and agrees that it will well and faithfully comply with and perform each and every obligation imposed upon him by the Contract Documents, or the terms of the award.

2. The Contractor covenants and agrees that its obligations pursuant to the Contract Documents include but are not limited to the furnishing of all material, labor, equipment, supplies, plant, tools, and all other services, facilities and expenses necessary for the full operational performance and completion of the requirements of the Contract Documents.

3. The County agrees that it will pay the Contractor, when due and payable under the terms of said Contract Documents and of said award, the sums set forth in Contractor's proposal, and the Contractor agrees that it will well and faithfully comply with and perform each and every obligation imposed upon it by this Agreement.

OPTION A:
4. In no event shall the total compensation paid to the Contractor under this Agreement exceed the sum of $_____ (Dollars) during the entire term of this Agreement.

OPTION B: [CHOOSE THIS OPTION FOR PROJECT SPECIFIC AGREEMENTS TO ACCOMMODATE DISCRETIONARY FUNDS.]
4. In no event shall the compensation paid to the Contractor exceed the budget appropriation during the term of this Agreement.

5. Contractor's Representations and Warranties: The Contractor hereby represents the following:

5.1 [USE FOR CORPORATIONS, LIMITED OR GENERAL PARTNERSHIPS OR LIMITED LIABILITY COMPANIES; DELETE IF CONTRACTOR IS AN INDIVIDUAL] The Contractor is a [corporation][limited partnership][general partnership][limited liability company], duly formed and validly existing under the laws of the State of [INSERT STATE OF INCORPORATION FROM SDAT] and is qualified to do business and is in good standing [and licensed] in the State of Maryland.

5.2 [USE FOR CORPORATIONS, LIMITED OR GENERAL PARTNERSHIPS OR LIMITED LIABILITY COMPANIES; DELETE IF CONTRACTOR IS AN INDIVIDUAL] The Contractor has the power and authority to consummate the obligations and responsibilities contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance required under this Agreement.

5.3 The person executing this Agreement for the Contractor warrants that he/she is duly authorized by the Contractor to execute this Agreement on the Contractor's behalf.

5.4 SELECT ONE OF THE FOLLOWING OPTIONS: A. [The services to be provided under this Agreement shall be performed competently and with due care, and in accordance with all applicable laws, codes, ordinances and regulations and licensing requirements.] OR B. [The goods to be delivered shall comply with the implied warranties of merchantability and fitness for use, and all express warranties created by this Agreement.]

6. Contract Documents. The Contractor and County agree that the following enumerated documents, collectively referred to as Contract Documents, are all essential documents of this Agreement and are made a part hereof as if fully set forth herein:

6.1 Contractor Agreement
6.2 General Conditions for Construction and Applicable Addenda
6.3 Proposal and Special Provisions
6.4 Instructions to Bidders
6.5 Bid Form
6.6 Performance Bond No. _____
6.7 Labor and Materials Payment Bond No. _____
6.8 All Drawings and Specifications
6.9 All Addenda duly issued prior to submission of Bids
6.10 All Change Orders duly issued
6.11 Any amendments to the Contract duly executed by both parties, and
6.12 Additional documents listed on any Addendum attached hereto.

7. Ownership of Goods. All finished or unfinished work, reports, or goods that are the subject of this Agreement; including any licenses or consents acquired by the Contractor for performance hereunder, shall be and shall remain the property of the County.

8. Term. All proposed work shall be completed within 120 calendar days from notice to proceed.

9. Ethics.

9.1 The Contractor certifies that the officer of the corporation who is executing this Contract has read and understands Exhibit I, entitled Howard County Charter and Code References to Ethics, which contains the provisions of Section 901(a) of the Howard County Charter dealing with conflicts of interest and Section 22.204 of the Howard County Code dealing with conflicts of interest.

9.2 The Contractor certifies that he/she has (1) not been a party to an agreement to bid a fixed or uniform price; (2) not offered nor will offer any gratuity to any county official or employee; and (3) not violated any of the fair employment provisions of Code Sec. 4.119 Ethics and Fair Employment Practices detailed in Exhibit I.

9.3 If applicable, the Contractor has complied with Sections 14-101 through 14-108 of the Election Law Article of the Annotated Code of Maryland, which requires that every person that enters into, during any 24 month period, one or more contracts, leases, or other agreements with the State, a county, or an incorporated municipality, or their agencies, involving a cumulative consideration of at least $200,000 (Two Hundred Thousand, Dollars) or more, shall file with the State Administrative Board of Election Laws a statement disclosing contributions to a candidate, or a series of such contributions, in a cumulative amount in excess of $500 (Five Hundred Dollars) made during the reporting period to a candidate for elective office in any primary or general election.

10. Governing Law.

10.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.

10.2 This Agreement is made and entered into in Maryland and is to be construed under the laws of Maryland. As to the Contractor, this Agreement is intended to be a contract under seal and a specialty.

11. Indemnification.

11.1 The Contractor shall indemnify, hold harmless and defend the County, its employees, agents and officials from any and all claims, suits, or demands including reasonable attorney fees which may be made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of this Agreement by the Contractor or anyone under agreement with the Contractor to perform duties under this Agreement. The Contractor shall not be responsible for acts of negligence or willful misconduct committed by the County, its employees, agents and officials.

11.2 Any property or work to be provided by the Contractor under this Agreement will remain at the Contractor's risk until written acceptance by the County; and the Contractor will replace, at the Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.

11.3 In the event that there is a conflict between the indemnification provision set forth in the Purchase Order Terms and Conditions and/or the General Conditions of the solicitation and/or this Agreement, the terms set forth in the Agreement shall govern.

12. Insurance. The Contractor shall be required to provide insurance required by the County pursuant to the insurance requirements specified in Section A of the IFB, including naming "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured. The Contractor shall maintain the insurance coverages required by the County while this Agreement is in force and provide documentation of such insurance in a form satisfactory to the County. Such documentation may, in the discretion of the County, be in the form of binders or declarations from the insurance company.

13. American Manufactured Goods Required for Public Works.

13.1 The Contractor shall comply with Section 14-416 of the Maryland State Finance and Procurement Article which requires a Contractor or subcontractor to use or supply American Manufactured goods in the performance of a contract for (a) constructing or maintaining a public work; or (b) buying or manufacturing machinery or equipment that is to be installed at a public work site, as the same may be amended from time to time.

13.2 This section does not apply: (a) if the County determines that: (i) the price of the American manufactured goods exceeds the price of a similar manufactured good that is not manufactured in the United States by an unreasonable amount; (ii) the item or a similar item is not manufactured or available for purchase in the United States in reasonably available quantities; (iii) the quality of the item or a similar item manufactured in the United States is substantially less than the quality of a comparably priced, similar, and available item that is not manufactured in the United States; or (iv) the procurement of a manufactured good would be inconsistent with the public interest; or (b) to emergency life safety and property safety goods.

13.3 The Contractor shall certify to the County whether the offered goods and/or services are provided in the United States.

EXHIBIT I

HOWARD COUNTY CHARTER AND CODE REFERENCES TO ETHICS

Charter Section 901. Conflict of Interest.

(a) **Prohibitions**. No officer or employee of the County, whether elected or appointed, shall in any manner whatsoever be interested in or receive any benefit from the profits or emoluments of any contract, job, work, or service for the County. No such officer or employee shall accept any service or thing of value, directly or indirectly, from any person, firm or corporation having dealings with the County, upon more favorable terms than those granted to the public generally, nor shall he receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable by the County, or by any person in connection with any dealings with the County, or by any person in connection with any dealings with or proceedings before any branch, office, department, board, commission or other agency of the County. No such officer or employee shall directly or indirectly be the broker or agent who procures or receives any compensation in connection with the procurement of any type of bonds for County officers, employees or persons or firms doing business with the County. No such officer or employee shall solicit or accept any compensation or gratuity in the form of money or otherwise for any act or omission in the course of his public work; provided, however, that the head of any department or board of the County may permit an employee to receive a reward publicly offered and paid for, for the accomplishment of a particular task.

(b) **Rules of construction; exceptions by Council**. The provisions of this Section shall be broadly construed and strictly enforced for the purpose of preventing officers and employees from securing any pecuniary advantages, however indirect, from their public associations, other than their compensation provided by law.

In order, however, to guard against injustice, the Council may, by resolution, specifically authorize any County officer or employee to own stock in any corporation or to maintain a business in connection with any person, firm or corporation dealing with the County, if, on full public disclosure of all pertinent facts to the County Council by such officer or employee, the Council shall determine that such stock ownership or connection does not violate the public interest.

The County Council may, by ordinance, delegate to the Howard County Ethics Commission the power to make such determinations and to authorize the ownership or connection. Any ordinance which delegates this power shall provide for procedures including a public hearing, and shall establish criteria for determining when the ownership or connection does not violate the public interest.

(c) **Penalties**. Any officer or employee of the County who willfully violates any of the provisions of this Section shall forfeit his office. If any person shall offer, pay, refund or rebate any part of any fee, commission, or other form of compensation to any officer or employee of the County in connection with any County business or proceeding, he shall, on conviction, be punishable by imprisonment for not less than one or more than six months or a fine of not less than $100.00 or more than $1,000.00, or both. Any contract made in violation of this Section may be declared void by the Executive or by resolution of the Council. The penalties in this Section shall be in addition to all other penalties provided by law.

Code Section 4.119. Ethics and Fair Employment Practices.

(a) **Conflict of Interest**. Bidders, vendors, purchasers and county employees involved in the purchasing process shall be governed by the provisions of the Howard County Charter and Howard County law regarding conflict of interest. No vendor shall offer a gratuity to an official or employee of the county. No official or employee shall accept or solicit a gratuity.

(b) **Discouragement of Uniform Bidding**.

(1) It is the policy of the county to discourage uniform bidding by every possible means and to endeavor to obtain full and open competition on all purchases and sales.

(2) No bidder may be a party with other bidders to an agreement to bid a fixed or uniform price.

(3) No person may disclose to another bidder, nor may a bidder acquire, prior to the opening of bids, the terms and conditions of a bid submitted by a competitor.

(c) **Fair Employment Practices**

(1) Bidders, vendors and purchases may not engage in unlawful employment practices as set forth in Subtitle 2 "Human Rights" of Title 12 of the Howard County Code, Subtitle 6 of Title 20 of the State Government Article, Annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964 as amended. Should any bidders, vendors or purchasers engage in such unlawful employment practices, they shall be subject to being declared irresponsible or being debarred pursuant to the provisions of this subtitle.

(2) The Howard County Office of Human Rights shall notify the county purchasing agent when any bidder is found, by a court of competent jurisdiction, to have engaged in any high unlawful employment practices.

(3) If any bidder has been declared to be an irresponsible bidder for having engaged in an unlawful employment practice and has been debarred from bidding pursuant to this subtitle, the Howard County Office of Human Rights shall review the employment practices of such bidder after the period of debarment has expired to determine if violations have been corrected and shall, within 30 days, file a report with the county purchasing agent informing the agent of such corrections before such bidder can be declared to be a responsible bidder by the County Purchasing agent.

(4) Payment of subcontractors. All contractors shall certify in writing that timely payments have been made to all subcontractors supplying labor and materials in accordance with the contractual arrangements made between the contractor and the subcontractors.

No contractor will be paid a second or subsequent progress payment or final payment until such written certification is presented to the county purchasing agent.

Code Section 22.204. - Prohibited Conduct and Interests.

(a) **Participation Prohibitions.**

(1) Except as permitted by Commission regulation or opinion, an official or employee may not participate in:

(i) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision of the matter, any matter in which, to the knowledge of the official or employee, the official or employee or a qualified relative of the official or employee has an interest.

(ii) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision with respect to the matter, any matter in which any of the following is a party:

a. A business entity in which the official or employee has a direct financial interest of which the official or employee may reasonably be expected to know;

b. A business entity for which the official, employee, or a qualified relative of the official or employee is an officer, director, trustee, partner, or employee;

c. A business entity with which the official or employee or, to the knowledge of the official or employee, a qualified relative is negotiating or has any arrangement concerning prospective employment;

d. If the contract reasonably could be expected to result in a conflict between the private interests of the official or employee and the official duties of the official or employee, a business entity that is a party to an existing contract with the official or employee, or which, to the knowledge of the official or employee, is a party to a contract with a qualified relative;

e. An entity, doing business with the County, in which a direct financial interest is owned by another entity in which the official or employee has a direct financial interest, if the official or employee may be reasonably expected to know of both direct financial interests; or

f. A business entity that:

1. The official or employee knows is a creditor or obligee of the official or employee or a qualified relative of the official or employee with respect to a thing of economic value; and

2. As a creditor or obligee, is in a position to directly and substantially affect the interest of the official or employee or a qualified relative of the official or employee.

(2) A person who is disqualified from participating under paragraph 1. of this subsection shall disclose the nature and circumstances of the conflict and may participate or act if:

(i) The disqualification leaves a body with less than a quorum capable of acting;

(ii) The disqualified official or employee is required by law to act; or

(iii) The disqualified official or employee is the only person authorized to act.

(3) The prohibitions of paragraph 1 of this subsection do not apply if participation is allowed by regulation or opinion of the Commission.

(b) **Employment and Financial Interest Restrictions.**

(1) Except as permitted by regulation of the commission when the interest is disclosed or when the employment does not create a conflict of interest or appearance of conflict, an official or employee may not:

(i) Be employed by or have a financial interest in any entity:

a. Subject to the authority of the official or employee or the County agency, board, commission with which the official or employee is affiliated; or

b. That is negotiating or has entered a contract with the agency, board, or commission with which the official or employee is affiliated; or

(ii) Hold any other employment relationship that would impair the impartiality or independence of judgment of the official or employee.

(2) The prohibitions of paragraph (1) of this subsection do not apply to:

(i) An official or employee who is appointed to a regulatory or licensing authority pursuant to a statutory requirement that persons subject to the jurisdiction of the authority be represented in appointments to the authority;

(ii) Subject to other provisions of law, a member of a board or commission in regard to a financial interest or employment held at the time of appointment, provided the financial interest or employment is publicly disclosed to the appointing authority and the Commission;

(iii) An official or employee whose duties are ministerial, if the private employment or financial interest does not create a conflict of interest or the appearance of a conflict of interest, as permitted and in accordance with regulations adopted by the Commission; or

(iv) Employment or financial interests allowed by regulation of the Commission if the employment does not create a conflict of interest or the appearance of a conflict of interest or the financial interest is disclosed.

(c) **Post-Employment Limitations and Restrictions.**

(1) A former official or employee may not assist or represent any party other than the County for compensation in a case, contract, or other specific matter involving the County if that matter is one in which the former official or employee significantly participated as an official or employee.

(2) For a year after the former member leaves office, a former member of the County Council may not assist or represent another party for compensation in a matter that is the subject of legislative action.

(d) **Contingent Compensation.** Except in a judicial or quasi-judicial proceeding, an official or employee may not assist or represent a party for contingent compensation in any matter before or involving the County.

(e) **Use of Prestige of Office.**

(1) An official or employee may not intentionally use the prestige of office or public position for the private gain of that official or employee or the private gain of another.

(2) This subsection does not prohibit the performance of usual and customary constituent services by an elected official without additional compensation.

(f) **Solicitation and Acceptance of Gifts.**

(1) An official or employee may not solicit any gift.

(2) An official or employee may not directly solicit or facilitate the solicitation of a gift, on behalf of another person, from an individual regulated lobbyist.

(3) An official or employee may not knowingly accept a gift, directly or indirectly, from a person that the official or employee knows or has the reason to know:

(i) Is doing business with or seeking to do business with the County office, agency, board or commission with which the official or employee is affiliated;

(ii) Has financial interests that may be substantially and materially affected, in a manner distinguishable from the public generally, by the performance or nonperformance of the official duties of the official or employee;

(iii) Is engaged in an activity regulated or controlled by the official's or employee's governmental unit; or

(iv) Is a lobbyist with respect to matters within the jurisdiction of the official or employee.

(4) (i) Subsection (4)(ii) does not apply to a gift:

a. That would tend to impair the impartiality and the independence of judgment of the official or employee receiving the gift;

b. Of significant value that would give the appearance of impairing the impartiality and independence of judgment of the official or employee; or

c. Of significant value that the recipient official or employee believes or has reason to believe is designed to impair the impartiality and independence of judgment of the official or employee.

(ii) Notwithstanding paragraph (3) of this subsection, an official or employee may accept the following:

a. Meals and beverages consumed in the presence of the donor or sponsoring entity;

b. Ceremonial gifts or awards that have insignificant monetary value;

c. Unsolicited gifts of nominal value that do not exceed $20.00 in cost or trivial items of informational value;

d. Reasonable expenses for food, travel, lodging, and scheduled entertainment of the official or the employee at a meeting which is given in return for the participation of the official or employee in a panel or speaking engagement at the meeting;

e. Gifts of tickets or free admission extended to an elected official to attend a charitable, cultural, or political event, if the purpose of this gift or admission is a courtesy or ceremony extended to the elected official's office;

f. A specific gift or class of gifts that the Commission exempts from the operation of this subsection upon a finding, in writing, that acceptance of the gift or class of gifts would not be detrimental to the impartial conduct of the business of the County and that the gift is purely personal and private in nature;

g. Gifts from a person related to the official or employee by blood or marriage, or any other individual who is a member of the household of the official or employee; or

h. Honoraria for speaking to or participating in a meeting, provided that the offering of the honorarium is not related, in any way, to the official's or employee's official position.

(g) **Disclosure of Confidential Information.** Other than in the discharge of official duties, an official or employee may not disclose or use confidential information, that the official or employee acquired by reason of the official's or employee's public position and that is not available to the public, for the economic benefit of the official or employee or that of another person.

(h) **Participation in Procurement.**

(1) An individual or a person that employs an individual who assists a County, agency or unit in the drafting of specifications, an invitation for bids, or a request for proposals for a procurement, may not submit a bid or proposal for that procurement, or assist or represent another person, directly or indirectly, who is submitting a bid or proposal for the procurement.

(2) The Commission may establish exemptions from the requirements of this section for providing descriptive literature, sole source procurements, and written comments solicited by the procuring agency.

APPENDICES

APPENDIX A

Maryland Department of Transportation State Highway Administration Utility Blanket Permit for Howard County and Utility Permit General Provisions with Acknowledgement

THE MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION (MDOT SHA)

District # 7
5111 Buckeystown Pike
Frederick, MD 21704
800-635-5119 or 301-624-8116

Utility Blanket Permit for the following Counties:
Carroll Frederick Howard

☑ **Aerial** ☑ **Surface** ☑ **Underground**

Permit Number: SHA-7-BP-0009-24

Issue Date : 3/7/2024 **Expiration Date :** 3/7/2026

PERMISSION IS HEREBY GRANTED TO:

Permitee:
HOWARD COUNTY BUREAU OF UTILITIES
8250 Old Montgomery RD
Columbia, MD 21045

Attention:
Ross Beschner
Phone#: (410) 313-4974
Email: rbeschner@howardcountymd.gov

Description of Work: To perform routine maintenance of existing facilities, tree and brush trimming operations and emergency operations to restore or maintain essential utility services within the State right-of-way.

So far as the Maryland Department of Transportation State Highway Administration (MDOT SHA) has the right and power to grant same, to enter upon the MDOT SHA's Right-of-Way to perform Emergency Repairs, Minor Maintenance, and Service to existing Utility Name facilities. Interstate routes require a separate Utility Permit unless it is an Emergency.

The following operations listed below are covered under this Blanket Permit:

1. Performing emergency utility facility repairs, including roadway excavation and restoration, necessary to restore and maintain essential utility services and any associated work thereafter. An Emergency is defined as a situation resulting from a sudden unexpected event or incident which presents a clear and imminent danger requiring immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services and any associated work thereafter.

2. The Permittee shall possess the ability to respond to a highway emergency within 2 hours of notification.

3. Minor maintenance defined as activities that are routine, low in cost, straightforward, and expedient to correct which are normally accomplished as part of the annual operation and maintenance. Such activities would include customer service work, pole attachments, and lighting repairs.

4. Minor service and/or repair of facilities, not requiring excavation activities within the roadway, i.e. removal or replacement of underground, surface, or aerial facilities, except during an emergency as defined above.

5. The in-kind removal and replacement of defective or damaged utility facilities.

6. Tree trimming required to access and maintain utility facilities.

7. Installing, replacing, removing, and maintaining streetlights and pole anchors attached to existing utility poles, and any make ready work on existing utility poles.

8. Access to facilities in existing manholes, handholes, structures, and vaults for repairs or service.

9. Conducting utility field investigations, inspections, designations, and surveys.

10. This permit is governed in strict compliance with the following Special Provisions as well as the Utility Permit General Provisions.

SPECIAL PROVISIONS

- ✓ The permittee is to notify the MDOT SHA District 7 Utility Engineer (DUE) for emergency work at 301-624-8115 during normal business hours or the State Operations Center (SOC) at 800-543-2515 after 3:30pm. normal business hours. The SOC will notify the DUE for after hour emergencies.

- ✓ All traffic control is to be performed in strict accordance with MDOT SHA Traffic Control Standards.

- ✓ Roadway excavation is strictly prohibited except when performing emergency repairs to restore or maintain essential utility services.

- ✓ Daily Traffic Control schedules are to be submitted to the SHA District 7 Office 48 hours prior to performing any lane or shoulder closure exceeding 15 minutes in duration.

- ✓ An Additional “Traffic Control Permit” is required for this permit. Please contact District 7 Traffic at 301-624-8141 for more information.

- ✓ Utility pole replacements or relocations are to be performed within one foot of the existing pole. In no case, shall replacement poles be installed at a distance closer to the edge of the roadway than the existing pole replaced.

- ✓ Replacement or relocated utility poles, guy anchors, and equipment may not obstruct sidewalks or bikeways.

NOTIFICATIONS

1. The permittee must notify the MDOT SHA District Utility Engineer’s Office at 301-624-8115 48 hours prior to starting any non-emergency work allowed by this Blanket Permit

2. If excavation is required, the permittee must notify Miss Utility at 1-800-257-7777 for any emergency work immediately and any non-emergency within 48 hours in advance of starting any work allowed by this permit

3. All other notifications as required per the Utility Permit General Provisions.

THIS BLANKET PERMIT IS ISSUED WITH THE REQUIREMENT THAT IT WILL BE ENFORCED BY THE UTILITY PERMIT GENERAL PROVISIONS, SPECIAL PROVISIONS, AND THE PERMIT REGULATIONS.

A COPY OF THIS BLANKET PERMIT ALONG WITH THE UTILITY PERMIT GENERAL PROVISIONS MUST BE FOUND ON THE JOB SITE AT ALL TIMES.

Anthony Cregger For

By: _____
ANDREW RADCLIFFE

District Engineer
MDOT State Highway Administration

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

ACKNOWLEDGEMENT
of the
MDOT SHA UTILITY PERMIT GENERAL PROVISIONS
Issued: January 1, 2024
By

Howard County Bureau of Utilities
Utility Company

8250 Old Montgomery Road
Address

Address

Columbia | MD | 21045
City | State | Zip

Howard Co. Bureau of Utilities intends to request permission from the Maryland Department of Transportation State Highway Administration (MDOT SHA) to perform limited work within various state right of ways by submitting Utility Permit Application Packages to the appropriate District Offices for Utility Construction Permits, Utility Relocation Permits (for MDOT SHA projects), Utility Blanket Permits (Tree Trimming, Utility Infrastructure Maintenance/Emergency Work) and/or Utility Permit Extensions, (hereinafter collectively referred to as Individual Work Order Permits).

It is hereby agreed and understood that:

- This acknowledgement form shall be construed to indicate that Howard Co. Bureau of Utilities has downloaded the Utility Permit General Provisions from MDOT SHA's website and accepts the terms and specifications outlined therein.
- A copy of the Utility Permit General Provisions shall be attached to each and every Individual Work Order Permit along with any attachments, plans and addenda in order to constitute a Complete Authorized Utility Permit.
- The Utility Permit General Provisions by itself or any Individual Work Order Permit by itself DOES NOT grant permission to Howard Co. Bureau of Utilities to work within MDOT SHA rights- of-ways.
- The issuance of any Complete Authorized Utility Permit shall be construed to indicate complete acceptance of the terms and specifications outlined therein.
- Any proposed work performed by Howard Co. Bureau of Utilities shall be performed and completed in accordance with all applicable County, State, and Federal laws, rules, regulations and ordinances, and subject to the inspection and control of the MDOT SHA.

I hereby certify that I have authorization to sign this Acknowledgement Form and that Howard Co. Bureau of Utilities agrees to all the above terms and conditions.

Ross A. Beschner — Print Name
Signature
March 6, 2024 — Date

Telephone Number: 410-313-4974 Email: rbeschner@howardcountymd.gov

SHA Control No. P01809 X-1

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

UTILITY PERMIT GENERAL PROVISIONS
Effective January 1, 2024

001.01 DESCRIPTION. The Maryland Department of Transportation State Highway Administration (MDOT SHA) issues Utility Permits to only those companies, local governments, and municipalities that have been approved by the MDOT SHA as an Authorized Public Utility. The Permittee shall not perform any work within MDOT SHA rights-of-ways without a Complete Authorized Utility Permit for each location as per § 8-646 of the Transportation Articles of the Annotated Code of Maryland. The MDOT SHA issues Utility Permits in two (2) parts which, when combined, comprise a Complete Authorized Utility Permit. (hereinafter referred to as Complete Authorized Utility Permit).

001.01.01 Part 1–Utility Permit General Provisions.

(a) These Utility Permit General Provisions contain the general requirements, conditions, procedures, and contact information required for all communications of activities performed within MDOT SHA right-of-way (ROW).

(b) The Permittee shall download, sign, date, and return (to the appropriate District Office) the Utility Permit General Provisions Acknowledgement Form acknowledging the Permittee's acceptance to abide by the Utility Permit General Provisions' terms and conditions.

001.01.02 Part 2–Individual Work Order Permits.

(a) Utility Construction Permits, Utility Relocation Permits (for MDOT SHA projects), Utility Blanket Permits, and Utility Permit Extensions, hereinafter referred to Individual Work Order Permits, grants the Permittee permission to perform limited work within various MDOT SHA ROW when combined with these Utility Permit General Provisions.

(1) **Utility Construction Permits** are issued for the installation, construction, and relocation; significant removal, replacement, or adjustment; and **major maintenance** of utility infrastructure as needed and requested by the Permittee.

Major Maintenance is any maintenance that is beyond the normal, routine upkeep of the facility; beyond cyclical or planned maintenance; new service installations; any activity requiring excavations except in emergency situations; and the removal or replacement of poles. Major maintenance activities include any scheduled preventative maintenance involving excavations except in emergency situations, including test pitting in non-emergency situations, and require a Utility Construction Permit.

(2) **Utility Relocation Permits** are issued for the installation, construction, removal, relocation, replacement and adjustment of utility infrastructure as required by the MDOT SHA. Utility Relocation Permits are issued specifically in connection with MDOT SHA projects.

(3) **Utility Blanket Permits** are issued for **minor maintenance** of utility infrastructure and utility work required **in emergency situations**. A Utility Blanket Permit is issued biennially from the appropriate districts for emergencies and minor maintenance activities, so the Permittee would not need to submit numerous individual site-specific Utility Permit Application Packages; however, this does not exempt the Permittee from obtaining required Traffic Control Permits in non-emergency situations.

Minor Maintenance is maintenance required to keep an existing utility facility in a good state of repair without adding to its physical makeup or changing its physical capacity. **Minor Maintenance** activities are routine, low in cost, straightforward, and expedient to correct which are normally accomplished as part of the annual operation and maintenance. Such activities covered in the Utility Blanket Permit would include existing customer service work, overhead work and pole attachments, lighting repairs, and splicing cables or other work in existing manholes/structures and vaults. Tree trimming activities required to access and maintain the Permittee's facilities are also covered in the Utility Blanket Permit.

Emergency is a situation resulting from a sudden, unexpected event or incident which presents a clear and imminent danger requiring immediate action to prevent or mitigate loss or damage to life, health, property or essential public services (including interruption of utility services). Emergency work is any activity, including roadway excavation, to make necessary temporary and permanent repairs to existing or potential unsafe conditions; and includes any work associated with the Emergency thereafter, including roadway excavation, to temporarily and permanently repair/restore essential public services and property, including MDOT SHA rights-of-ways. Emergency work is covered in the Utility Blanket Permit.

(4) **Utility Permit Extensions** are issued for the extension of previously issued Utility Construction Permits and/or Utility Relocation Permits when the proposed utility work will not be completed by the expiration date of said permits. Utility Permit Extensions apply to only Utility Construction Permits and Utility Relocation Permits.

Utility Blanket Permits shall require the issuance of a new permit upon their expiration.

(b) Individual Work Order Permits are issued by the appropriate district office under the signature of the District Engineer (or their approved designee).

(c) **Part 1 and Part 2 combined.** The Permittee shall attach both parts of the Utility Permit together in order to constitute a Complete Authorized Utility Permit prior to beginning any work within the MDOT SHA's ROW.

001.01.03 Utility Access. Individual Work Order Permits alone or the Utility Permit General Provisions alone DOES NOT grant permission to the Permittee to work within the MDOT SHA ROW. Only a Complete Authorized Utility Permit grants permission to the Permittee access to the MDOT SHA ROW to perform the Permittee's work in accordance with and as defined in the Complete Authorized Utility Permit.

001.02 MATERIALS. Not Applicable.

001.03 CONSTRUCTION.

001.03.01 GENERAL CONDITIONS.

(a) **Acceptance of terms and specifications**. It is agreed and understood that the issuance of any Complete Authorized Utility Permit will be construed to indicate complete acceptance of the terms and specifications outlined herein.

(b) **Work**. All work shall be performed in accordance with the provisions of any Complete Authorized Utility Permit.

(c) **Right to modify**. In the event of a safety concern, differing site conditions, design errors or omissions, restoration concerns, changes in laws, regulations or requirements, or any other unforeseen changes or issue which might affect any permit or permit provision, the MDOT SHA reserves the right to modify any permit or permit provision at any time to ensure safety, compliance, and restoration is acceptable to the MDOT SHA Standard Specifications. The Permittee will first be provided the opportunity to demonstrate its compliance with the permit or address the modification before any permit, or permit provision, is modified.

(d) **Unsafe operations**. In the event the MDOT SHA determines that any operation is detrimental to the safe operation of the (State) highway system, the MDOT SHA will notify the Permittee. The Permittee shall suspend its operation(s) and then work with the MDOT SHA in good faith to determine if and/or how the Permittee's operation(s) can be continued or resumed in a manner that is not detrimental to the safe operation of the (State) highway system. If the Permittee's operation(s) cannot be continued or resumed in a manner that is of a safe operation of the (State) highway system, the MDOT SHA reserves the right to halt the Permittee's operation(s).

(e) **Right to revoke**. In the event the Permittee's fails to comply with the terms of a Complete Authorized Utility Permit, the MDOT SHA will notify the Permittee of its non-compliance. The Permittee will then be provided the opportunity to cure its non-compliance before any permit, or permit provision, is modified or revoked. If the Permittee fails to cure its non-compliance, the MDOT SHA reserves the right to revoke the Complete Authorized Utility Permit.

(f) **Permission**. Permission, when granted, to place utility facilities within the limits of MDOT SHA ROW is revocable at any time by the MDOT SHA. Any such revocation will have no bearing on any other facility of the Permittee under a franchise authorized under the Annotated Code of Maryland, Public Utilities Article.

(g) **Complete Authorized Utility Permit-job site**. A copy of the Complete Authorized Utility Permit must be on the job site at all times during the performance of all work identified in the Individual Work Order Permits in order that the Permittee's personnel and/or the Permittee's contractor is in a position to comply with the requirements of the Complete Authorized Utility Permit. The Procurement Officer shall have the option of stopping work on MDOT SHA projects where the Permittee's representative does not

have a copy of the Complete Authorized Utility Permit on the job site and/or is not familiar with the contents of the permit.

(h) **Property interest**. Permits issued by the MDOT SHA do not convey any property interest to the Permittee or to any successor of the Permittee.

(i) **Future road improvements**. In the event future road improvements require the relocation, adjustment, and/or removal of facilities installed under any Complete Authorized Utility Permit, all costs associated with the relocation, adjustment, and/or removal of said facilities shall be borne by the Permittee.

(j) **Non-compliance**. In the event that the Federal Highway Administration (FHWA) or any other federal authority with jurisdiction over the subject matter determines that a specific use of the MDOT SHA ROW (or the terms of such use) noncompliant with applicable federal authority, the MDOT SHA shall have the right to direct the Permittee to take the necessary actions to bring any such use (or the terms of such use) into compliance with the applicable federal authority without assuming the liability of any user/Permittee of such ROW. The Permittee will be provided with information on the authority's determination. The Permittee shall provide maximum cooperation to the MDOT SHA and any such Federal authority to assure prompt compliance is achieved.

(k) **Hold harmless and insurance requirements**. Hold Harmless, Indemnification, and Insurance provisions (as required by Section GP-7.13 of the most current "MDOT SHA Standard Specifications for Construction and Materials, as may be revised from time to time) are hereby required of the Permittee. The Permittee covenants and agrees to require all contractors and subcontractors or other parties that the Permittee uses to perform work within any MDOT SHA rights-of-way, including both MDOT SHA controlled access rights-of-way and MDOT SHA secondary roads (collectively, "ROW") to abide by the same provisions and requirements. The State of Maryland, the Maryland Department of Transportation and the State Highway Administration ("MDOT SHA") must be listed as additional named insureds on all insurance policies. Self-Insured companies may provide a self-insurance letter. Certificates and letters of self-insurance must be mailed to the State Highway Administration, Attn. Statewide Utility Engineer, Office of Construction, 7450 Traffic Drive, Hanover, MD 21076 prior to the commencement of any work within MDOT SHA ROW.

(l) **Liability requirements**. The Permittee shall be responsible for, defend (at the State's option), indemnify, and hold harmless the State of Maryland, MDOT, and MDOT SHA, their respective members, officers, agents, and employees, against and from any and all liability or claim of liability for bodily injury (including death) or property damage (including reasonable attorneys' fees) related to involving or arising, in whole or in part from any act or failure to act or out of the use, occupancy, conduct, or operation, construction, maintenance, or management of or upon any portion of state rights-of-way (as approved and authorized in the Complete Authorized Utility Permit) by the Permittee, its principals, contractors, employees, agents, licensees, lessees, or invitees in accordance with the most current GP-7.13 RESPONSIBILITY FOR DAMAGE CLAIMS, Standard Specifications For Construction And Materials, including, by way of example only: (a) any work or thing whatsoever done or not done on state rights-of-way (as approved and authorized in any Complete Authorized Utility Permit) by or on behalf of the Permittee;

or (b) any breach, default, or Event of Default by the Permittee in performing any of its obligations under the provisions of these Utility Permit General Provisions, Individual Work Order Permits, or applicable law. The Permittee agrees that the indemnification as described in this Section shall include any liability or claim of liability that occurs during the Term (or that occurs after the Term where the Permittee has obligations under any Complete Authorized Utility Permit that remain following the expiration or termination of the Term), even if the injury does not become apparent or does not manifest itself until after expiration of any Complete Authorized Utility Permit. In no event shall the mention of "any portion of state rights-of-ways" within this Section be interpreted to grant the Permittee rights to use portions of state rights-of-ways other than those expressly approved by the State on any Complete Authorized Utility Permit, nor shall any mention of "licensees" or "lessees" in this Section be interpreted to allow the Permittee to assign or otherwise transfer any rights or obligations it has under any Complete Authorized Utility Permit.

(m) **No waiver of immunity**. Nothing in any Complete Authorized Utility Permit shall constitute a waiver of any immunity to which the State of Maryland, MDOT, or MDOT SHA may be entitled under any federal law or under the laws of the State of Maryland, as they may be amended from time to time.

(n) **Compliance with laws and regulations**. The Permittee shall comply with all Federal, State, and local laws, regulations and ordinances applicable to their activities.

(o) **Right to Inspect**. The MDOT SHA reserves the right to inspect any operation, work or material which may impact safety, integrity of the roadway or restoration of the MDOT SHA's ROW. On large projects, weekend work, or night work, requiring significant or extensive inspection which exceeds the staffing resources the MDOT SHA, the MDOT SHA may need to assign inspection forces while work is being accomplished within MDOT SHA ROW at the expense of the Permittee. The MDOT SHA will inform the Permittee if its intent to assign inspection forces prior to commencement of the permit work.

(p) **Permits Not Assignable**. Complete Authorized Utility Permits are not assignable. The use of any Complete Authorized Utility Permit by any party not specifically indicated on the Utility Permit General Provisions AND the Individual Work Order Permit shall constitute the immediate revocation of the permit. Contractors and subcontractors authorized by the Permittee are authorized to carry out the work allowed under a Complete Authorized Utility Permit on behalf of the Permittee.

(q) **Cost of repairs**. The Permittee will be responsible for the cost of any repairs to roadway embankments, drainage facilities, or any other facilities owned or maintained by the MDOT SHA should they become necessary or as caused by the construction, existence or failure of this utility or utility facility.

(r) **Restore**. Upon completion of work, MDOT SHA rights-of-ways affected by any Complete Authorized Utility Permit shall be restored to its original condition to the complete satisfaction of the Permit Inspector and the District Utility Engineer.

(s) **Traffic control plan**. A copy of the Work Zone Traffic Control Plan approved by the MDOT SHA shall be attached to the Complete Authorized Utility Permit at all times.

(t) **Prior notifications**. The Permittee shall contact all offices and persons prior to the start of utility work, in accordance with the Complete Authorized Utility Permit - Notifications requirements.

(u) **Additional easements**. The Permittee shall be solely responsible for obtaining any additional easements; right of entry's, etc. from abutting property owners necessary for the Permittee to perform any approved work under said Complete Authorized Utility Permit.

(v) **Open cutting**. Open cutting of any paved surface is strictly prohibited unless specifically authorized in the Individual Work Order Permit.

(w) **Abide by terms and conditions**. The Permittee shall (i) initially when requesting to be approved as an Authorized Public Utility; and (ii) again at each notification that the Utility Permit General Provisions have been revised; sign, date, and return the Utility Permit General Provisions Acknowledgement Form acknowledging the Permittee's acceptance to abide by the Utility Permit General Provisions' terms and conditions.

(x) **Deactivated or taken out-of-service.** When the Permittee's work is to replace, renew, or for the facilities to be deactivated and be taken out-of-service (retired), the Permitee shall remove what was the original main line, service, or appurtenance unless otherwise agreed to, in writing, by the MDOT SHA and the Utility. In the past, what was referred to as abandon, abandoned, and/or abandonment is no longer acceptable. As the connotation of the terms implied that there was no further responsibility for the facility, these terms are no longer used. The Permittee is still responsible for any utility facility that is approved to remain in the MDOT SHA rights-of-way. A Letter of Agreement (LOA) shall be executed and a requirement prior to any permit's approval and issuance.

(1) The Utility shall deliver an electronic file and/or a hard copy with georeferenced coordinates of the deactivated or taken out-of-service facilities' location when it is agreed upon that the deactivated and be taken out-of-service (retired) facility will remain in the State's ROW. The electronic file may be a MicroStation drawing .dgn file, As Constructed As Built plan set with georeferenced coordinates (latitude and longitude out six decimal places or the most current available version), collection of data by the Utility's staff with State provided esri Survey123 ArcGIS Online account (AGOL) and collector application, or other agreed to mechanism.

001.03.02 NOTIFICATIONS.

001.03.02.01 Traffic Controls. Certain State roads require a Traffic Control Permit from the District Office Traffic Section. Contact the District Utility Permit Section, as identified on the Individual Work Order Permit, a minimum of five working days prior to beginning work to obtain the required Traffic Control Permit(s). The Permittee must comply with all Traffic Control Notification Procedures.

001.03.02.02 Roadside Tree Care. The Permittee is responsible for contacting the Maryland Department of Natural Resources - Forest Service (DNR-FS) prior to the start of construction and shall obtain necessary permits, if any, to comply with the Roadside Tree Care Section of the Annotated Code of Maryland. Any work that involves tree felling, or tree branch pruning, or excavation which impacts the roots of roadside trees, requires a DNR-FS Permit.

The Roadside Tree Law Permit Application can be accessed on the MDOT SHA website under the Business Utility Permit General Provisions (12/14/2023) Standards and Specifications / Roadside Tree Law Summary at https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=221.

The Utility Permit will not be issued to the Permittee until a copy of the DNR-FS Permit is submitted to the District Utility Engineer.

001.03.02.03 Landscaping. The Permittee shall perform landscape construction in conformance with Category 700 – Landscaping of MDOT SHA Standard Specifications for Construction and Materials, and in conformance with the permit documents and any landscape plans approved for the permit. Inspections will be performed by the Office of Environmental Design's Quality Assurance Division and Landscape Programs Division in conformance with MDOT SHA Standard Specifications. Questions regarding approved landscape plans or modifications should be addressed to oedprojectreview@mdot.maryland.gov.

001.03.02.04 MDOT SHA Signal Facilities. Care shall be exercised when working adjacent to traffic signal facilities. The MDOT SHA Office of Traffic and Safety Signal Operation Section having jurisdiction over the traffic signals involved must be notified a minimum of three (3) business days before the start of construction work in order to coordinate any work to be performed near MDOT SHA traffic signal facilities. The Contact number for the MDOT SHA Office of Traffic and Safety Signal Operation Section is 410-787-7650.

001.03.02.05 Signs and Street Lighting Facilities. Care shall be exercised when working adjacent to MDOT SHA signs and street lighting facilities. The District Maintenance Engineer in the appropriate MDOT SHA district must be notified a minimum of three (3) business days before the start of construction work in order to coordinate any work to be performed near MDOT SHA signs and street lighting facilities.

001.03.02.06 MDOT SHA Communication Facilities. Care shall be exercised when working adjacent to MDOT SHA communication facilities (fiber optic, telecom, etc.). The MDOT SHA Office of CHART & ITS Development Communications Division at 410-747-8590 must be notified a minimum of three (3) business days before the start of Utility work in order to coordinate any work to be performed near MDOT SHA communication facilities.

001.03.02.07 MDOT SHA Automated Traffic Counting Station (ATR's). Care shall be exercised when working adjacent to ATR facilities. The Office of Planning & Preliminary Engineering Data Services Engineering Division at 410-545-5523 must be notified a minimum of three (3) business days before the start of utility work in order to coordinate any work to be performed near MDOT SHA ATR facilities.

001.03.02.08 MDOT SHA Construction Projects. If any work under any Complete Authorized Utility Permit is to be performed in any proximity of a MDOT SHA construction project, or will have any effect whatsoever on any work performed on a MDOT SHA construction project, or will effect maintenance of traffic concerning any other roadway network system in conjunction with any MDOT SHA construction project, the Permittee is required to notify the Contractor's Utility Coordinator and/or the State's Project Engineer for that project at least three (3) business days in advance of any commencement of work and is, therefore, required to coordinate all work performed under any Complete Authorized Utility Permit with the Contractor's Utility Coordinator and/or the MDOT SHA Project Engineer.

001.03.02.09 MDOT SHA Maintenance Projects. If any work under any Complete Authorized Utility Permit is to be performed in any proximity of a MDOT SHA maintenance project, or will have any effect whatsoever on any work performed on a MDOT SHA maintenance project, or will effect maintenance of traffic concerning any other roadway network system in conjunction with any MDOT SHA maintenance project, the Permittee is required to notify the Resident Maintenance Engineer and/or the District Maintenance Office for that area at least three (3) full business days in advance of any commencement of work and is, therefore, required to coordinate all work performed under any Complete Authorized Utility Permit with the District Maintenance Office or Resident Maintenance Engineer.

001.03.02.10 Miss Utility. The Permittee must contact "Miss Utility" in compliance with Title 12 - Underground Facilities of the Public Utilities Articles of the Annotated Code of Maryland via the internet at www.missutility.net two (2) business days (call in day does not count) in advance of performing any excavating or similar work. If the Permittee is unable to contact Miss Utility via the internet, the Permittee may call Miss Utility at 1-800-257-7777 or 1-800-441-8355 (for Kent, Queen Anne's, Talbot, & Caroline counties). Ticket life is twelve (12) business days after day on which the ticket is transmitted to the Permittee. The Permittee shall be charged a locate fee of up to Thirty-five ($35.00) dollars by the MDOT SHA for locating MDOT SHA facilities.

001.03.02.11 MDOT SHA District Utility Engineer. The Permittee shall notify the appropriate contact person listed in the Individual Work Order Permit a minimum of three (3) business days before the start of construction, in accordance with the Complete Authorized Utility Permit requirements, with the name of its representative for the job; verification that the Permittee has notified all other offices previously listed; and that the Permittee has coordinated work with said offices. Failure to do so will result in immediate suspension of work until proper notifications are made.

001.03.02.12 Other Utility Companies. The Permittee must contact the appropriate Utility Companies prior to performing any work near their respective facilities in order to determine any clearance requirements; coordinate any construction activities; and/or dig test holes/test pits, if needed, at their own cost.

001.03.02.13 Environmental Permit Requirements. The Permittee shall comply with all Federal, State, and local environmental requirements and must obtain all environmental permits necessary to perform the work under said permit prior to commencement of any work.

001.03.03 DESIGN AND CONSTRUCTION STANDARDS, PROCEDURES, AND POLICIES.

001.03.03.01 Design and Construction. Design and construction associated with this permit shall be performed in complete conformance with standards, procedures, and policies of the following MDOT SHA publications:

(a) Maryland Manual on Uniform Traffic Control Devices (MdMUTCD)
(b) Standard Specifications for Construction and Materials
(c) Book of Standards for Highway & Incidental Construction
(d) Maryland Standard Method of Tests, Materials Manual, Laboratory and Field Procedures

(e) MDOT SHA Utility Policy

(f) Manual for Controlling and Reducing the Frequency of Pavement Utility Cuts

(g) Occupational Safety & Health Administration (OSHA)

(h) Maryland Occupational Safety and Health (MOSH)

(i) Standard Specifications for Subsurface Explorations

(j) Supplemental Specifications and Provisions

Note: Copies of the above-mentioned publications can be obtained from the MDOT SHA website: roads.maryland.gov. Any changes to these Utility Permit General Provisions will be noted in the individual permits.

001.03.03.02 Laws & Regulations. The Permittee is responsible for compliance with all laws and regulations included, but not limited to, those of the Federal Highway Administration, Maryland Public Service Commission, National Electric Safety Code, Maryland Occupational Safety and Health Administration, County or Municipal Planning and Zoning Boards, Army Corps of Engineers, Maryland Department of Natural Resources, Maryland Department of Environment, PHMSA, and USDOT. The Permittee shall comply with the High Voltage Line Act of the Labor and Employment Article of the Annotated Code of Maryland and OSHA's Cranes and Derricks in Construction Directive. This permit DOES NOT release the Permittee from acquiring any additional permits that these or other agencies may require.

001.03.03.03 Railroad. The Permittee is responsible for obtaining the required permits prior to performing any work on or adjacent to railroad facilities or ROW (ROW) thereof.

001.03.03.04 Underground Facilities. All underground utility facilities placed within the ROW of the MDOT SHA MUST maintain a minimum cover of three (3') feet on secondary roadways at all times between the top of any buried duct or cable and finished grade or pavement surface which includes the bottom of any ditch lines as outlined in the MDOT SHA Utility Policy. On expressway/freeways, buried facilities must be placed at least five (5') feet below finished grade or pavement surface which includes the bottom of any ditch lines. The MDOT SHA District Utility Engineer reserves the right to require any facility to be placed at depths greater than three (3') feet at their discretion to facilitate operations of the MDOT SHA. If at a later date, it is discovered the facilities installed under this permit do not meet this requirement, the Permittee will be required to make necessary adjustments solely at their cost, regardless of who is performing the work. Information about MDOT SHA highways can be found here MDOT SHA's Highway Location Reference located on the MDOT SHA website at: roads.maryland.gov.

001.03.03.05 Revised Plans. The MDOT SHA reserves the right to stipulate modifications to the approved construction plans whenever necessary. The MDOT SHA will notify the Permittee of any modifications, required by the MDOT SHA, to the approved construction plans prior to performance of the work. The Permittee shall be entirely responsible for all additional costs and expenses associated with these changes. It is agreed and understood that significant deviation by the Permittee from the plans submitted shall be reported immediately to the MDOT SHA contact person listed in the Individual Work Order Permit and a revised plan showing changes shall be submitted to the MDOT SHA in accordance with TC-4.01 – Working Drawings for approval prior to performance of the work. Relocation and/or adjustment of any public or private utility shall be the responsibility of the Permittee.

001.03.03.06 As Constructed Deliverables. MDOT SHA follows the American Society of Civil Engineers (ASCE) 75-22 Standard Guideline for Recording and Exchanging Utility Infrastructure Data. The Permitee shall submit an electronic file and/or a hard copy of As Constructed Plan Sets with georeferenced coordinates.

The Permittee is required to provide Geographic Information System (GIS) coordinates of any of its facilities, infrastructure, and appurtenances installed within the permitted area(s) to MDOT SHA District Office within Sixty (60) calendar days or agreed upon timeline of the completion of the Permittee's installation.

To comply with this requirement, the Utility As Constructed Plan Sets submitted to the MDOT SHA shall be as follows:

Utility location data of any new construction, to include but not limited to the installation, adjustment, and/or relocation of facilitates, appurtenances, and/or infrastructure asset(s) shall be georeferenced with GPS coordinates.

(a) for aerial construction: the coordinates shall be provided for items to include but not limited to pole installations, adjustments, or relocations.

(b) for underground construction: the coordinates shall be provided for items to include but not limited to manholes, hand holes, pedestals, valve covers, vents, clean-outs, and/or any demarcation point at the beginning, along the path of, and at end of the installation, adjustment, or relocation.

(c) The electronic file may be a MicroStation drawing .dgn file, As Constructed As Built plan set with georeferenced coordinates (latitude and longitude out six decimal places or the most current available version), collection of data by the Utility's staff with State provided esri Survey123 ArcGIS Online account (AGOL) and collector application, or other agreed to mechanism.

001.03.04 MAINTENANCE OF TRAFFIC.

001.03.04.01 Work Zone Traffic Control. Work Zone Traffic Control is to be in complete conformance with the current and latest specifications, standards, provisions and policies of these Provisions Section 001.03.03 – DESIGN AND CONSTRUCTION STANDARDS, PROCEDURES, AND POLICIES. In addition to the documents referenced above, design and construction associated with Work Zone Traffic Control shall be performed in complete conformance with, and with particular attention to, the following MDOT SHA publications:

- Work Zone Safety and Mobility Policy
- High Visibility Apparel Policy
- Maryland Manual on Uniform Traffic Control Devices (MdMUTCD)
- Traffic Control Devices Design Manual
- Traffic Control Analysis's Guidelines
- Maryland Standard Sign Book
- Book of Standards for Highway & Incidental Structures
- Standard Specifications for Construction and Materials
- Supplemental Specifications and Provisions
- Accessibility Policy & Guidelines for Pedestrian Facilities along State Highways

- SHA Bicycle and Pedestrian Design Guidelines

Copies of the above-mentioned publications can be obtained from the MDOT SHA's website: roads.maryland.gov.

001.03.04.02 Approved Work Zone Traffic Control Plan. An approved Work Zone Traffic Control Plan (WZTC) is required for all work performed within MDOT SHA right of way. The Permittee is responsible to submit a carefully designed WZTC Plan to the District Utility Engineer (or approved designee) for any relocation or permit work affecting a highway. This plan must be in complete accordance with Temporary Traffic Control Typical Applications detailed in the MDOT SHA's Book of Standards for Highway and Incidental Structures and the MdMUTCD. The WZTC plan shall address vehicular, bicycle, and pedestrian traffic on or along any transportation facility in accordance with MDOT SHA's Work Zone Safety and Mobility Policy; and on any specific directions received from the appropriate District Engineer (or approved designee). The WZTC Plan should indicate the time during which work is to be performed as well as the proposed placement of signs and layout of traffic control devices. When speed of traffic is noted, this means the posted speed or prevailing travel speed; whichever is higher, unless otherwise specified. All changes, modifications, or alterations to the approved WZTC Plan shall be submitted in writing to the District Utility Engineer in advance for review and approval. A copy of the approved Work Zone Traffic Control Plan is always to be attached to the permit. All closures are to be performed in complete accordance with the approved Work Zone Traffic Control Plan. Traffic Control Plan revisions shall be submitted per the 2017 Standard Specifications for Construction and Materials, Section 104.01 – Traffic Control Plan.

001.03.04.03 Work Zone Modifications. All changes, modifications, or alterations to the approved Work Zone Traffic Control Plan must be submitted in writing to the MDOT SHA District Utility Engineer at least ten (10) business days in advance for review and approval. The MDOT SHA reserves the right to modify and/or expand the methods of traffic control specified if in the opinion of the Engineer or Inspector, the Permittee's operations are a detriment to the safe and efficient flow of traffic. In the event that the construction plans are revised, or differing site conditions are encountered, the WZTC Plan shall be reviewed and revised, if necessary, to comply with the MDOT SHA's Book of Standards for Highway and Incidental Structures and the MdMUTCD.

001.03.04.04 Traffic Control by MDOT SHA. In the event that the MDOT SHA is required to provide traffic control, due to the Permittee failing to maintain a safe work zone or if a Permittee requests the MDOT SHA to provide traffic control, all costs and applicable overhead shall be billed directly to the Permittee. In the event that a 3rd party caused a situation or emergency which required the MDOT SHA and/or the Permittee to provide traffic control, all costs and applicable overhead shall be billed directly to the 3rd party that caused the situation or emergency.

001.03.04.05 Traffic Manager's Responsibility. A MDOT SHA certified Traffic Manager must be specifically designated for each permit application. This identification must include a 24-hour contact telephone number for someone that will respond to Work Zone Traffic Control situations. The Traffic Manager will be responsible for ensuring the proper implementation and maintenance of the Work Zone Traffic Control Plan as well as conducting regular day and night inspections of the traffic control devices and overall traffic operations. Permittee Personnel may obtain an approved Traffic Manager certification from the Maryland Transportation Builders and

Materials Association (MTBMA). Information on Traffic Manager certification can be obtained from MTBMA's website at http://www.mtbma.org.

001.03.04.06 Traffic Control Devices. All traffic control devices must comply with performance criteria published in the National Cooperative Highway Research Program (NCHRP) Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

(a) Traffic Control signs or devices identified as unsatisfactory by the District Utility Engineer or their representative must be replaced immediately.

(b) High performance wide-angle retro-reflective sheeting for signs, fluorescent orange in color, shall be used on projects along interstate highways and other freeways, unless otherwise specified.

(c) Type VI (vinyl micro-prismatic) retro-reflective sheeting conforming to Federal Highway Administration's Standard Specifications for Construction of Roads and Bridges and AASTM D-4956 is acceptable for use on roll up signs and channelizing devices.

(d) Upon initial installation, temporary traffic control signs shall have at least 70 percent of the reflectivity over 90 percent of the reflectorized surface as specified in Section 950.03-Reflectorization of Signs and Channelizing Devises and in Section 104.08.03 of the Standard Specifications for Construction and Materials, Dated 2017.

(e) When temporary traffic control signs are not indicative of actual conditions (e.g. temporary shutdowns, overnight, or other periods when work is not being performed) the signs shall be removed, turned away from traffic, or completely covered.

(f) At least 90 percent of all reflective barrier markers, warning lights, and raised pavement markers shall be operational at any given time.

(g) Flashing arrow boards as early warning devices shall be used whenever a lane is closed unless considered unnecessary by the District Engineer.

(h) Under certain circumstances, a variable message sign (VMS) may be required. The corresponding job-specific permit will provide details about what message must be displayed; how much advance notice must be given, etc. Messages displayed on the VMS will be coordinated with the District Utility Engineer and have prior approval of the District Traffic Engineer.

(i) The Permittee shall correct any deficiencies within 24 hours after notification.

001.03.04.07 Lane, Ramp, and Shoulder Closures. The Permittee shall apply for and obtain a Traffic Control Permit from the appropriate District Office prior to closing any lanes. The District Utility Engineer (or approved designee) will approve the time schedules and numbers of lanes involved for lane closings. All Traffic Controls will be allowed only during off peak hours. Lane and shoulder closures on wet roadways are strictly prohibited. Travel lanes and shoulders must be restored immediately in the event of precipitation. All Travel lanes shall be restored immediately in the event of accident or emergency within or adjacent to the work area. Delay to motorists traveling through work zone lane, ramp, or shoulder closures shall not exceed the thresholds in accordance with MDOT SHA's Traffic Control Analysis's Guidelines. All lane and shoulder closures will be cleared immediately at the specific direction of any representative

of the MDOT SHA. The Permittee is responsible to coordinate all Traffic Control activities with adjacent contractors. When a lane, ramp, or shoulder closure is in effect, work must begin within one hour after the lane is closed. Once work is completed, travel lanes and shoulders are to be restored immediately.

001.03.04.08 Road Closures. Full or temporary roadway closures for non-emergency situations are not permitted without prior approval of the MDOT SHA District Utility Engineer. The Permittee is responsible for coordinating Maryland State Police Assistance for any temporary roadway closure. No temporary roadway closure can exceed 15 minutes in duration. The Permittee must provide a minimum of two Variable Message Signs (VMS) for any temporary roadway detour or roadway closure. VMS sign messages must be approved by the District Utility Engineer prior to display. The delay to motorists traveling through work zone lane, ramp, or shoulder closures shall not exceed fifteen (15) minutes unless there is an emergency and it is approved by the District Utility Engineer. Prior to reopening, all travel lanes and shoulders must be completely cleared of all materials, equipment, and debris.

001.03.04.09 Travel Lanes. No travel lane shall be reduced to less than ten (10') feet in width at any time.

001.03.04.10 Emergency Crossovers. The use of emergency crossovers is strictly prohibited.

001.03.04.11 Pedestrian & Bicycle Traffic. The Permittee shall provide for safe bicycle and pedestrian access through work zones for all permits and projects where applicable and to the maximum extent feasible. Provisions for bicycle and pedestrian access shall be clearly shown on the WZTC plan. The Permittee shall submit plans for all proposed road closings or detours to MDOT SHA's Bicycle and Pedestrian Coordinator for review and comment. Provisions for bicycle and pedestrian access through the work zone must be Americans with Disabilities Act (ADA) compliant. Information about MDOT SHA's ADA requirements can be found in MDOT SHA's Accessibility Guidelines for Pedestrian Facilities along State Highways located on the MDOT SHA website at: roads.maryland.gov.

001.03.04.12 Flaggers. All flagging operations are to be performed by individuals who have successfully completed MDOT SHA's Approved Flagger training course. Each flagger is always to have in their possession an approved MDOT SHA flagger training card. Flagging is to be conducted utilizing stop/slow paddles in complete accordance with Part VI Section 6F of the current edition of the MdMUTCD. Flaggers are always to be appropriately attired. Flaggers must wear a reflective vest, meeting the requirements of MDOT SHA's High Visibility Apparel Policy, always while flagging. Contractor Personnel may obtain an approved Flagger certification from the American Traffic Safety Services Association (ATSSA). Information on Flagger certification can be obtained from ATSSA's website at http://www.atssa.com/

001.03.04.13 Dry Road. Precautions shall be taken, particularly in freezing temperatures, to keep water off travel lanes.

001.03.04.14 Driveway Access. The Permittee is responsible to insure safe pedestrian and vehicular access to private and public driveways, entrances, and roadways always.

001.03.04.15 Emergency Access. Access to fire hydrants, firehouses, hospitals, and mailboxes is always to be maintained.

001.03.04.16 Working Hours: Work done that will impact on MDOT SHA roadway and shoulder areas is allowed only during certain hours. The following sub-sections describe generally when this work is permitted:

(a) Work is permitted Monday through Friday only. Generally, working hours for MDOT SHA roadway and shoulder closures are restricted to between 9:00 AM and 3:00 PM and 9:00 PM and 5:00 AM. Work not adjacent to travel lanes is permitted between 7:00 AM and 7:00 PM. Exceptions to these hours may be specified in the individual permit. The Permittee shall confirm allowable lane and shoulder closure hours with the District Utility Engineer prior to work. All requests for additional special exceptions must be provided in writing to the Office of the District Utility Engineer.

The District Utility Engineer has the authority to require reimbursement for MDOT SHA inspection if the work is to take place during non-standard hours even if the MDOT SHA requires weekend work, nighttime work, or when the location and/or duration of the work is an undue burden to the State due to safety of the operation or travelling public. An agreement must be in place before the work starts.

(b) Night work and weekend work is prohibited in residential areas unless authorized by the District Utility Engineer.

(c) No work is allowed on the day(s) of major holidays or holiday weekends, or days preceding and following said holiday(s) or holiday weekends. Holiday restrictions may vary by location. Information regarding specific holiday restrictions can be obtained from the Office of the District Utility Engineer prior to each holiday. The National holidays mentioned are listed as follows: (These may or may not be the same as the State holiday).

NATIONAL HOLIDAYS:
New Year's Day, January 1
Martin Luther King's Birthday, the third Monday in January
Washington's Birthday, the third Monday in February
Memorial Day, the last Monday in May
Juneteenth National Independence Day, typically June 19th
Independence Day, July 4
Labor Day, the first Monday in September
Columbus Day, the second Monday in October
Veteran's Day, November 11
Thanksgiving Day, the fourth Thursday in November
Christmas Day, December 25

(d) Work may also be restricted for special events occurring along specific routes. Information regarding specific special event restrictions can be obtained from the Office of the District Utility Engineer prior to any special event. Additional work restrictions, if any, will be noted in the Individual Work Order Permit. Reimbursement for MDOT SHA inspection may be required.

(e) Any deviation from the approved traffic control standard for the Individual Work Order Permit, such as when construction plans are revised, or differing site conditions encountered, must be approved by the MDOT SHA Permit Inspector prior to the

commencement of work. The MDOT SHA reserves the right to modify and/or restrict working hours or deny permission to work within MDOT SHA rights-of-way at any time if, in the opinion of the Engineer or Inspector, the Permittee's operations are a detriment to the safe and efficient flow of traffic.

01.03.04.17 Specific Signing Instructions. Signing shall be placed in accordance with the MdMUTCD, the MDOT SHA's Standard Highway Sign Book, and the Complete Authorized Utility Permit. All work area warning signs shall be 48 in. x 48 in. unless otherwise specified. MDOT SHA's Standard Highway Sign Book may be obtained from the Office of Traffic and Safety, Traffic Engineering Design Division. Refer to Section 104.08 TEMPORARY TRAFFIC SIGNS (TTS) for a detailed description of the requirements to furnish, install, and maintain TTS on or along all MDOT SHA transportation facilities. The following are additional requirements for TTS:

(a) Sign details are available from the Office of Traffic & Safety, Traffic Engineering Design Division.

(b) Construction Identification signs (Hat and Shovel) G2-1(1), G2-1(2), or G2-1(3) shall be installed at each approach and end of all projects greater than two (2) months in duration unless otherwise noted or directed by the Engineer.

  (1) The initial sign will be installed between the one-mile and one-half mile advance warning signs unless otherwise specified. See MDOT SHA Standard No. MD 104.01-04 (≥ 40 mph) and MDOT SHA Standard No. MD 104.01-04 (≤ 40 mph) for placement.

(c) The ROADWORK (W20-1) sign and END ROAD WORK (G20-2) sign shall be installed at each approach and end of all projects greater than two months in duration, unless otherwise noted or directed by the Engineer.

  (1) The Hat and Shovel sign installed near the end of the project will not replace the End Road Work sign. See MDOT SHA Standard No. MD 104.01-04 (≥ 40 mph) and MDOT SHA Standard No. MD 104.01-04 (≤ 40 mph) for placement.

(d) When highway alignment changes occur throughout the work area due to phase changes, install a supplemental panel beneath the Construction Length sign stating, "NEW TRAFFIC PATTERNS." The supplemental panel shall remain up for a maximum of 30 days unless otherwise specified.

(e) Where parts of a mile are designated on a sign, fraction to the nearest ½-mile shall be used instead of decimals.

(f) In areas where longitudinal paving joints are left exposed to traffic, warning signs shall be erected indicating UNEVEN PAVEMENT. For sign placement, see MDOT SHA Standard No. MD 104.06-15 thru MD 104.06-20.

  (1) They shall be placed in advance of the uneven joints and spaced at appropriate 1500' intervals throughout the area of the uneven joint.

  (2) In areas of exposed lateral paving joints, the warning sign message shall be BUMP (W8-1).

(3) When milling a pavement, (removing the top layer to smooth the roadway) a ROUGH ROAD (W8-8) sign or a GROOVED PAVEMENT W8-8(1) sign shall be the warning message.

(g) Along two and three-lane, two-way roadways where a standard centerline is not provided and passing is not permitted (due to resurfacing, etc.), DO NOT PASS (R4-1) signs shall be erected at the beginning of such zones along the right side and at appropriate intervals throughout the project. For sign placement, see MDOT SHA's Standard No. MD 104.06-14.

(1) A NO PASSING ZONE pennant (W14-3) shall be erected at the beginning of such zones on the left-hand side of the roadway across from the first DO NOT PASS sign.

(2) The NO PASSING ZONE pennants shall be used only at the beginning of such zones and shall not be placed at intermediate points throughout the zone.

(3) Standard no passing centerlines may be installed at the direction of the Engineer or Inspector if site conditions (at a particular location) or past accident history indicates that this would be a prudent thing to do.

(h) When complete pavement markings are not in place, and passing may be permitted, sign(s) shall be erected indicating WARNING: PASSING ZONES UNMARKED W14-3(1) with supplemental plate "NEXT X MILES".

(1) These signs shall be placed in advance of the unmarked zone and at appropriate intervals throughout the unmarked zone where passing is permitted.

001.03.04.18 Pavement Drop-off. During construction and maintenance activities involving pavement surfacing and resurfacing work, including shoulders, it often becomes necessary to maintain traffic along side or near lanes and shoulders having different elevations (drop-offs). Special traffic control devices are needed to safely protect and guide traffic through such areas. The following are the traffic control requirements for pavement drop-off situations:

(a) Uneven Joints For Traffic Crossings:

Uneven joints where traffic can be anticipated to cross (i.e. intersections) are to be tapered with a minimum of two (2) feet of a bituminous concrete product for the entire width of the travel lane crossing.

(b) Pavement Drop-offs of 2 ½ Inches or Less (between Traffic Lanes):

(1) Adjacent pavement elevation differences, drop-offs, of 2 ½ inches or less may be freely crossed by traffic.

(2) Drop-offs of 2 ½ inches or less shall be indicated to traffic through the use of the UNEVEN PAVEMENT warning signs placed in advance of and repeated throughout the limits of the drop-off in accordance with the Book of Standards for Highway & Incidental Structures, Standard No. MD 104.06-15. When needed, the GROOVED warning supplemental sign plate shall be mounted below each sign. The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(3) The UNEVEN PAVEMENT warning sign is to be placed supplemental to other work zone traffic control. The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(4) Temporary transverse tie-in transitions during the paving operation shall be in accordance with Standard Specifications for Construction and Materials Section 504.03.10 (2017 Spec book). The transverse tie-in shall be completed prior to traffic being allowed on the pavement.

(c) Pavement Edge Drop-offs of 2 ½ Inches or Less (between Traffic Lanes and Shoulder):

(1) Pavement edge drop-offs of 2 ½ inches or less shall be in compliance with the Book of Standards for Highway & Incidental Structures, Standard No. MD 104.06-16.

(2) UNEVEN PAVEMENT warning signs shall be placed in advance of and repeated throughout the limits of the drop-off in accordance with Standard No. MD 104.06-16. The UNEVEN PAVEMENT warning sign is to be placed supplemental to other work zone traffic control. The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(3) Temporary transverse tie-in transitions during the paving operation shall be in accordance with Standard Specifications for Construction and Materials Section 504.03.10 - Tie-in. The transverse tie-in shall be completed prior to traffic being allowed on the pavement.

(d) Pavement Drop-offs of Greater Than 2 ½ inches (between Traffic Lanes):

(1) Adjacent pavement elevation differences, drop-offs exceeding 2½ inches shall be paved to match with the abutting lanes or shoulders on the same working day in accordance with Standard Specifications for Construction and Materials Section 504.03.09 (2017 Spec Book). As a result of this, the complete pavement section including shoulders shall be at the same elevation at the end of each working day.

(2) Drop-offs of 2½ inches or less shall be indicated to traffic through the use of the UNEVEN PAVEMENT warning signs placed in advance of and repeated throughout the limits of the drop-off in accordance with Standard No. MD 104.06-15. When needed, the GROOVED warning supplemental sign plate shall be mounted below each sign.

(3) The UNEVEN PAVEMENT warning sign is to be placed supplemental to other work zone traffic control. The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(4) While it is intended that traffic traveling in the same direction drive to one side of the drop-off or the other, such traffic may be permitted to drive along both sides under properly controlled conditions, but such traffic may not be permitted to freely cross.

(5) Temporary transverse tie-in transitions during the paving operation shall be accordance with Standard Specifications for Construction and Materials Section 504.03.10. The traverse tie-in shall be completed prior to traffic being allowed on the pavement.

(e) Pavement Edge Drop-offs Greater Than 2 ½ Inches, But Equal to or Less Than 5 Inches (between Traffic Lanes and Shoulder):

(1) Drop-offs between lane and shoulder or shoulder and earth grading, exceeding 2 ½ inches, but equal to or less than 5 inches shall be provided with an abutting wedge with a slope of 4:1 or flatter at all times while no work is being performed as referenced in the Book of Standards for Highway & Incidental Structures, Standard No. MD 104.06-17.

(2) Drums or other suitable channelizing devices are used to mark the area even when a traversable wedge is in place.

(3) Drop-offs exceeding 2 ½ inches, but equal to or less than 5 inches shall be indicated to traffic through the use of the UNEVEN PAVEMENT warning sign placed in advance of and repeated throughout the limits of the drop-off in accordance with Standard No. MD 104.06-17.

(4) The UNEVEN PAVEMENT warning sign is to be placed supplemental to other work zone traffic control. The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(f) Pavement Edge Drop-offs Greater Than 5 inches WITHOUT an Adjacent Lane Closure:

(1) Continuous drop-offs exceeding 5 inches if next to or within 12 feet of a lane of traffic, shall be provided with a temporary concrete barrier or other suitable barrier as may be approved by the District Utility Engineer or Inspector, to preclude crossing the drop-off throughout its entire length. See the Book of Standards for Highway & Incidental Structures, Standard No. MD 104.06-18.

(2) The sign size and spacing, and how it complements other traffic control devices is covered in the Standard Specifications for Construction and Materials and the MdMUTCD.

(g) Pavement Edge Drop-offs Greater Than 5 Inches WITH an Adjacent Traffic Control:

(1) Continuous drop-offs exceeding five (5”) inches, but greater than twelve (12’) feet away from traffic (and not protected with an approved barrier) shall be provided with an abutting wedge with a slope of 4:1 or flatter at all times while no work is being performed. See the Book of Standards for Highway & Incidental Structures, Standard No. MD 104.06-19.

(2) Drums or other suitable channelizing devices are required to mark the area. When traffic is permitted to occupy the adjacent lane(s) to this work, drums or other suitable channelizing devices shall be placed in front of and completely across the

excavated area, in addition to the traffic control requirements for the lane or shoulder work.

(3) For a series of drop-offs within a lane or shoulder, typically as a result of concrete joint or pavement repair, all areas where the pavement material has been removed shall be repaired the same working day.

(4) The decision to use a positive barrier to separate the workspace from traffic will be determined by the Utility Permit Inspector. The Inspector should consider such things as traffic volumes, vehicle speeds and weaving, trucks, highway geometrics, length of workspace, duration of work, etc.

(5) The sign size and spacing, and how it complements other traffic control devices is covered in the MDOT SHA Standards and Specifications and the MdMUTCD.

001.03.04.19 Traffic Markings, Signing, Lighting, and Signalization:

(a) Traffic signs are not to be removed or relocated without permission of the District Utility Engineer.

(b) The Permittee is to exercise extreme caution when in the vicinity of signalized intersections so as to protect and maintain in good work order, all traffic signal poles, wires, conduits, and equipment associated with traffic signalization.

(c) All pavement markings and symbols shall be completely replaced immediately upon the completion of milling or resurfacing, prior to the reopening to traffic.

(d) The Permittee shall inventory existing pavement markings in the work area prior to disturbance and application.

(e) Pavement marking material shall be submitted to the MDOT SHA for approval prior to application.

(f) The Permittee shall submit a pavement marking plan and the name of the pavement marking sub-contractor to the District Utility Engineer for approval prior to the start of pavement work.

001.03.05 SAFETY.

001.03.05.01 Excavation.

(a) Cuts or excavations will not normally be permitted to remain open overnight and at any time when work is not in progress at the cut or excavation area. The Permittee should excavate only as far as can be backfilled in the same working day.

(b) If a trench must remain open during non-working hours, it must be steel plated or protected by a positive barrier. Existing guardrail, permanent concrete barrier, or temporary concrete barrier wall will be required to meet OSHA, MOSH, and MDOT SHA regulations. Suitable protective measures approved by the MDOT SHA, will be required at any excavation.

(c) No excavated or construction material shall be stored within thirty feet (30’) of the edge of the existing traveled pavement. Material shall be stored in a way, which does not reduce driver sight distances nor interfere with roadway drainage.

(d) All equipment and material shall be removed from the MDOT SHA ROW or located a minimum of thirty feet (30') from the edge of the existing traveled pavement of MDOT SHA roadway during non-working hours and when not being used in daily construction operations unless it is stored behind a positive protective barrier. In no case will construction material or equipment be allowed to remain in the median or a divided highway when the materials or equipment is not in use.

(e) All mud and debris tracked or spilled on the state highway shall be removed promptly to eliminate potential hazards.

(f) Precautions shall be taken, particularly in freezing temperatures, to keep water off the traveled lane.

(g) No access is permitted from interstate roadways or from any connecting ramp for purposes of construction, maintenance, or expansion to another facility.

(h) Private automobiles and non-essential construction vehicles are not allowed to be parked on the MDOT SHA ROW. The Permittee must transport workers to the job site from a safe parking site procured by the Permittee.

(i) All work areas are to be continuously maintained in a neat and clean condition.

(j) Guy wires within six (6') feet of the ground will be sheathed in heavy high visibility plastic tubing.

(k) Appropriate protective measures, approved by the MDOT SHA, including warning signs, safety fence, and barricades, shall be placed at all excavations.

(l) The Permittee shall take all necessary precautions to protect the traveling public, pedestrians, and workers, including ADA compliance, as necessary. Information about MDOT SHA's ADA requirements can be found in MDOT SHA's Accessibility Guidelines for Pedestrian Facilities along State Highways located on the MDOT SHA website at: http://www.roads.maryland.gov/Index.aspx?PageId=26.

(m) The MDOT SHA may halt any operation it considers to be in any manner detrimental to the safe operation of MDOT SHA's highway system.

(n) The Permittee shall maintain vertical and horizontal clearances from all existing utility facilities as required by the respective utility agencies.

001.03.06 PROTECTIONS OF HIGHWAYS.

001.03.06.01 Materials and Equipment. No metallic tread equipment shall be driven or towed on any MDOT SHA road surface or surfaced shoulder. Material or equipment not provided with wheels will not be dragged or skidded across paved surfaces. No excavated or backfill materials are to be placed or stockpiled on any improved surface within the jurisdiction of the MDOT SHA (or within MDOT SHA rights-of-ways). The excavation of any MDOT SHA roadway, which has been recently resurfaced, shall be strictly prohibited for a period of two (2) years from the date the resurfacing has been accepted for maintenance unless approved in writing by the appropriate District Utility Engineer.

001.03.07 QUALITY CONTROL.

MDOT SHA inspectors shall be authorized to inspect all work performed and all material furnished under this permit which may impact safety, integrity of the roadway or restoration of the MDOT SHA's ROW to the complete satisfaction of the MDOT SHA. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used as per MDOT SHA's Standard Specifications for Construction and Materials, Sections GP-5.01 AUTHORITY OF THE PROCUREMENT OFFICER and GP-5.07 AUTHORITY AND DUTIES OF INSPECTORS.

(a) At MDOT SHA's discretion, the MDOT SHA may assign inspection forces to the Permittee's work being performed within MDOT SHA's ROW at the expense of the Permittee as per Section 001.03.01 (o) Right to Inspect. The Permittee shall provide the MDOT SHA inspector with an intended work schedule and shall inform the MDOT SHA inspector of any subsequent changes to the schedule. The MDOT SHA reserves full control over said roads, highways, and rights-of-ways and the subject matter of this permit.

(b) The Permittee, or the Permittee's contractor or subcontractor, if authorized by the Permittee to carry out the work allowed under a Complete Authorized Utility Permit on behalf of the Permittee, shall be responsible for providing effective on-site supervision at all times to ensure compliance with all plans and permit specifications, regulations, and conditions. All work areas are to be continuously maintained in a neat and clean condition. The Permittee will be responsible for maintaining its facilities installed within MDOT SHA ROW in a safe working condition.

(c) The Permittee shall be responsible to respond to and correct citizen complaints regarding work performed adjacent to private properties immediately upon notification.

001.03.07.01 Testing.

(a) The Permittee shall perform all testing required for all work performed under the Individual Work Order Permit in accordance with all appropriate regulations and current applicable industry codes. The Permittee shall make available all test data and results to the MDOT SHA upon request of the MDOT SHA inspector. Depending on the type of work and site conditions, the MDOT SHA may require any additional tests or testing, at the MDOT SHA's discretion, at the Permittee's expense.

(b) The additional applicable testing required, if applicable, may include, but not limited to, compaction or pavement surface profile testing or geophysical surveys to detect subsurface voids for work performed under the Individual Work Order Permit.

(c) The MDOT SHA may require, if applicable, the collection of video imagery of any drainage or open pipe systems running within MDOT SHA rights-of-ways and to provide that video imagery to the MDOT SHA for review.

(d) All piping installed within the MDOT SHA ROW shall be tested as required by USDOT – Pipeline and Hazardous Materials Safety Administration.

(e) Carrier pipes of all pressurized utilities shall be pressure tested before start-up in accordance with all appropriate regulations and current applicable industry codes.

001.03.08 CONSTRUCTION. All work must be performed in complete conformity with the approved construction plans.

(a) All changes, modifications, or alterations to the approved construction plans must be submitted in writing to the District Utility Engineer for review and approval. Attachments to bridges and other structures are prohibited unless specifically authorized in individual permit applications. Open cutting of any paved surface is strictly prohibited except when authorized by individual permit applications. The adjustment and/or relocation of any public, private, or MDOT SHA owned facility or utility required by work performed in accordance with this permit will be the complete responsibility of the Permittee.

(b) The Permittee is responsible to verify the location of all existing buried facilities within or adjacent to the work area to prevent damage to existing utilities. The Permittee is responsible for maintaining vertical and horizontal clearances from all existing utility facilities as required by the respective utility agencies.

(c) The Permittee shall take all necessary measures to protect any facilities owned or maintained by the MDOT SHA while performing any work within MDOT SHA rights-of-ways.

001.03.09 EXCAVATION.

001.03.09.01 Trenching. All excavations and trenching shall be performed in complete accordance with all requirements set forth by OSHA, MOSH, and MDOT SHA regulations.

(a) When the MDOT SHA allows excavations within MDOT SHA rights-of-ways, the Permittee shall minimize excavations performed within pavement areas. All excavations, open cuts, or trenching to be performed across pavement areas shall be saw cut to the full depth of the pavement prior to removal.

(b) Sheeting, shoring, and/or bracing shall be required for any excavations or trenches within the Roadbed Area of Influence per the MDOT SHA's Utility Policy- Chapter 4- Section 4.07.02; as required by MOSH and/or OSHA; and/or as determined by the MDOT SHA to prevent failure of the embankments and to maintain safe access.

(c) Cuts or excavations will not be permitted to remain open at the end of a work shift, or when work is not actively in progress. For excavations that cannot be closed the same day as opened, the MDOT SHA may require the following: steel plates; installation of concrete barriers and impact attenuators; and/or any other measures deemed appropriate by MDOT SHA to maintain the safety of the excavation. In addition, the perimeter of all open excavations such as access, working or receiving pits shall be secured using chain link fencing or other approved pedestrian protection along with orange safety fencing suitably installed.

(d) All spoil material is to be completely removed from MDOT SHA ROW. The Permittee will be responsible for repairing any damage due to settlement of backfill.

001.03.09.02 Sheeting. In order to prevent failure of the embankments and to maintain safe access sheeting, shoring, and/or bracing shall be required for any excavations within the Roadbed Area of Influence as per MDOT SHA's Utility Policy- Chapter 4, Section 4.07.02;

within the Zone of Influence of any structure as per MDOT SHA's Utility Policy - Chapter 9 - Figure 9.04-1 – Zone of Influence; as required by MOSH and/or OSHA; and/or as determined by the MDOT SHA.

(a) Tight sheeting will be required where the distance off the roadside edge of any excavation is less than the depth of the excavation. The roadside face must be tightly sheeted and braced securely against skeleton sheeting on the opposite or far side of the excavation. The Permittee shall install all tight sheeting in accordance with all OSHA, MOSH, and MDOT SHA regulations. Sheeting shall be furnished and installed as per MDOT SHA's Standard Specifications for Construction and Materials, Sections 402.03, 402.04.02, & 405.03. All sheeting must be completely removed upon the completion of excavation and backfill activities.

(b) Metal sheeting systems may be used with prior approval of the MDOT SHA and pulled only as tamped fill progresses. If the excavation is to be left open, it shall be tight sheeted, and the Permittee must notify the MDOT SHA Permit Inspector.

(c) A trench box support may be used with the prior approval of the MDOT SHA.

001.03.09.03 Steel Plates. Whenever steel plates are required, the following provisions will apply:

(a) For non-emergency situations the Permit Inspector must be notified at least 48 hours in advance of any steel plates being placed in the roadway.

(b) Steel plates are to be monitored and maintained by the Permittee as agreed to by the MDOT SHA, which may be at least twice daily, seven (7) days a week including, but not limited to nights, weekends, holidays, and snow events until they are removed. Steel plates will not be left in the roadway longer than seven (7) calendar days without prior written permission of the MDOT SHA.

(c) Steel plates shall be installed as per MDOT SHA's Book of Standards for Highway & Incidental Structures, Standard No. MD 104.01-85, Steel Plate – Method 1, Greater Than 40 mph; or Standard No. MD 104.01-86, Steel Plate – Method 2, Equal To or Less Than 40 mph as appropriate.

(d) Steel shall conform to the current ASTM A36 standard. All steel plates must be at least one (1") inch thick and sized to effectively carry traffic with a maximum one (1") inch deflection. Steel plates must be large enough to allow a minimum of one (1') foot of bearing on all four sides of the pavement surrounding the excavation and securely held in place with six (6") inch pins installed on all corners.

(e) In the event that more than one plate is required, the steel plate shall be large enough to allow a minimum of two (2') feet of bearing on three (3) sides of the plate and securely held in place with pins installed on all corners of each plate. For trench widths equal to or greater than five (5') feet, the steel plate support system shall be designed and stamped by a Professional Engineer licensed in the State of Maryland and approved by the MDOT SHA. Steel plate bridging is prohibited on expressways and freeways.

001.03.09.04 Multiple Steel Plates. When placing multiple plates, the MDOT SHA shall determine which of the following methods may be used by the Permittee:

(a) Two plates or more shall be welded together. This consists of placing three welds Twelve (12") inches in length on each abutting plate. One weld placed one foot from each edge and one weld placed in the center of the plate [six (6") inches from center in each direction]. All welds shall be performed by an American Welding Society certified welder, certified by the State of Maryland. Approach plates and ending plates shall be attached to the roadway by a minimum of one anchor pre-drilled into the corners of the plate and drilled a minimum two (2") inches into the pavement.

(b) Two plates or more shall be held together. This consists of placing three six (6") inch by twelve (12") inch by one (1") inch blocks to one side of the plate. One block to be placed one (1') foot from each edge and one block placed in the center of the plate. The two end blocks on the underside of the plate, the middle block to be placed on the topside of the plate.

001.03.09.05 Steel Plate Safety Measures. To minimize the hazard to the traveling public, the use of a bituminous concrete product is required on all exposed edges of the plates to ensure a smooth transition from the pavement to the surface of the steel plate. The material must be tapered from the height of the steel plate to the existing road surface and extend a minimum distance of one (1') foot to provide a suitable taper.

(a) At the sole discretion of the MDOT SHA, the Permittee may be required to recess the steel plate such that the top of the steel plate is flush with the surrounding pavement and pinned in place. For roadways with travel speeds greater than 40 mph, the steel plates shall be required to be recessed.

(b) Plates must be removed from the MDOT SHA ROW within twenty-four (24) hours once they are removed from the roadway. Plates may never be left within the roadway, shoulders, or any other area within the ROW, which could jeopardize motorist safety.

(c) Should an emergency condition occur that MDOT SHA forces must correct, the Permittee shall be charged for any and all costs, including but not limited to; labor, equipment, overtime, overhead, inspection, etc., associated with restoring the condition to a safe and acceptable level. The Permittee shall be responsible for any additional costs incurred by the MDOT SHA for emergency repairs performed during snow emergencies.

001.03.09.06 Sign Requirements. Sign requirements for steel plates are as follows:

(a) "STEEL PLATE:" warning signs, W8-8(4), shall be 48" x 48" and shall conform to the MdMUTCD and Maryland's Sign Standard Book.

(b) When steel plates are used to bridge open cut excavations within MDOT SHA pavement areas, signs shall be placed approximately 500 feet in advance of the steel plates.

(c) Location and spacing of these signs will depend on field conditions and is subject to approval by the MDOT SHA's Permit Inspector.

(d) The identification of the Permittee, contact individual, and 24-hour telephone number shall be clearly marked on the rear face of the "STEEL PLATES" warning sign.

(e) From October through April, steel plates shall be additionally identified by the placement of a grade stake located at the pavement edge immediately adjacent to the steel plates for

identification during snow events. The stake is to be at least three (3') feet high, painted international orange and must be visible to the traveling public.

(f) The identification of the Permittee must be clearly marked in orange paint on the surface of the steel plate or adjacent roadway.

(g) Permittee Identification Signs. The Permittee is required to install signs identifying their organization and telephone number. Signs shall be at least 14" in height by 22" in width. Signs shall have white letters and numerals on a dark blue background and must provide all of the following information:

(1) The name of the owner of the Permittee.

(2) The name of the contractor that is performing the work.

(3) A 24-hour telephone number for the contractor.

(4) Overall dimensions may be modified to fit the name of the Permittee with approval of the appropriate District Utility Engineer (or approved designee).

(5) The number and spacing of these identifying signs shall be subject to the approval of the MDOT SHA District Utility Engineer.

(6) MDOT SHA facilities will not be used to provide or install the signs or their supports.

(7) Identifying signs shall be erected immediately before the start of the Permittee's work operations and must be removed immediately upon completion of permanent construction and restoration.

001.03.10 BLASTING. All blasting operations, including the storage and handling of explosives and blasting agents, shall be performed in conformance with the applicable provisions of Section TC-6.07 and Section 201.03.04(b)(c) of the Maryland Standard Specifications for Construction and Materials, Dated July 2017.

001.03.10.01 Requirements.

(a) Blasting within MDOT SHA ROW is strictly prohibited without prior approval. To obtain authorization, a blasting plan (of type, charge, pattern, and method) must be submitted for approval a minimum of forty-five (45) days in advance of the anticipated commencement of work. Blasting cannot begin until the blasting plan is approved and authorized by the MDOT SHA and all other appropriate agencies.

(b) A (Maryland) licensed blaster is required to perform all blasting work associated with the work to be accomplished under the terms of this permit. The Permittee is required to furnish proof of a Maryland Blaster's License before beginning any blasting operations.

(c) The Permittee may be required to provide proof of additional insurance in an amount to be specified by the MDOT SHA prior to commencing any blasting activity.

(d) The District Utility Engineer must be notified three (3) business days prior to beginning any blasting work.

(e) All blasting is to be performed in complete compliance with the approved blasting plan.

(f) Blasting is not to be performed within one hundred (100') feet of any residence or structure.

(g) A thorough site inspection, including representatives of the MDOT SHA, the Permittee, and other affected parties shall be conducted prior to the commencement of blasting. The existing conditions of all culverts, inlets, retaining walls, and other structures is to be fully documented using photographs and/or videotape supplied at the expense of the Permittee. A copy of a complete set of this documentation is to be provided to the MDOT SHA District Utility Engineer prior to the commencement of blasting. A follow up inspection is to be performed upon the completion of blasting to identify any new damage to existing facilities. All damage to existing facilities shall be repaired to the complete satisfaction of the MDOT SHA at the sole expense of the Permittee. All necessary repair or replacement work is to begin immediately and be completed as soon as practicable.

(h) The Permittee is solely responsible to resolve to the complete satisfaction of the MDOT SHA all damage claims resulting from any activity associated with blasting performed under this permit. The Permittee shall be required to repair or replace all facilities damaged by blasting operations at no cost to the MDOT SHA.

(i) All shots shall be matted to control flying rock and debris so as to prevent damage to persons or structures.

(j) Equipment used for drilling blast holes shall use a positive means of dust control.

(k) Seismic readings may be required to monitor blasting operations. When required, a copy of readings indicating peak particle velocities shall be made available to a representative of the MDOT SHA after each shot.

(l) Blasting shall not be performed closer than fifty feet (50') from any water, gas, sewer, cable, or conduit unless said facilities have been completely exposed, definitively located and suitably backfilled prior to blasting in strict accordance with the specific requirements of the representative utility agencies. In no case will blasting be permitted closer than two (2') feet from any utility facility ten (10") inches or smaller in diameter, and no closer than five (5') feet from any utility facility larger than ten inches in diameter.

(m) All possible caution is to be exercised to ensure that drilling and blasting operations minimize overbreak and blast damage to adjacent unexcavated ground.

(n) All blasting is to be carefully balanced and controlled to provide a uniform distribution of charge that will fracture the rock so that it may be excavated to the required contours without fracturing rock beyond the excavation limits. Modify the blasting round as necessary to achieve the best obtainable results and to keep the air blast over pressure, vibrations and noise within the limits herein specified. It shall be the Permittee's responsibility to produce a satisfactory excavated surface by determining the proper relationships of the factors of burden, spacing, depth of charge, amount and type of explosive, hole size, and delay pattern, and other necessary considerations to achieve the required results.

(o) Controlled blasting is a method used to remove rock in which the various elements of the blast, hole, size, depth, spacing, burden, charge size, explosive charge weight per delay, distribution, and delay sequence, are carefully balanced and controlled to provide a distribution of the charge that will fracture the rock so it may be excavated to the required contours and minimize overbreak and fracturing of the rock beyond the contour line. Smooth wall blasting, pre-splitting, cushion blasting, and line drills are examples of operations included in the term "controlled blasting".

(p) The Permittee shall be responsible for providing material to replace broken rock that is unsuitable for trench backfill use.

(q) In the event that air blast pressure, vibration, noise, flying debris, or over breakage exceed specified limits, all blasting operations are to be immediately suspended until a modified blasting plan is submitted and approved.

(r) All blasting shall comply with MDOT SHA's Standard Specifications for Construction and Materials, Section TC-6.07- Use of Explosives.

001.03.11 TEST HOLES & TEST PITS. All test holes and/or test pit excavations performed within the MDOT SHA ROW shall be in accordance with Standard Specifications for Construction and Materials, Section 205 - Test Pit Excavation, Section 210 – Tamped Fill, and Standard Specifications for Subsurface Explorations.

(a) All test holes performed in pavement areas shall be by saw cut an area not to exceed Twelve (12") by twelve (12") square and then shall be excavated by the vacuum method. Test holes shall be of the size, depth, and location in accordance with Title 12 (Miss Utility) location requirements as approved by the MDOT SHA and restored by tamped six (6") lifts and sealed with approved cold mix asphalt.

(b) All test pits should generally be 3-feet to 4-feet square or rectangle dimensions depending upon the depths of the excavation needed. However, all test pit excavations shall be kept to the minimum required for satisfactory completion of the work. Test pits shall be of the size, depth, and location as approved by the MDOT SHA.

(c) All damaged paving shall be repaired with flowable fill or other MDOT SHA approved material and replaced in kind as soon as practicable and to the satisfaction of the MDOT SHA.

(d) At the discretion of the District Utility Engineer, the Permittee shall completely backfill test holes to match existing grade with non-shrink grout. Repairs are to be completed within forty-eight (48) hours.

(e) When a Permittee open cuts or excavates for test holes and/or test pits in the pavement of a state roadway, the cut shall be marked with the appropriate color code as designated by Miss Utility (see section 001.03.19 – MARKING ROAD REPAIRS). The initials of the Permittee are required to be painted within the cut area.

(f) The MDOT SHA reserves the right to require the Permittee to mill and overlay the roadway due to the amount and location of the said test pits.

001.03.12 TRENCHLESS INSTALLATIONS.

001.03.12.01 Trenchless installation activities are to be performed in complete accordance with submitted plans and specifications approved by the MDOT SHA. The Permittee assumes responsibility in the event of any roadway failure to replace any or all pavement as required in the opinion of the District Utility Engineer and/or Resident Maintenance Engineer's Office. The Permittee shall submit, with the Utility Permit Application of any proposed trenchless installation within MDOT SHA rights-of-ways. Plans should* be signed by a Professional Engineer licensed in the State of Maryland. Prior approval from the MDOT SHA shall be obtained prior to any construction using any method of trenchless installation. All materials used shall be adequate for the intended purpose and method of installation; and shall be approved by the MDOT SHA. * Refer to the MDOT SHA Utility Manual Section 1.01.02 Terms and Definitions.

001.03.12.02 Tunneling. All plans for tunneling operations must be approved/signed by a Professional Engineer licensed in the State of Maryland. For any proposed tunneling within MDOT SHA rights-of-ways, the Permittee shall submit a request for review and approval from both the MDOT SHA Office of Structures and the appropriate District Utility Engineer (or approved designee).

(a) The Permittee shall have approved plans, and approval of a method to support the face and periphery of the excavation, before doing any work.

(b) A heavy timber shaft at either end of the tunnel must be provided in order to prevent failure of the embankments and to maintain access to the tunnel. The tunnel liner plates shall be installed by tunnel methods using an approved method to support the face and periphery of the excavation, of which, all supports shall be adequately strong, braced, and shored. This support shall be maintained during non-working hours in order to prevent cave-ins. Access shafts are required at both ends of the tunnel.

(c) Tunnel excavation shall be advanced in increments not to exceed two (2') feet. Tunnel liner plates shall be installed immediately upon the completion of each excavation increment. Excavation is to be conducted so that the voids behind the tunnel liner plates are kept to a minimum.

(d) Voids behind tunnel liner plates are to be filled with grout placed under pressure. At least two (2) grout plugs are to be provided per ring to appropriately fill all voids. Grouting is to begin as soon as a sufficient length of tunnel liner plate has been installed to insure a proper seal. Grouting is to proceed progressively with each adjacent set of holes provided in liner plates. All voids shall be completely filled prior to the end of each shift.

(e) Bulkheads must be sufficiently secured to ensure proper seal and prevent the leakage of grout under pressure. Grouting equipment shall have a minimum capacity of one-half (½) cubic yard to assure that adequate grouting material is available within a reasonable period of time to avoid the setting up of grout from the previous batch. Upon the completion of grouting, all holes are to be plugged with an appropriate fitting provided.

(f) Access to the shaft is to be protected at all times to deny unauthorized pedestrian entry. Since the definition of tunneling compared to other trenchless technologies is that workers are present inside the tunnel, the safety of the operators is most important. The

Permittee shall operate and maintain an installed ventilation system to meet all OSHA, MOSH, and other pertinent safety requirements for the duration of the tunnel project.

(g) Approval for any proposed tunneling shall be from the appropriate District Utility Engineer (or approved designee) via the Complete Authorized Utility Permit unless work is 3rd Party Utility Work incorporated into the MDOT SHA's construction project.

001.03.12.03 Jacking & Boring. All plans for jacking and boring operations must be reviewed and stamped by a Professional Engineer licensed in the State of Maryland.

(a) A heavy timber shaft at either end of the jacking pit is required to prevent embankment failure and maintain access to the pit. This support shall be continuously maintained to prevent cave-ins. Pipes and sleeves shall have sufficient length to extend beyond the ditchline or shoulder edges as directed by the MDOT SHA. Excavation in shoulder areas to push or install pipes or sleeves is prohibited. For jacked and bored pipe crossings under MDOT SHA roadways, the bore hole diameter is not to exceed the outside diameter of the pipe or sleeve.

(b) The jetting of pipes or sleeves is not permitted.

(c) The allowable jacking strength capacity of the casing pipe shall be capable of withstanding the maximum jacking forces imposed by the operation. Steel casing pipe shall have minimum yield strength of 35,000 psi. To prevent cave-ins, pipes and sleeves shall be installed simultaneously with augering. In the event of a false start, the void will be backfilled by grouting or other method approved by the MDOT SHA.

(d) The Permittee is responsible to repair or replace any pavement area or areas damaged as a result of jacking and boring operations. The extent of repairs or replacement shall be determined at the sole discretion of the MDOT SHA. Repairs or replacement shall be performed immediately.

(e) Jack and bore pits shall be protected at all times to prohibit unauthorized vehicular and pedestrian access.

(f) The minimum allowable depth of a Jack and Bore installed casing pipe under the road and shoulder surface is five (5') feet. Any deviation shall require prior approval from the appropriate District Utility Engineer (or their approved designee). In locations where the road surface is super elevated, the minimum depth of the bore shall be measured from the lowest side of the pavement surface. In addition, a minimum three (3') foot depth shall be maintained in all other features including ditch bottoms unless otherwise directed by the appropriate District Utility Engineer (or their approved designee).

(g) Upon completion of the work, the Permittee shall remove and properly dispose of all excess materials and equipment from the work site.

001.03.12.04 Directional Boring. All plans for directional-boring operations should* be approved and stamped by a Professional Engineer licensed in the State of Maryland. * Refer to the MDOT SHA Utility Manual Section 1.01.02 Terms and Definitions.

(a) As per the standard for horizontal directional drilling, a minimum of three (3') foot cover within non-controlled access ROW and five (5') foot cover within controlled access ROW is required from existing grade to the top of all buried cables and ducts and must be

maintained under paved sections. The top of all cables and ducts must be buried a minimum of five feet below streambeds when crossing waters or wetlands.

(b) The discharge of all effluent resulting from directional boring operations is to be directed into a tank or truck and suitably disposed of at an authorized waste site.

(c) Drilling sites shall be protected at all times to prohibit unauthorized vehicular and pedestrian access. Exposed cables and ducts at splicing locations are to be protected utilizing orange safety fence installed a minimum height of four (4') feet and as prescribed in Section 104.20.03 of the 2017 Standard Specifications for Construction and Materials. Perimeter safety fencing around ducts and cables is to be securely maintained at all times.

(d) Support for exposed cables or ducts at splicing locations must be installed by the Permittee. The temporary attachment of cables or ducts to existing poles, signs, trees, or other existing fixed objects is strictly prohibited. Splicing and handhole installation is to proceed with cable or duct installation.

(e) Unless otherwise agreed to by the Permittee and the MDOT SHA, and responded to with a written letter, restoration activities must be commenced within seven (7) days of the placement of cable or duct between each handhole location. Upon completion of the work, the contractor shall remove and properly dispose of all excess materials and equipment from the work site.

001.03.12.05 Other Methods. Prior approval from MDOT SHA must be obtained prior to any construction using any other methods of trenchless installation. The Permittee must request, in writing, permission from the MDOT SHA to use any other methods of trenchless installation, attaching plans and specifications for MDOT SHA's review.

001.03.13 EROSION & SEDIMENT CONTROL.

001.03.13.01

(a) All erosion and sediment control measures and devices shall be constructed in conformance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control published by the Maryland Department of the Environment, Water Management Administration, and all revisions thereof.

(b) The Permittee is required to install and maintain all sediment control devices specified in assigned job-specific permit or other permits which have or should have been obtained by the Permittee. The Permittee is solely responsible for securing all permits necessary to accomplish the work outlined in the assignment permit.

(c) The Permittee is responsible for compliance with all state and local sediment control regulations.

(d) All disturbed areas are to be temporary stabilized within 48 hours following completion of excavation activities.

(e) Restoration and permanent stabilization of all areas is to be completed within seven (7) days of the completion of excavation activities.

(f) The discharge of any material or liquid, other than clean water, into any drainage facility is strictly prohibited.

(g) The discharge of any material or liquid into Waters of the United States is strictly prohibited.

(h) Stabilized construction entrances are required for access to work areas adjacent to roadways. Construction entrances shall be shown on permit plans and are to meet the sight distance standards.

(i) Any work or activity within twenty-five feet (25') of any wetland area is strictly prohibited.

(j) All dewatering is to be performed utilizing an approved dewatering device, approved by a Maryland Professional Engineer, to ensure the removal of sediment from effluent.

(k) All surface drains, swales, and ditches are to be maintained free of debris at all times.

(l) The Permittee shall take all steps necessary to keep erosion and siltation into the MDOT SHA's right of way to a minimum during construction.

(m) The Permittee shall avoid and minimize construction impacts to wetlands and waterways and shall restore affected areas to their preconstruction condition.

(n) A MDOT SHA certified Erosion and Sediment Control Manager must be specifically designated for each permit application. The Erosion and Sediment Control Manager shall supervise implementation of the sediment and erosion plan for all work that involves soil disturbance or excavation. The Erosion and Sediment Control Manager shall possess current MDOT SHA certifications.

(o) The MDOT SHA Quality Assurance Division provides quality assurance of erosion and sediment control devices in conformance with Section 308 of the 'Standard Specifications'.

001.03.14 DRAINAGE. All drainage structures must function while work is in progress, as well as upon completion of work. If damaged, storm drain facilities, including but not limited to pipe, inlets, headwalls, underdrain, and ditches etc., shall be replaced "in kind" by the Permittee in accordance with MDOT SHA publications heretofore referenced (Section 001.03.03.01 - DESIGN and CONSTRUCTION). Should any disturbances be made to the existing surface drain ditches, it will be necessary to restore the drainage ditches to their original condition by re-sodding or seeding and mulching, leaving them in a neat and orderly condition as determined by the MDOT SHA. Unpaved drainage ditches shall be restored in accordance with MDOT SHA's Standard Specifications for Construction and Materials, Category 300 - Drainage and MDOT SHA's Book of Standards for Highway & Incidental Structures, Category 300 - Drainage. All streambeds must be left free of debris so as to provide for a free flow of water at all times. Concrete ditch reconstruction shall be in accordance with the standards.

001.03.15 VALVES AND MANHOLES. The MDOT SHA shall not be responsible for repair of any damage to valves, manholes, or other structures, improperly installed and/or maintained by the Permittee, within the roadway or shoulder areas; or damage caused by others. The Permittee will assume the full responsibility for any injury or damage to MDOT SHA personnel

and equipment as a result of MDOT SHA equipment striking valves, manholes, or other structures, improperly installed and/or maintained by the Permittee such as during snow removal operations.

001.03.16 BACKFILL AND TEMPORARY PATCHING.

001.03.16.01

(a) **Backfill.** The Permittee shall backfill all excavated areas as per the approved permit drawings or as directed by the District Utility Engineer.

(b) **Saw cuts.** All excavation across pavement areas is to be full depth saw cut prior to removal.

(c) **Backfill placement.** For areas approved to be backfilled with excavated material or selected backfill material, all backfill is to be placed in horizontal layers not to exceed six (6") inches in depth. Each layer is to be uniformly tamped and compacted by means of a mechanical or vibratory compacting device in accordance with Standard Specifications for Construction and Materials Sections 210 Tamped Fill and 916 Soil and Soil Aggregate Borrow.

(1) **Excavating in pavement areas.** When the excavation is located within pavement areas, the backfill will be placed to within one foot of the bottom of the specified permanent patch depth; the remaining depth of the trench shall be temporarily backfilled with dense graded aggregate and compacted and approved by the MDOT SHA before permanently repairing the road.

(d) **Flowable fill.** For areas approved to be backfilled with flowable fill, the Permittee shall place and cure the Controlled Low Strength Material as directed by the MDOT SHA and in accordance with MDOT SHA's Standard Specifications for Construction and Materials, Section 314 - Flowable Backfill. The Permittee will be required to mill and overlay after this process at the direction of the District Utility Engineer.

(e) **Repairing disturbed areas.** The Permittee shall upon completion of backfilling the excavation, immediately repair all disturbed areas. The Permittee may temporarily patch the disturbed areas with the approval of the District Utility Engineer, otherwise all repairs will be permanent.

(f) **Temporary repairs outside roadway**. Temporary repair of areas outside the paved section shall be restored to their original condition, and shall include replacing topsoil, seeding and other work in general conformance with the MDOT SHA Environmental Guide for District, Access and Utility Permits Applicants, and as specified in the landscape plan developed for the project, or as directed by the District Utility Engineer. All reconstruction shall be in accordance with MDOT SHA's Standard Specifications for Construction and Materials, Category 700 – Landscaping. Inspections will be performed by the Office of Environmental Design's Quality Assurance Division and Landscape Programs Division in conformance with MDOT SHA Standard Specifications.

(g) **Temporary shoulder repair.** Temporary repair of shoulder areas after backfilling shall consist of a minimum of three (3") inches of cold patch placed into the excavated shoulder area and mechanically compacted as directed by the District Utility Engineer.

(h) **Temporary roadway patching.** The MDOT SHA may, at its discretion, allow a temporary patch of roadway area for a short period of time, not to exceed thirty (30) days unless agreed to and responded to in writing between the Permittee and the MDOT SHA as long as the patching remains acceptable for driving conditions. The period of time is subject to weather conditions allowing for the work to be completed. Temporary repair of bituminous concrete areas after backfilling shall consist of a minimum of three (3") inches HMA placed into the excavated roadway area and mechanically compacted or as directed by District Utility Engineer.

001.03.17 ROADWAY AND SHOULDER REPAIR AND RESTORATION. Installation of underground utilities under paved roadways and shoulders may require repairing hot mix asphalt pavement or Portland cement concrete pavement. Repairs shall be completed meeting the requirements of sections 504 Asphalt Pavement, 505 Asphalt Patches, and 522 Portland Cement Concrete Pavement Repairs of the Maryland Standard Specifications for Construction and Materials dated 2017; and Standard No. 578.01 – Repairing Pavement Openings for Utility Trenches; Standard No. MD 578.03 – Permanent Patching for Flexible Pavement Using Approved Asphalt Mix; Standard No. 578.03-01 – Permanent Patching for Composite Pavement in the Book of Standards for Highway and Incidental Construction as follows:

001.03.17.01

(a) **Permanent pavement repairs.** The Permittee shall permanently repair all roadway and shoulder areas (including intersecting roads and streets) in accordance with MDOT SHA's Book of Standards for Highway & Incidental Construction and MDOT SHA's Standard Specifications for Construction and Materials. MDOT SHA's Book of Standards for Highway & Incidental Construction, Standard 578.01 Repairing Pavement Openings for Utility Trenches is a minimum guideline only. The MDOT SHA reserves the right to change permit repair specifications to suit any changes that may occur on site.

(b) **Pavement restoration.** Final pavement restoration is to occur within thirty (30) days of the completion of the work unless agreed to in writing between the Permittee and the MDOT SHA.

(c) **Permanent roadway and shoulder repairs.** Permanent repair of shoulder and roadway areas excavated by the Permittee shall consist of the removal of any temporary repairs placed and must extend a minimum of two (2') feet beyond the limits of the excavation on all sides. The MDOT SHA may require resurfacing of the roadway up to a maximum of two hundred (200') feet on each side of a trench crossing a highway. This distance is a maximum and the appropriate District Engineer (or approved designee) may approve resurfacing down to a minimum of two (2') feet on each side of the excavation when road, traffic, and excavation conditions permit. All pavement repairs shall be as determined by the District Utility Engineer.

(d) **Milling.** Milling and overlay of pavement surfaces may be required at the direction of the District Utility Engineer.

(e) **Surface structure protection.** Exposed utility surface structures in milled areas are to be protected around their entire circumference with a minimum taper of two (2') feet of a bituminous concrete product.

(f) **Overlay milled pavement.** Milled surfaces are to be resurfaced within seven (7) days.

(g) **Restriping.** Traffic markings and symbols are to be replaced in milled and resurfaced areas prior to the reopening of pavement to traffic. Restriping of these areas with in-kind material will be completed immediately upon resurfacing entirely at the Permittee's expense.

(h) **Settlement in roadway repair.** The Permittee will be responsible for a period of one (1) year for any settlement of any repair, even if the Permittee met the required compaction requirements during the backfilling and installation. At the discretion of the District Utility Engineer, the area of settlement must be cut out and replaced to match the existing profile.

(i) **Concrete Roadway and/or Shoulders**. All concrete pavement disturbed is to be replaced with at least a ten (10') foot length of reinforced concrete patch or to the length required by MDOT SHA's Book of Standards for Highway & Incidental Construction, Standard MD 578.01 and placed in accordance with standard requirements of the MDOT SHA Specifications for Construction and Materials, Section 522 Portland Cement Concrete Pavement Repairs. Concrete Mix No. 9 per Standard Specifications for Construction and Materials Section 902.10 shall be used. Curing of the concrete patch shall be in compliance with the MDOT SHA's Specifications.

(1) **Extending the patch.** In the event the edge of the trench is within six (6') feet of a construction joint, the reinforced concrete patch must be extended to the construction joint. All trenches must be sawed full depth with a concrete saw. The roadway openings must be compacted as specified under "Backfill" Section of this permit.

(2) **Accelerator for Concrete Pavements**. When in the opinion of the MDOT SHA a concrete accelerator is required, the accelerator shall be approved by the MDOT SHA and used in accordance with manufacturer's specifications to obtain 350 psi split tensile strength within 12-16 hours.

(j) **Bituminous Concrete Roadway and Shoulders.** All bituminous concrete pavement disturbed is to be replaced as indicated under Concrete Roadway, as shall be applicable, except that the length of concrete patch will be a minimum of six (6') feet and a minimum depth of ten (10") inches. The concrete patch shall be overlaid with HMA, placed and thoroughly compacted, in accordance with MDOT SHA's Standard Specifications for Construction and Materials Sections 504 – Asphalt Pavement and 505 – Asphalt Patches, MDOT SHA's Book of Standards for Highway and Incidental Structures Standard No. MD 578.01 and as directed by the District Utility Engineer.

(1) **Full Depth Bituminous Concrete Shoulders**. At the sole discretion of the MDOT SHA, pavement repairs to full depth bituminous concrete shoulders may be composed of a variable depth HMA base covered with two (2") inches of HMA surface SC. The total thickness of HMA used for shoulder repairs must be equal to or greater than the thickness of the existing shoulder pavement.

(k) **Chip Seal Surface Treated Shoulders**. All Chip Seal Surface Treated Shoulders disturbed shall be replaced with twelve (12") inches of dense graded aggregate base, placed and compacted in two (2) horizontal lifts of thickness not exceeding six (6") inches and graded to match the existing shoulder slope. The Chip Seal Surface Treatment

shall be performed in accordance with MDOT SHA's Standard Specifications for Construction and Materials, Section 503 – Chip Seal Surface Treatment and as directed by the MDOT SHA. The Permittee shall maintain the disturbed shoulder area for a minimum of six (6) months after completion of all work.

(l) **Dense Graded Aggregate Shoulders**. All unpaved stone shoulders disturbed by the Permittee's operations shall be repaired by the Permittee with twelve (12") inches of dense graded aggregate base in accordance with Standard Specifications for Construction and Materials Section 501, placed and compacted meeting the requirements of Standard Specifications for Construction and Materials, Section 501.03.10 - Compaction in two (2) horizontal lifts of thickness not exceeding six (6") inches and graded to match the existing shoulder slope. The material must have a dual treatment of calcium chloride consisting of one pound per square yard each treatment, with treatments 14-90 days apart as required in the opinion of the Permit Inspector. The Permittee shall maintain the disturbed shoulder area for a minimum of six (6) months after completion of all work.

(m) **Driveway Entrances**. Private entrance aprons shall be replaced in accordance with MDOT SHA's Guidelines for Residential Entrances to State Highways and the Residential Permit Application Package. Commercial entrances damaged by the Permittee's activities shall be replaced in accordance with the Complete Authorized Utility Permit or as directed by the MDOT SHA. Pavement repair to existing driveway entrances are to be composed of material in type and thickness identical to that which existed prior to excavation. Existing concrete entrance aprons, if damaged, will be replaced in their entirety, using MDOT SHA Mix No. 6 concrete.

001.03.18 ROAD-SIDE RESTORATION.

001.03.18.01 General.

(a) **Replace, repair, or restore damaged property.** The Permittee will be responsible for replacing, repairing, or restoring anything removed or damaged as a result of any activity performed under this permit including but not limited to all curbs, medians, gutters, drains, fences, sidewalks, steps, rails, walls, signs, structures, crosswalks, mailboxes, etc. to their original condition to the complete satisfaction of the MDOT SHA and adjacent property owners.

(b) **Remove, adjust, or relocate property.** Any removal, adjustment, or relocations of traffic barrier, guardrails, posts, or end treatments is strictly prohibited except when authorized by individual permit applications. Traffic barriers shall be replaced in accordance with MDOT SHA's Book of Standards for Highway & Incidental Structures, Category 6 – Shoulders; Standard Specifications for Construction and Materials, Section 604 - Concrete Traffic Barriers, Section 605 – Metal Traffic Barriers, and Section 605 - Traffic Barrier End Treatments; and Guidelines for Traffic Barrier Placement and End Treatment Design.

(c) **Restore or replace fencing.** (Chain link) Fencing removed for construction is to be restored to its original condition. All fence openings shall be completely restored prior to the end of each working shift. Fences shall be replaced in accordance with MDOT SHA's Standard Specifications for Construction and Materials- Category 600 Shoulders,

and MDOT SHA's Book of Standards for Highway & Incidental Structures- Standards Nos. MD 690.01 thru MD 692.01 as applicable.

(d) **Remove, adjust, or relocate traffic control devices.** The removal, adjustment, or relocation of signs, delineators, markers, crosswalks, and other traffic control facilities or devices is strictly prohibited except as specifically authorized by the Complete Authorized Utility Permit. MDOT SHA traffic control facilities or devices shall not be removed until immediately prior to the permit activity requiring removal and shall be replaced in their original locations immediately upon completion of said permit activity. MDOT SHA traffic control facilities or devices disturbed or damaged by the Permittee's activities shall be repaired, replaced, or otherwise restored to the satisfaction of the MDOT SHA in accordance with MDOT SHA's Book of Standards for Highway & Incidental Structures; Standard Specifications for Construction and Materials; and the Maryland Manual on Uniform Traffic Control Devices. Delineators removed for construction shall be replaced to their original height and position upon the immediate completion of activities in accordance with MDOT SHA's Book of Standards for Highway & Incidental Structures, Standard Nos. MD 665.01 thru MD 665.06; and the Maryland Manual on Uniform Traffic Control Devices.

001.03.18.02 Curbs.

(a) **Limits of replacing curbs.** Any existing curbs disturbed shall be replaced to the limits as indicated for concrete roadway repair with the exception that in the event the edge of the trench is within four feet (4') of a construction joint, the new concrete curb must be continued to said construction joint and must conform with the existing curbs, and to be constructed in accordance with MDOT SHA's Book of Standards for Highway & Incidental Structures and Standard Specifications for Construction and Materials.

(b) **Concrete curb specifications.** Existing concrete curb or combination curb and gutter is to be replaced using MDOT SHA Mix No. 3 concrete to its original condition in accordance with the current version of the MDOT SHA Book of Standards for Highway & Incidental Construction, Standard Number MD 620.02, MD 620.02-1, and MD 620.03 as appropriate.

(c) **Bituminous curb.** Existing bituminous curb is to be replaced to its original condition in accordance with the MDOT SHA Book of Standards for Highway & Incidental Construction, Standard Number MD 615.01.

(d) **ADA.** Any existing curbs and/or combination curb & gutters disturbed shall be replaced in compliance with MDOT SHA's ADA policy.

001.03.18.03 Sidewalks.

(a) **Permanent sidewalk repairs.** Permanent repairs to concrete sidewalk shall consist of removal of the entire blocks of concrete sidewalk affected and the entire area replaced with MDOT SHA Mix No. 3 concrete (if applicable, type will be specified in job-specific permit), five (5") inches thick and finished to a true grade and alignment of the existing sidewalk – finished as now exists.

(b) **Curb specifications.** All work and materials shall be in accordance with the requirements of the MDOT SHA's Standard Specifications for Construction and

Materials, Section 603- Sidewalks and MDOT SHA's Book of Standards for Highway & Incidental Structures, Standard Nos. MD 655.01 thru MD 655.22. It will be the Permittee's responsibility to contact the Permit Section of the Department of Public Works of the County affected to obtain any necessary permits for all work involving the disturbance of sidewalks.

(c) **Accessibility requirements (ADA Compliance).** Both Maryland and Federal law require that new construction and reconstruction of any public facilities be done in a manner that ensures the facility is accessible by all users, including those with disabilities. Therefore, it is mandatory that work completed under this permit which includes construction or reconstruction of curbs, curb ramps, sidewalk/pedestrian walkways, crosswalks, or installation or modification of any type of obstructions contained within a sidewalk or pedestrian walkway be built in accordance with the MDOT SHA's Accessibility Policy and Guidelines for Pedestrian Facilities Along State Highways, available on MDOT SHA's Internet Site at roads.maryland.gov. These requirements include providing a minimum sixty (60") inch width path of travel, clear of obstructions within or protruding into the sidewalk/pedestrian walkway. If an object within the limits of the construction already exists within the sidewalk/pedestrian walkway, every reasonable effort should be made to relocate the object as part of the work performed under this permit. If an object cannot be placed or relocated entirely outside of the sidewalk/pedestrian walkway, then the object should be placed or relocated in a manner that provides the maximum possible clear width, which in no case shall be less than thirty-six (36") inches. The work done under this permit shall in no way reduce or negatively impact the accessibility of the curb ramps, sidewalk/pedestrian walkway, crosswalks, etc. from what existed prior to construction under this permit. If the sidewalk to be installed is less than five (5') feet in width, a wavier must be approved by the MDOT SHA ADA department.

001.03.18.04 Landscape Restoration. Landscape restoration shall begin immediately upon completion of excavation activities, and shall include replacing topsoil, seeding, sodding, tree installation, and other work in general conformance with the MDOT SHA Environmental Guide for District, Access and Utility Permit Applicants, and as specified in the landscape plan developed for the project, or as directed by the District Utility Engineer. All reconstruction shall be in accordance with MDOT SHA's Standard Specifications for Construction and Materials, Category 700 – Landscaping. Inspections will be performed by the Office of Environmental Design's Quality Assurance Division and Landscape Programs Division in conformance with MDOT SHA Standard Specifications.

001.03.19 MARKING ROAD REPAIRS.

When a Permittee open cuts within MDOT SHA ROW, the cut shall be marked with the appropriate color code as designated by Miss Utility (see below). The initials of the utility company are required to be painted within the cut area.

When the Permittee open cuts pavement of a State roadway, they shall mark the repaired road or shoulder area with the appropriate color as designated by Miss Utility. The initials of the utility company are also required to be painted within the repaired area.

Utility Color Codes as designated by Miss Utility:

Color	**Utility**
Red	Electric Power Lines, Cables, Conduit, and Lighting Cables
Yellow	Gas, Oil, Steam, Petroleum or Gaseous Materials
Orange	Communication, Alarm or Signal Lines, Cables or Conduit incl. CATV
Blue	Potable Water
Purple	Reclaimed Water, Irrigation and Slurry
Green	Storm Drain Lines/Sewer
Pink	Survey Markings
White	Proposed Excavation

APPENDIX B

Maryland Department of the Environment Permit Fact Sheet for the General Discharge Permit for Stormwater Associated with Construction (August 19, 2020) and Standard Inspection Form

Permit Fact Sheet

for the General Discharge Permit For Stormwater Associated with Construction Activity Maryland General Permit No. 20CP0000, NPDES Permit Number MDRC0000

Prepared by Paul Hlavinka
Maryland Department of the Environment
Water and Science Administration,
Industrial Stormwater Permits Division
1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708
paul.hlavinka@maryland.gov, 410-537-3323

Completed: August 19, 2020

Maryland regulations (COMAR 26.08.04.08) specify the process required for issuing General Permits and their renewals. The renewal process includes publication of a notice that the Maryland Department of the Environment (Department) has drafted a Tentative Determination and Fact Sheet, and allows the public 30 days to comment on the Tentative Determination and Fact Sheet before the Department issues the Final Determination. Maryland Code, Environment § 1-606 requires the Department to extend the public comment period to a total of 90 days on request by a person. The Department assumes that, for a permit like this, a request to extend the public comment period would be made; therefore, the public notice and comment period for this permit is 90 days.

Maryland regulations also allow for a public hearing on a draft permit (i.e., Tentative Determination) when a written request has been made. It is the Department's intent to provide and schedule online meetings for the exchange of information in hopes of achieving an equivalent outcome to the process that would occur through an in person meeting or hearing. Nevertheless, current rules provide the opportunity for traditional meeting and or hearing unless waived by a requesting party or where interim rules are declared applicable during the COVID-19 emergency declaration for Maryland.

The public notice is published in the Maryland Register and in newspapers around the State. The Department must review and respond to comments on the Tentative Determination. With this background, once the Department has created a Tentative Determination, public participation rules require the Department to publish the Tentative Determination in the Maryland Register and newspapers. The Department also sends a copy of the notice to the permittees and interested parties and will be posted to our website https://mdewwp.page.link/CGP. The dates of any scheduled public hearing and the specific end date of the comment period are included in the notice. An interest list will also be established for those interested in online opportunities for meetings and for online opportunities to present comments for the record. Comments can also be mailed in written form or emailed to the Department to Paul Hlavinka's attention.

Contents

I. Background

The Maryland Department of the Environment (MDE, hereinafter referred to as the "Department") is reissuing the National Pollutant Discharge Elimination System (NPDES) GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (Maryland General Permit No. 20-CP), which authorizes the discharges of stormwater associated with construction activity, to Waters of this State.

The Maryland General Permit No. 20-CP replaces the previous construction stormwater general permit, Maryland General Permit No. 14-GP, which expired on December 31, 2019. This Fact Sheet describes the Maryland General Permit No. 20-CP. The slight change in the permit designation from GP to CP, acknowledges that there are many general permits, but this permit is specific to construction.

A. Clean Water Act

Section 301(a) of the Clean Water Act (CWA) provides that "the discharge of any pollutant by any person shall be unlawful" unless the discharge is in compliance with certain other sections of the Act. 33 U.S.C. 1311(a). The CWA defines "discharge of a pollutant" as "(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft." 33 U.S.C. 1362(12). A "point source" is any "discernible, confined and discrete conveyance" but does not include "agricultural stormwater discharges and return flows from irrigated agriculture." 33 U.S.C. 1362(14). The term "pollutant" includes, among other things, "garbage… chemical wastes, biological materials …and industrial, municipal, and agricultural waste discharged into water."

One way a person may discharge a pollutant without violating the section 301 prohibition is by obtaining authorization to discharge (referred to herein as "coverage") under a NPDES permit issued pursuant to section 402 of the CWA (33 U.S.C. 1342).

1. NPDES Permits

Congress passed the Federal Water Pollution Control Act of 1972 (Public Law 92-500, October 18, 1972) (hereinafter the "Clean Water Act" or "CWA"), 33 U.S.C. 1251 et seq., with the stated objectives to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 101(a), 33 U.S.C. 1251(a). To achieve this goal, the CWA provides that "the discharge of any pollutant by any person shall be unlawful" except in compliance with other provisions of the statute. CWA section 301(a). 33 U.S.C. 1311. The CWA defines "discharge of a pollutant" broadly to include "any addition of any pollutant to navigable waters from any point source." CWA section 502(12). 33 U.S.C. 1362(12). EPA is authorized under CWA section 402(a) to issue a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant from a point source. These NPDES permits are issued by EPA regional offices or NPDES- authorized state or tribal agencies. Since 1972, EPA and the authorized states have issued NPDES permits to thousands of dischargers, including industrial (e.g., manufacturing, energy and mining facilities) and municipal (e.g., sewage treatment plants) facilities. As required under Title III of the CWA, EPA has promulgated Effluent Limitations Guidelines (ELGs) and New

Source Performance Standards (NSPS) for many industrial point source categories, and these requirements must be incorporated into NPDES permits. 33 U.S.C. 1311(b). The Water Quality Act (WQA) of 1987 (Public Law 100-4, February 4, 1987) amended the CWA, adding CWA section 402(p), requiring implementation of a comprehensive program for addressing stormwater discharges. 33 U.S.C. 1342(p).

2. Clean Water Act Stormwater Program

Prior to the Water Quality Act of 1987, there were numerous questions regarding the appropriate means of regulating stormwater discharges within the NPDES program due to the serious water quality impacts of stormwater discharges, the variable nature of stormwater, and the large number of stormwater point sources. EPA undertook multiple regulatory actions in an attempt to address these unique discharges. Congress, with the addition of section 402(p), established a structured and phased approach to address stormwater discharges and fundamentally altered the way stormwater is addressed under the CWA as compared with other point source discharges of pollutants. Section 402(p)(1) created a temporary moratorium on NPDES permits for point source stormwater discharges, except for those listed in section 402(p)(2), including dischargers already required to have a permit and discharges associated with industrial activity.

In 1990, pursuant to section 402(p)(4), EPA promulgated the Phase I stormwater regulations for those stormwater discharges listed in 402(p)(2). See 55 FR 47990 (November 16, 1990). The Phase I regulations required NPDES permit coverage for discharges associated with industrial activity and from "large" and "medium" municipal separate storm sewer systems (MS4s). CWA section 402(p)(2). As part of that rulemaking, EPA interpreted stormwater "discharges associated with industrial activity" to include stormwater discharges associated with "construction activity" as defined at 40 CFR 122.26(b)(14)(x). See 55 FR 48033- 34. As described in the Phase I regulations, dischargers must obtain authorization to discharge (or "permit coverage"), including discharges associated with construction activity, including clearing, grading, and excavation, if the construction activity:

- will result in the disturbance of five acres or greater; or
- will result in the disturbance of less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. See 40 CFR 122.26(b)(14)(x) and (c)(1).

Section 402(p)(5) and (6) of the CWA establishes a process for EPA to evaluate potential sources of stormwater discharges not included in the Phase I regulations and to designate discharges for regulation in order to protect water quality. Section 402(p)(6) of the CWA instructs EPA to "issue regulations…which designate stormwater discharges, other than those discharges described in [section 402(p)(2)], to be regulated to protect water quality and shall establish a comprehensive program to regulate such designated sources." In 1999, pursuant to the broad discretion granted to the agency under section 402(p)(6) of the CWA, EPA promulgated the Phase II stormwater regulations that designated discharges associated with "small" construction activity and "small" MS4s. 64 FR 68722 (December 8, 1999). Per 40 CFR 122.26(b)(15), NPDES permit coverage is required for discharges associated with "small" construction activity, including clearing, grading, and excavation, if the construction activity:

- will result in land disturbance of equal to or greater than one acre and less than five acres; or

- will result in disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

EPA continues to have discretionary authority under section 402(p)(6) of the CWA to designate additional stormwater discharges for regulation under the CWA in order to protect water quality. EPA has established an adjudicatory process for exercising discretion to designate and require NPDES permits for unregulated stormwater discharges. See 40 CFR 122.26(a)(9)(i)(C)-(D); see also Envt Defense Ctr. v. EPA, 344 F.3d 832, 873-76 (9th Cir. 2003).

3. NPDES Permits for Stormwater Discharges Associated With Construction Activity

The NPDES regulations provide two options for obtaining authorization to discharge or "permit coverage": general permits and individual permits. A brief description of these types of permits as they apply to construction and development (C&D) sites follows:

a. General NPDES Permits.

The vast majority of discharges associated with construction activity are covered under NPDES general permits. EPA, states, and tribes use general permits to cover a group of similar dischargers under one permit. See 40 CFR 122.28. General permits simplify the process for dischargers to obtain authorization to discharge, provide permit requirements for any eligible discharger that files a Notice of Intent (NOI) to be covered, and reduce the administrative workload for NPDES permitting authorities. General permits, including the fact sheet describing the rationale for permit conditions, are issued by NPDES permitting authorities after an opportunity for public review of and comment on the proposed general permit. Typically, to obtain authorization to discharge under a construction general permit, a discharger (any operators of the construction site; typically, a developer, builder, and/or contractor) submits to the permitting authority an NOI to be covered under the general permit. An NOI is not a permit or a permit application (see Texas Independent Producers and Royalty Owners Ass'n v. EPA, 410 F.3d 964, 977-78 (7th Cir. 2005)), but by submitting the NOI, the discharger asserts and acknowledges that it is eligible for coverage under the general permit and that it agrees to the conditions in the published general permit. Discharges associated with the construction activity are authorized consistent with the terms and conditions established in the general permit.

After reviewing information regarding permit eligibility contained in the NOI, EPA, states and tribes may notify a construction site operator that it must, instead, apply for an individual permit if the permitting authority determines that the operator does not meet the eligibility conditions for coverage under the general permit. Examples of situations that might trigger such a determination are when the proposed discharges will not meet applicable water quality standards, or when they may adversely affect a Federally listed threatened or endangered species. In some cases, the permitting authority may allow the operator to proceed with coverage under the general permit provided additional control measures

designed to address the specific issue at hand are implemented.

b. EPA Construction General Permit (CGP).
Since 1992, EPA has issued a series of Construction General Permits (CGPs) that cover areas where EPA is the NPDES permitting authority. At present, EPA issues construction stormwater permits in four states (Massachusetts, New Hampshire, New Mexico, and Idaho), the District of Columbia, Puerto Rico and all other U.S. territories with the exception of the Virgin Islands. EPA also issues NPDES permits for: (1) construction projects undertaken by Federal Operators in Colorado, Delaware, Idaho, Vermont, and Washington; (2) most tribal lands; and (3) a couple of other specifically designated activities in specific states (e.g., oil and gas activities in Texas and Oklahoma).

c. MDE Construction General Permit (MDRC0000/20CP0000).
Maryland is a state with authorization and the responsibility to issue NPDES permits within the State. Maryland Department of the Environment (MDE or "the Department") issues these NPDES permits. MDE issued its first NPDES general permit for stormwater associated with construction activity in 1993(NPDES number MDRC0000), and relied on the State's established erosion and sediment control and stormwater management programs discussed below. This permit was required for all construction activity disturbing five acres or more. MDE reissued the general permit in 1997 and 2003. In accordance with EPA's Phase II stormwater regulations, the 2003 general permit was required for all construction activity disturbing one acre or more. MDE reissued a subsequent general permit on March 31, 2008, which became effective on July 13, 2009. MDE reissued the 2009 general permit (NDPES number MDRC0000/State Number 14GP0000) as of January 1, 2014, and terminated the 2009 general permit effective December 31, 2014. The 2014 general permit took effect January 1, 2015, and expired December 31, 2019. This renewal will be NPDES number MDRC0000/State Number 20CP0000.

d. Maryland's Soil Erosion and Sediment Control and Stormwater Management Programs.
This general permit contains numerous references to Maryland state standards and regulations regarding soil erosion and sediment control (ESC) and post-construction stormwater management requirements (Stormwater Management Plans or SWM Plans), which are equivalent to or exceed standards described in the CFR and EPA's current General Permit for Stormwater Associated with Construction Activity. Maryland's Erosion Control Law and regulations specify the general provisions for program implementation; provisions for delegation of enforcement authority; requirements for erosion and sediment control ordinances; exemptions from plan approval requirements; requirements for training and certification programs; criteria for plan submittal, review, and approval; procedures for inspection and enforcement; and applicant responsibilities. Clearly defining minimum standards is essential to make erosion and sediment control work. MDE has established minimum criteria for effective erosion and sediment control practices. The 2011 Standards and Specifications for Soil Erosion and Sediment Control are incorporated by reference into State regulations and serve as the official guide for erosion and sediment control principles, methods, and practices. Further information about these updated Standards and Specifications is available on MDE's Website. Under the Erosion and Sediment Control Regulations at COMAR 26.17.01.08.G, some sites meeting certain grandfathering conditions

may continue to operate under previously approved plans meeting the 1994 Standards and Specifications for Soil Erosion and Sediment Control.

Maryland's Stormwater Management Act was passed by the Maryland General Assembly in 1982. The primary goal of the State and local programs established by the Act is to "maintain after development conditions, as nearly as possible, the predevelopment runoff characteristics." This program covers the permanent stormwater Best Management Practices installed on the developed site, rather than the controls used during construction activities. On April 24, 2007, Governor Martin O'Malley signed the "Stormwater Management Act of 2007" (Act), which became effective on October 1, 2007. The Act requires that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural best management practices and other better site design techniques. MDE has developed guidance including changes to regulation and a supplement to the Maryland Stormwater Design Manual for ESD (https://mdewwp.page.link/MDSWDesign).

Applicants for the General Permit include information on their NOIs listing the stormwater BMPs expected to be used at the time of application. The General Permit requires that permittees obtain approval (from the appropriate approval authority, such as a county government) for the Stormwater Management Plan prior to beginning earth disturbance, unless exempt or waived by the approval authority.

e. Individual NPDES Permits.
A permitting authority may require any construction site to apply for an individual permit rather than using the general permit. Likewise, any discharger may apply to be covered under an individual permit rather than seek coverage under an otherwise applicable general permit. See 40 CFR 122.28(b)(3). Unlike a general permit, an individual permit is intended to be issued to one permittee, or a few co-permittees. Individual permits for stormwater discharges from construction sites are rarely used, but when they are, they are most often used for very large projects or projects located in sensitive watersheds. EPA estimates that less than one half of one percent (< 0.5%) of all construction sites in the country are covered under individual permits. In Maryland, the issues related to large projects or sensitive watersheds are primarily addressed through specific controls on the E&SC plans.

4. Technology-Based Effluent Limitations Guidelines and Standards in NPDES Permits

Effluent limitations guidelines (ELGs) and new source performance standards (NSPSs) are technology-based effluent limitations under CWA sections 301 and 306 for categories of point source discharges. These effluent limitations, which can be either numeric or non-numeric, along with water quality-based effluent limitations, if necessary, must be incorporated into NPDES permits, as appropriate. ELGs and NSPSs are based on the degree of control that can be achieved using various levels of pollutant control technology as defined in Subchapter III of the CWA and summarized as follows:

a. Best Practicable Control Technology Currently Available (BPT).
The CWA requires EPA to specify BPT effluent limitations for conventional, toxic, and nonconventional pollutants. In doing so, EPA must determine what level of control is technologically available and economically practicable. CWA section 301(b)(1)(A). In

specifying BPT, EPA must look at a number of factors. EPA considers the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application. The agency also considers the age of the equipment and facilities, the process employed and any required process changes, engineering aspects of the application of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Administrator deems appropriate. CWA section 304(b)(1)(B).

b. Best Available Technology Economically Achievable (BAT).
BAT effluent limitations are applicable to toxic (priority) and nonconventional pollutants. EPA has identified 65 pollutants and classes of pollutants as toxic pollutants, of which 126 specific pollutants have been designated priority toxic pollutants. See 40 CFR 401.15 and 40 CFR part 423, Appendix A. In general, BAT represents the best available performance of facilities through application of the best control measures and practices economically achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives within the point source category. CWA section 304(b)(2)(A). The factors EPA considers in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the processes employed, the engineering aspects of the control technology, potential process changes, non-water quality environmental impacts (including energy requirements), and such factors as the Administrator deems appropriate. CWA section 304(b)(2)(B).

c. Best Conventional Pollutant Control Technology (BCT).
The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with BCT for discharges from existing point sources. BCT is not an additional limitation, but replaces Best Available Technology (BAT) for control of conventional pollutants. In addition to other factors specified in CWA section 304(b)(4)(B), the Act requires that EPA establish BCT limitations after consideration of a two- part "costreasonableness" test. EPA explained its methodology for the development of BCT limitations in July 1986. 51 FR 24974 (July 9, 1986). Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD5), total suspended solids (TSS), fecal coliform, pH, and any additional pollutants defined by the Administrator as conventional. See 40 CFR 401.16. The Administrator has designated oil and grease as an additional conventional pollutant. 44 FR 44501 (July 30, 1979). CWA section 304(b)(4)(B).

d. Best Available Demonstrated Control Technology (BADT) for New Source Performance Standards (NSPS).
NSPS apply to all pollutants and reflect effluent reductions that are achievable based on the BADT. New sources, as defined in CWA section 306, have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS should represent the greatest degree of effluent reduction attainable through the application of the best available demonstrated control technology. In establishing NSPS, CWA section 306 directs EPA to take into consideration similar factors that EPA considers when establishing BAT, namely the cost of achieving the effluent reduction and any non-water quality, environmental impacts and energy requirements. CWA section 306(1)(B). NPDES permits issued for construction stormwater discharges are required under Section 402(a)(1)

of the CWA to include conditions for meeting technology-based ELGs established under Section 301 and, where applicable, any NSPS established under Section 306. Once an ELG or NSPS is promulgated in accordance with these sections, NPDES permits must incorporate limits based on such limitations and standards. See 40 CFR 122.44(a)(1). Prior to the promulgation of national ELGs and/or NSPS, permitting authorities must establish and include in NPDES permits technology- based effluent limitations case-by-case based on their best professional judgment. See CWA section 402(a)(1)(B); 125.3(a)(2)(ii)(B).

5. EPA's Construction and Development Effluent Limitations Guidelines and New Source Performance Standards

On December 1, 2009, EPA promulgated ELGs and NSPSs to control the discharge of pollutants from construction sites. See 74 Fed. Reg. 62996, and 40 CFR 450.21. These requirements, known as the "Construction and Development Rule" or "C&D rule," became effective on February 1, 2010.

Following the promulgation of the C&D rule in 2009, several parties filed petitions for review of the final rule, identifying potential deficiencies with the dataset that the EPA used to support its decision to adopt a numeric turbidity limitation as well as other issues. On March 6, 2014, pursuant to a settlement agreement to resolve the litigation, EPA finalized amendments to the C&D rule that withdrew the numeric turbidity limitation and monitoring requirements, and also provided clarification regarding several other requirements of the rule. See 79 Fed. Reg. 12661 and 80 Fed. Reg. 25235. MDE issued the 14GP after these C&D rule requirements were available and incorporated them into the 14GP permit. Therefore, the new 20-CP continues to include the requirements from the C&D rule and is consistent with the required Effluent Limitations Guidelines. There are cases within the Fact Sheet where the Department has found portions of the C&D rule that were implemented by EPA in its CGP, that were not included in Maryland's 14-GP, and as a result we are now incorporating them into the 20-CP.

a. Summary of C&D Rule Requirements

The C&D rule requirements include non-numeric effluent limitations that apply to all permitted discharges from construction sites (40 CFR 450.21). The effluent limitations are structured to require construction operators to first prevent the discharge of sediment and other pollutants through the use of effective planning and erosion control measures; and second, to control discharges that do occur through the use of effective sediment control measures. Operators must implement a range of pollution control and prevention measures to limit or prevent discharges of pollutants, including those from dry weather discharges as well as wet weather (i.e., stormwater).

The non-numeric effluent limitations are designed to prevent the mobilization and stormwater discharge of sediment and sediment-bound pollutants, such as metals and nutrients, and to prevent or minimize exposure of stormwater to construction materials, debris and other sources of pollutants on construction sites. In addition, these non-numeric effluent limitations limit the generation of dissolved pollutants, such as nutrients, organics, pesticides, herbicides and metals that may be present naturally in the soil on construction sites, such as arsenic or selenium, or may have been contributed by previous activities on the site such as agriculture or industrial activity. These pollutants, once mobilized by rainfall and stormwater, can detach from the soil particles and become dissolved pollutants. Once dissolved, these pollutants would not be

removed by down-slope sediment controls. Source control through minimization of soil erosion is therefore the most effective way of controlling the discharge of these pollutants.

b. The C&D rule's non-numeric effluent limits are as follows (see 40 CFR 450.21):

1. Erosion and Sediment Controls

   Operators must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

   i. Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
   ii. Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
   iii. Minimize the amount of soil exposed during construction activity;
   iv. Minimize the disturbance of steep slopes;
   v. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater discharge, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
   vi. Provide and maintain natural buffers around Waters of this State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
   vii. Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
   viii. Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

2. Soil Stabilization Requirements

   Operators must, at a minimum, initiate soil stabilization measures immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within a period of time determined by the permitting authority. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

3. Dewatering Requirements

   Operators must minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Pollution Prevention Measures

Operators must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

i. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
ii. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
iii. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

5. Prohibited Discharges

The following discharges from C&D sites are prohibited:

i. Wastewater from washout of concrete, unless managed by an appropriate control;
ii. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
iii. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
iv. Soaps or solvents used in vehicle and equipment washing.

6. Surface Outlets

When discharging from basins and impoundments, operators must utilize outlet structures that withdraw water from the surface, unless infeasible.

6. Review of File and Input from Listening Sessions

When considering the renewal, the Department held listening sessions with various groups to identify gaps and opportunities for improvements. We also reviewed EPA's input from their oversight Permit Quality Reviews (PQR). The consistent items that needed to be addressed are summarized here. Changes through the permit and discussed in this Fact Sheet are a result of this effort. Areas for improvement:

1) The 14-GP makes frequent reference to Maryland Regulations, without including the actual language in the permit. EPA recommended moving more of the language into the permit so that operators would have a better chance of meeting all State Requirements. [EPA PQR]
2) The 14-GP doesn't provide limits or language regarding the use of Chemical Additives. [CBP Urban Stormwater Workgroup]

The Department is aware of the significant interest and need to use polymers and other chemical additives for treatment of turbid waters that result from runoff in certain soil profiles in Maryland. It was 2014, when the existing 14-GP was being issued, when the Chesapeake Bay Program (CBP) partnership's Urban Stormwater Workgroup provided recommendations regarding E&SC practices to address pollutants released into the Bay [https://www.chesapeakebay.net/channel_files/21146/attachment_d--final_long_draft_esc_expert_panel_01072014.pdf], which reviewed all the Chesapeake Bay states' programs, and identified the use of chemical additives as an essential component of stormwater treatment to address pollutants entering the local streams and larger watershed. Over the years, some Maryland Counties had actually taken the lead to start approving chemicals on their own without any solid guidance from the State. It is the Department's position that we needed to take leadership in this regard and provide permit limits and guidance for the safe use of these products. When reviewing options, the Department held an internal workgroup to examine options and explore best practices. As noted later in this Fact Sheet, a rationale was settled on that is consistent with EPA's implementation, and taking some of the ideas from other states, to address this need.

Figure 1 - Stormwater BMP with Turbid Waters

3) The permit does not contain language of how to handle discharges to sensitive waters (antidegradation). [EPA PQR, Center for Progressive Reform, Chester River Keeper, Chesapeake Bay Foundation]
4) The permit should include requirements to target discharges to waters with PCB impairments, similar to EPA CGP. [EPA PQR, Maryland Building Industry Association]
5) Stormwater Design Standards should acknowledge changes in climate and the resulting changes in frequency of storms. [Center for Progressive Reform, Chester Riverkeeper]

   This item in particular is hard to address by the permit alone. The permit refers to the Design Manual, which is where changes would be made to address design standards.

6) Petitions by Concerned Citizens and the Public Comment Period. [Center for Progressive Reform]

The suggestions to allow more input will be afforded to citizens related to the newly required Antidegradation Checklists, however those will be based either on the Water Quality-Based or Technology-Based requirements found in the permit. The other addition to the permit is a requirement for specific sites to maintain a SWPPP and related records. Although these are not readily available by citizens, they are to be on-site for an inspector to evaluate and make recommendations based on citizen complaints.

7) Fees [Center for Progressive Reform]

   The suggestion that fees should be increased to support the Department's efforts is something that would need to be addressed through regulation. The permit would allow for an increase, only if the regulation is changed. Thus the reference in that section to the regulation.

8) Impaired Waters and the need for Water Quality-Based limits. [Center for Progressive Reform, Chester River Keeper, Chesapeake Bay Foundation]
9) The need for SWPPPs to address issues beyond the E&SC Plan. [Center for Progressive Reform, Maryland Building Industry Association, Chesapeake Bay Foundation]
10) Large and Complex Construction Projects should require better coordination and a SWPPP condition. [Center for Progressive Reform]
11) Listing of Non-Stormwater Discharges contains gaps which could be addressed through considerations of the EPA CGP. [Maryland Building Industry Association]
12) Inspection improvements should include an option to perform more frequent inspections in lieu of the existing once a week and once after storm event. [Maryland Building Industry Association]
13) eNOI should include more information about work at a site (polymer use, Tier II). [Center for Progressive Reform, Maryland Building Industry Association]
14) There were many questions taken by the help desk for the eNOI system that will need to be addressed so that the electronic system uses terminology that is consistent with the Permit. Differences in the past have caused confusion for roles such as a signatory vs responsible party, use of the term 'person' without the COMAR definition, and Co-Permittee, and transfers.
15) The permit uses the term 'person' instead of 'Operator', 'permittee' in the third person vs 'You' or 'Your', and uses the term 'Director' instead of the term 'Department'. Changes were made throughout to make the permit consistent with the Department's other General Permits.
16) The C&D Rule requirements were largely incorporated into the 14-GP. However, the requirement to provide and maintain natural buffers around Waters of this State were missed. In this renewal buffers are addressed for tributaries.

B. Summary of Significant Changes to Permit

The 14-GP's conditions are retained in the 20-CP, including the required C&D rule requirements. The permit relies on Maryland's effective Soil Erosion and Sediment Control and Stormwater Management

Programs, to address the primary pollutants (namely sediments) resulting from construction activities. The permit requires a stormwater management plan, self-inspection and record keeping. The changes in the renewal address certain gaps related to sensitive waters (primarily Tier II waters), pollutants other than sediment and the use of chemical additives to address turbidity. The permit also addresses a common point of confusion, which relates both to common plans of development, where areas of responsibility require a SWPPP, and the use of transfers for more than changes in ownership. To incorporate these permit limits, the Department reviewed strategies employed by EPA CGP and neighboring state programs related to required controls and SWPPP provisions. The chosen permit organization necessitated a reorganization of the permit to allow for these additions. The permit also incorporates the requirements for use of the web-based NOI system for many of the authorization activities. Supporting rationale for these and other changes in the Maryland General Permit No. 20-CP are included in the remainder of this factsheet.

1. Reorganization of the Permit

The Department streamlined and simplified language throughout the CP to present requirements in a generally more clear and readable manner, by incorporation of similar changes implemented by EPA in its latest CGP. This included labeling and grouping requirements in a similar structure to that EPA permit. (Table 1). This structure should enhance operators' understanding of and compliance with the permit's requirements. For example, the Department moved definitions into an appendix and replaced many references to COMAR with the actual language in the regulation so that the operator wouldn't need to look each reference up. Although the permit has been streamlined from prior permits, many of the requirements remain unchanged. The structure of the document consolidated controls in one section, corrective actions in a separate section, monitoring or inspection in another section, so that an operator may more quickly find the relevant item of interest. This also allowed for the addition of the actual SWPPP requirements, sensitive water requirements and use of chemical additives and for more clearly grouping the C&D controls in their own section.

Table 1 - New Permit Structure Compared with Existing Permit

14-GP Structure (where section was located)	**20-CP Structure (new structure)**
Part I. COVERAGE UNDER THIS PERMIT	PART I. PERMIT APPLICABILITY
I.A. Permit Applicability to Areas in Maryland	A. Geographic Coverage
I.B. Eligibility	B. Eligibility Conditions
[Found as bullet 4 in Part III.A "Prohibition of Non-Stormwater Discharges"]	C. Eligible Discharges (Types of Discharges Authorized)
III.A. Prohibition on Non-Stormwater Discharges	D. Prohibited Discharges
I.C. Requiring an Individual Permit or an Alternative General Permit	E. Requiring an Individual Permit or an Alternative General Permit
[Found in Standard Permit Conditions]	F. Continuation of an Expired General Permit
Part II. NOTICE OF INTENT REQUIREMENTS I.D. Authorization	Part II. AUTHORIZATION UNDER THIS PERMIT

II.C. Notice of Intent II.A. Deadlines for Notification II.D. Failure to Notify II.E. Contents of Notice of Intent II.F. Fees II.G. Where to Submit	A. Authorization Request
II.B. NOI Approval Process and Public Review Period	B. NOI Approval Process and Public Review Period
II.H. Effective Date of Coverage	C. Effective Date of Coverage
I.E. Transfer of Authorization	D. Transfer of Authorization
[Found in Standard Permit Conditions]	E. Continuation of Coverage under This General Permit
II.I. Notice of Termination	F. How to Terminate Coverage
Part III. SPECIAL CONDITIONS	Part III. CONTROL MEASURES AND EFFLUENT

Part IV. EFFLUENT LIMITATIONS, PREVENTION OF THE DISCHARGE OF SIGNIFICANT AMOUNTS OF SEDIMENT, MONITORING, RECORDS, AND REPORTING REQUIREMENTS	LIMITATIONS
A. Effluent Limitations	A. Technology-Based Limits
Part V. CONSISTENCY WITH TOTAL MAXIMUM DAILY LOADS	B. Water Quality-Based Limits
C. Monitoring and Records D. Reporting Requirements C. Releases in Excess of Reportable Quantities	C. Site Inspection, Monitoring and Records
B. Prevention of the Discharge of Significant Amounts of Sediment	D. Corrective Actions
D. Training of Personnel E. Compliance with Other Laws	E. Staff Training Requirements
III.B. Other Requirements for Erosion and Sediment Control and Stormwater Management Plans	F. Stormwater Pollution Prevention Plan (SWPPP)
Part VI. STANDARD PERMIT CONDITIONS Part VII. REOPENER CLAUSE	Part VI. STANDARD PERMIT CONDITIONS
Part VIII. AUTHORITY TO ISSUE DISCHARGE PERMITS	Part V. AUTHORITY TO ISSUE GENERAL NPDES PERMITS
Part IX. DEFINITIONS	Appendix A
	Appendix B – C&D Rule Requirement for Buffers
	Appendix C – Tier II Antidegredation Checklist

2. Types of Discharges Authorized

The permit clarifies that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the 20-CP.

The 20-CP, like the 14-GP, authorizes several non-stormwater discharges in Part I.E. New to the 20-CP are clarifications on the explicit prohibition of non-stormwater discharges, such as external building washdown waters containing hazardous substances, such as paint or caulk containing polychlorinated biphenyls (PCBs). Also new to the permit is inclusion of chemical additives. Consistent with the 14-GP, authorized non-stormwater discharges are required to comply with any applicable effluent limitation requirements in Parts III.A and Part III.3 of the 20-CP.

3. Effluent Limitations

Changes to the organization of this section are substantial, however the content is very similar, and the supporting rationale is discussed later in this Fact Sheet in Part I.C.16 "Control Measures and Effluent Limitations." The limits are broken up into Technology-Based Limits and Water Quality-Based Limits. The technology-based limits are specific practices or controls that are to be implemented. Many of these address sediment and erosion, and support the E&SC plan. The 14-GP had relied on references to requirements in COMAR. The limits are now drawn from COMAR and are consistent with the EPA CGP. In addition, there are controls for fueling areas, and for other areas that may contain contaminated soils, that would necessitate additional actions and planning, which will trigger the creation of a SWPPP. A comparison of the 14-GP and the EPA CGP resulted in the identification of the full suite of practices required for those pollutants. Where the 14-GP had already included the control, the MDE language was utilized. In cases where the EPA CGP identified a practice, for example for fueling areas, the EPA developed practice was used. This reorganization also provided a better context for additions such as the use of chemical additives, since they logically fall into technology-based limits and have SWPPP components. With the previous permit structure, such additions would have been difficult. The comparison also highlighted the need to include specific requirements for dewatering, beyond the reference to the design manual.

In the Water Quality-Based Limits section are the additions of controls for Sensitive Waters, also called Tier II waters. These are new to the Maryland permit 20-CP. The requirements are discussed later in this fact sheet. Also in this section are requirements for construction in watersheds with PCB impairments. Specifically, the permit requires the implementation of controls on sites discharging to polychlorinated biphenyl-(PCB) impaired waters to minimize the exposure of building materials containing PCBs to precipitation and stormwater. This provision applies to the demolition of structures with at least 10,000 square feet of floor space built or renovated before January 1, 1980. The Department also requires information about the demolition location and associated pollutants to be documented in the SWPPP.

4. Notice of Permit Coverage

As in the 14-GP, construction operators must post a sign or other notice of permit coverage at a safe, publicly accessible location in close proximity to the construction site (Part III.C.8). New to the 20-CP is the requirement to have a copy of the SWPPP on-site, if required to create one in accordance with Part III.F.

5. Notice of Intent (NOI)

The Department added questions to the NOI requirements to be consistent with the eNOI system

and other NPDES permits issued by the State. These questions are:

- The type of construction site (select one or more of 9 options), rather than an SIC code.

- Addition of Tier II watershed identification and ability to upload the Anti-degradation Checklist.

- A yes/no question asking if there is demolition of a structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980.

6. Categories of Facilities That Can Be Covered Under This Permit

This permit covers stormwater discharges associated with construction activities located in one of the areas identified in Part I.B, which disturb one or more acres of land, or will disturb less than one acre but are part of a common plan of development or sale that will ultimately disturb one acre or more. See 40 CFR 122.26(b)(14)(x) and (15), in addition to this Part I.B of the permit. Any construction operator that meets the eligibility requirements laid out for coverage is eligible. Eligibility for coverage by the permit is available to operators of "new sites", operators of "existing sites", "new operators of permitted sites", and operators of "emergency related projects". New Operator by way of example is an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction site that is either a "New site" or an "existing site".

7. Triggers for SWPPP Requirements

The permit requires SWPPPs in certain cases, which are meant to complement the required E&SC or SWM plans. Those changes are discussed in the Permit Requirements section of this fact sheet. The basic premise is that SWPPPs are required when there are pollutants beyond those addressed by the E&SC Plan. The triggers are included in Part III.F.1.c of the permit. The triggers are 1) use of chemical additives or polymers, 2) contaminated soil or demolition, 3) activities such as fueling or batch plants with pollution prevention requirements spelt out in Part III.A.3, and 4) sites which are part of a larger common plan of development.

8. Sensitive Water (Tier II Waters) and Impairment Triggers for E&SC Requirements

These are discussed further in the document below. The summary is that the Department will require a checklist (Appendix C) to be completed for construction within watersheds identified as Tier II, to allow the Department to review the permittee's antidegradation review. If the waterbody is impaired for a pollutant other than sediments, that also may be a trigger for additions to the SWPPP or implementation of additional controls as required by the Department. Both are discussed in the Water Quality-Based limits section.

C. Permit Requirements

This section outlines below the purpose of each provision, followed by the permit requirements (in

text box), followed by any additional explanation of each provision.

1. Part I: Permit Applicability

This permit authorizes the discharge of pollutants to Waters of This State in accordance with the effluent limitations and conditions set forth herein associated with construction activity. Part I and Part II: Permit Applicability and How to Obtain Authorization Under the 20-CP. Part I of the 20-CP details the provisions that must be met to obtain coverage under the permit, and then Part II details how to obtain the authorization. Although these sections have been reorganized from prior permits, most of the requirements for coverage and the process to be followed for seeking coverage remain largely unchanged. The exceptions to the previous process are highlighted below.

2. Part I.A: Geographic Coverage

The requirements in Part I.A describe which operators may be authorized for the permit based on their geography. The key here is that the operator must be registered to do business in Maryland and discharge to State Waters, which is addressed under information required for the NOI.

3. Part I.B: Eligibility Conditions

The requirements in Part I.B describe all the conditions that must be met to be eligible for coverage under the 20-CP. Listing these eligibility conditions ensures that operators have verified that their particular construction project, and discharges from it, are eligible for coverage under this permit.

Part I.B (I.B.1 - I.B.4) Permit Requirements

I.B.1. You are an operator of the construction project for which discharges will be covered under this permit. For the purposes of this permit and in the context of stormwater discharges associated with construction activity, an "operator" is any party associated with a construction project that meets either of the following two criteria:

a. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

b. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Where there are multiple operators associated with the same project, all operators must obtain permit coverage. Subcontractors generally are not considered operators for the purposes of this permit.

I.B.2. The project will disturb one or more acres, or will disturb less than one acre but is part of a common plan of development or sale that will ultimately disturb one or more acres, or the project's discharges have been designated by the Department as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii).

I.B.3. For operators of a "new source" (as defined in Appendix A)

a. The Department has not, prior to authorization under this permit, determined that discharges from your site will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, the Department may notify the operator that an individual permit application is necessary in accordance with Part I.C.2. However, the Department may authorize coverage under this permit after the operator has included appropriate controls and implementation procedures designed to bring the discharge into compliance with this permit, specifically the requirement to meet water quality standards. In the absence of information demonstrating otherwise, the Department expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part III.B, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard; and

Discharges from your site to a Tier II water will not lower the water quality of the applicable receiving water. In the absence of information demonstrating otherwise, the Department expects that compliance with requirements of this permit, including the requirements applicable to such discharges in Part III.B.2, will result in discharges that will not lower the water quality of such waters.

I.B.4. Discharges from the project are not:

Already covered by a different NPDES stormwater permit for the same discharge.
Note that this does not include the following: (1) sites currently covered under the 14-GP that will be seeking coverage under this permit, nor (2) sites that will be covered under this permit that are transferring coverage to a different operator.

[Note that notwithstanding a project being ineligible for coverage under this permit because it falls under the description of (a) or (b) above, the Department may waive the applicable eligibility restriction after specific review if it determines that coverage under this permit is indeed appropriate.]

The definition of “operator” in Part I.B. above is consistent with the 14-GP. Any party associated with a construction site that meets the first part of the definition of “operator” (i.e., the party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications) or the second part of the definition of “operator” (i.e., the party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions) must obtain NPDES permit coverage for its stormwater discharges associated with construction activity including clearing, grading, and excavation.

Part I.B of the permit now clarifies the requirements with respect to projects with multiple operators. Where there are multiple operators associated with the same project, all operators must obtain permit coverage. The 14-GP however was not crystal clear in this respect, which resulted in multiple transfers of authorization in common plans of development. The result was often confusion by both inspector and permittee with regards to who had responsibility in those types of projects. This clarification in Part B.1.b and the resulting requirements for a SWPPP to clarify who has control, will

aid inspectors and those who are authorized in determining areas of responsibility.

Also, if the operator of a "construction support activity" (see Part I.B.1.b) is different than the operator of the main site, that operator must also obtain permit coverage. For example, if a construction support activity for the project is owned by a separate owner, and if the separate owner meets the definition of "operator", that person must obtain permit coverage for discharges from the site where the support activities are located. For concrete batch plants, coverage under MD state permit 15-MM, the General Permit for Discharges from Mineral Mines, Quarries, Borrow Pits, and Concrete and Asphalt Plants, may also be required if the plant discharges process water. However, if the construction support activity is owned or operated by the site operator, then the support activity must be included in the site operator's permit coverage, including any documentation provided in the NOI and SWPPP. Part I.B references Part III.F for clarification on the sharing of permit-related functions between and among operators on the same site and for conditions that apply to developing a SWPPP for multiple operators associated with the same site.

The requirements in Part I.B.3, which apply to new sources, are designed to comply with 40 CFR 122.4(i) requirements that address the issuance of permits to new sources to bodies of water not meeting instream water quality standards. The Department notes that while Part I.B.3 is designed to specifically implement 40 CFR 122.4(i), other water quality-based requirements apply to existing sources, as well as new sources. Part III.B of the permit includes water quality-based effluent limits applicable to all sources, which are designed to ensure that all discharges from all operators are controlled as necessary to meet water quality standards.

Part I.B.3.b also requires operators to determine if they discharge to a Tier II water, and if they do, to comply with specific requirements in the permit, which are intended to ensure that their discharges will not result in a lowering of water quality in the receiving water. This provision makes clear to operators their requirements for complying with antidegradation requirements, and provides assurance that operators will not cause or contribute to a lowering of water quality in the receiving water.

4. Part I.C: Types of Discharges Authorized

Part I.C of the 20-CP provides operators with a comprehensive list of the types of discharges that are authorized once covered under this permit. This is modified from the 14-GP and is now consistent with other permits issued by the Department and with EPA's CGP. The result of providing the full list should be improved knowledge by the permittee and inspector as to what is covered by the permit. This list provides clarifications from the 14-GP, and makes operators aware of allowed stormwater and non- stormwater discharges, and of any additional requirements associated with those discharges to minimize the discharge of pollutants, and also makes operators aware that any discharges not included on the list are not authorized under this permit.

Part I.C.1 lists categories of stormwater discharges that are allowed under the 20-CP, provided that all applicable permit limits and conditions are met.

Part I.C.1 Permit Requirements

The following stormwater discharges are authorized under this permit provided that

appropriate stormwater controls are designed, installed, and maintained (see Parts III.A and III.B):

a. Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR 122.26(b)(14) or 122.26(b)(15)(i);

b. Stormwater discharges designated by the Department as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Stormwater discharges (no process water) from construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided that:

i. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;

ii. The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;

iii. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and

iv. Stormwater controls are implemented in accordance with Part III.A and Part III.B for discharges from the support activity areas.

d. The permit also clarifies that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the CGP.

Part I.C.1.d includes that new clarification that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the 20-CP. This clarification was added to ensure consistency between this permit, the 12SW, the 15MM, EPA's MSGP and EPA's CGP, which gives mining operators the option of having these same stormwater discharges covered under that permit or having them covered under the CGP. This language simply makes it clear to mining operators that these stormwater discharges are in fact eligible under the 20-CP, as intended.

Part I.C.2 provides authorization for non-stormwater discharges from the operator's construction activity.

Part I.C.2 Permit Requirements

The following non-stormwater discharges associated with your construction activity are authorized under this permit provided that, with the exception of water used to control dust and to irrigate vegetation in stabilized areas, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Parts I.ii.A and III.B:

a. Discharges from emergency fire-fighting activities;

b. Landscape irrigation;

c. Water used to wash vehicles and equipment, provided there is no discharge of soaps, solvents, or detergents used for such purposes;

d. Water used to control dust;

e. External building washdown, provided soaps, solvents, and detergents are not used, and external surfaces do not contain hazardous substances (as defined in Appendix A) (e.g., paint or caulk containing polychlorinated biphenyls (PCBs));

f. Pavement wash waters, provided spills or leaks of toxic or hazardous material have not occurred (unless all spill material has been removed) and where soaps, solvents, and detergents are not used. The operator is prohibited from directing pavement wash waters directly into any water of the U.S., storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;

g. Uncontaminated air conditioning or compressor condensate;

h. Uncontaminated, non-turbid discharges of ground water or spring water;

i. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and

j. Construction dewatering water discharged in accordance with Part III.A.4, and which must be managed by controls in accordance with the 2011 Standards and Specifications for Soil Erosion and Sediment Control or any updated standards issued by MDE (after their effective date).

Part I.C.2.e adds a new condition that discharges of external building washdown waters containing hazardous substances (e.g., paint or caulk containing PCBs) are not authorized. The purpose of this new provision is to prevent releases of PCBs in the environment when these wash waters contact external building surfaces containing PCBs. If the operator were to discharge washdown waters containing PCBs to an MS4 or directly to a receiving water, these would be unauthorized discharges.

The Department notes that “uncontaminated” means that the discharge does not cause or contribute to an exceedance of applicable water quality standards. Similarly, “non-turbid” means the discharge does not cause or contribute to an exceedance of turbidity-related water quality standards. See Appendix A.

I.C.3 If the operator plans to add cationic treatment chemicals (as defined in Appendix A) to stormwater and/or authorized non-stormwater prior to discharge, it is ineligible for coverage under this permit and may not be authorized for coverage under this permit until the operator obtains approval from the Department that it has included appropriate controls and implementation procedures designed to ensure that their use of cationic treatment chemicals will not lead to discharges that cause an exceedance of water quality standards. In the absence of such authorization, to use cationic treatment chemicals at the site, the operator must apply for and receive coverage

under an individual permit. (The procedures for both cationic and anionic chemical additives are new to this renewal and include selecting from pre-approved listings which meet criteria that protect State Waters).

EPA had implemented similar procedures which were incorporated by reference into their latest renewal of the CGP. The incorporated reference included the discussion in the 2012 CGP fact sheet
concerning background on cationic treatment chemicals as well as the agency's rationale for adopting this provision. See section VI.2.4 "Use of Cationic Treatment Chemicals" on pages 20 through 28 of the 2012 CGP fact sheet, available at
https://www.epa.gov/sites/production/files/2015- 10/documents/cgp2012_finalfactsheet.pdf

Part I.C.4 provides authorization to discharge authorized stormwater or authorized non-stormwater discharges, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

Part I.C.4 Permit Requirements

Also authorized under this permit are discharges of stormwater listed above in Part I.C.1, or authorized non-stormwater discharges listed above in Part I.C.2, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

5. Part I.D: Prohibited Discharges

Part I.D identifies the types of discharges that are prohibited from occurring at the operator's construction site. This list prohibits the following discharges:

Part I.D (I.D.1 - I.D.6) Permit Requirements

I.D.1. Wastewater from washout of concrete, unless managed by an appropriate control as described in the 2011 Standards and Specifications for Soil Erosion and Sediment Control, Section H-6;

I.D.2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

I.D.3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance

I.D.4. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown;

I.D.5. Toxic or hazardous substances from a spill or other release; and

I.D.6. Water contaminated by toxic or hazardous substances from sites managed under Maryland's Voluntary Cleanup Program (VCP) or Land Restoration Program (LRP), not addressed by a stormwater pollution prevention plan (Part III.F) and consistent with requirements stipulated by MDE LMA. This is new to the permit language, which puts into the permit the clarification how those facilities may be covered by the permit.

Part I.D also specifies that to prevent the above-listed prohibited non-stormwater discharges, operators must comply with the applicable pollution prevention requirements in Part III.A.3.

Part 1.D details the types of wastes and other pollutants that operators are prohibited from discharging under the permit. The requirements in Parts I.D.1 through I.D.4 above implement prohibitions included in the C&D rule at 40 CFR 450.21(e). The requirement in Part I.D.5 and I.D.6 above to prohibit toxic or hazardous substances from a spill or other release corresponds to Part III.C.2 of the 14-GP ("you are not authorized to discharge hazardous substances or oil resulting from an on-site spill"). The Department includes the types of prohibited non-stormwater discharges in the permit as a reminder to the operator that the only authorized non-stormwater discharges are at Part I.C.2. Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit.

This provision, which is now Part I.D in this permit, was consolidated from various Parts in the 14-GP. Moving this section on prohibited discharges to immediately follow Part I.C on authorized discharges specifies for operators in one place in the permit which discharges are and are not allowed under the 20-CP.

6. Part I.E Requiring an Individual Permit or an Alternative General Permit

The Department includes the prohibited non-stormwater discharges in Part D above as a reminder to the operator that the only non-stormwater discharges authorized by this permit are in Part C above. Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit. This part of the permit was in the 14-GP, however the number of scenarios when an individual permit may be required are now listed many of the commonly required alternative permits for construction sites.

7. Part I.F Continuation of an Expired General Permit and Permit Coverage

This section was contained within the standard conditions of the 14-GP, but was moved to this portion of the permit as it was a common point of confusion for those who had coverage and MDE received comments from EPA during their review of the draft documents. The permit now states, in accordance with 40 CFR 122.6 and 40 CFR 122.46(a) that new NOIs are not allowable after the permit expires, and requires permittees to submit a request for continuance 60 days prior to the expiration date of 20-CP. The new language states: "Unless this permit is terminated by the Department, an expired general permit continues in full force and effect for those with permit coverage on the date of expiration until the date specified under a reissued general permit or an individual permit is issued, whichever comes first. If you wish to continue an activity regulated by this permit after the expiration date of this permit, you shall submit a Continuation of Registration statement at least 60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. Notices of Intent or Continuation of Registration statements submitted later than the expiration date of the existing permit will not be accepted by the Department." The Continuation of Registration statement will include a certification from the permittee that all required plans remain current, contact information has been updated if necessary, and a recommitment to continue to abide by the terms and conditions of the permit during the administratively extended period of the permit.

8. Part I.G Duty to Reapply.

This section was added based on EPA's review, as it is a standard condition found in 40 CFR 122.41(b) that was omitted from the 14-GP. . "If you wish to continue an activity regulated by this permit under a renewed general permit, you must apply for and obtain authorization as required by the new permit once the Department issues it." This also clarifies that submitting a Continuation of Registration statement does not provide permit coverage under the new permit; a new NOI must be submitted.

9. Part II: Authorization under this Permit

This portion of the permit was restructured similar to the EPA CGP, to highlight the fact that submittal of an NOI is required in order for discharges associated with construction activity to be authorized under this General Permit. Part II carries out the fundamental requirement that discharges are not authorized until permit coverage is obtained, and that permit coverage is obtained for the 20-CP through the submission of a complete and accurate NOI followed by a minimum 14-day waiting period.

Part II Permit Requirements: Part II specifies that all "operators" (as defined in Appendix A) associated with the construction site, who meet the Part I.B eligibility requirements, and who seek coverage under the final permit, must submit to the Department a complete and accurate NOI prior to commencing construction activities.

Part II provides an exception for operators that are conducting construction activities in response to a public emergency (e.g., natural disaster, widespread disruption in essential public services), and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services. If any of these circumstances apply, the operator may discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing construction activities (see Table 1 in the permit) establishing that you are eligible for coverage under this permit. The operator must also provide documentation in the SWPPP to substantiate the occurrence of the public emergency.

The Department recognizes that obtaining 20-CP coverage following the normal procedures is not feasible in situations requiring emergency-related construction. The Department includes the exception in Part II, consistent with EPA's CGP approach, to ensure that the authorization process does not interfere with emergency-related construction projects required to avoid endangerment to human health, public safety, or the environment. By providing the operators of these projects with the ability to immediately begin work, and to postpone the NOI submission and SWPPP completion deadlines for 30 calendar days, the Department intends that these projects may proceed without delay. Once the initial 30 calendar days has expired, however, an NOI must be submitted and a SWPPP must be completed. In these cases, and approved Erosion and Sediment Control plan may not be required, therefore the SWPPP becomes even more important for understanding the measures planned for by the operator.

Part II: Prerequisite for Submitting Your NOI. Part II clarifies requirements for submitting the NOI. Those elements follow. Language related to submission of NOIs after the permit expiration date was also added, specifying that NOIs may not be submitted after the General Permit expires.

10. Part II.A Authorization Request Requirements

Part II.A.1 clarifies the elements of the NOI submission. Part II.A.2 specifies the required elements on the NOI.

Part II.A.3 clarifies the fees required to complete the submission of the NOI. A clarification was included in this section regarding certain activities within a Common Plan of Development. The fee exception is clarified: "For larger common plans of development where grading and utility work has been completed under an NOI, and individual builders are constructing single family homes on an individual lot or parcel, or groups of these by a single builder within a common plan of development, there is no additional fee." This change is meant to eliminate confusion when these portions of the development have been using transfers under the 14-GP for this situation, where the Department prefers an NOI for the activity. It is noted that neighboring Virginia provides coverage for single family homes in this situation without NOI.

Part II.A.4 is new and addresses new documentation required in certain cases for coverage under this permit. It clarifies a SWPPP consistent with Part III.F or an antidegradation checklist, as a prerequisite to submitting an NOI for coverage under this permit, in addition to the E&SC and SWM. We have also clarified here that in cases where the signed E&SC or SWM cannot be easily uploaded, that a letter from the approval authority will also be accepted.

Parts II.A.5 and II.A.6 specify that operators must use the Department's eNOI tool to electronically prepare and submit their NOIs for coverage under the 20-CP, unless the operator receives a waiver from the Department. Waivers from electronic reporting may be granted based on one of the following conditions:

a. If the operator's operational headquarters are physically located in a geographic area (i.e., ZIP code or census tract) that is identified as underserved for broadband Internet access in the most recent report from the Federal Communications Commission; or

b. If the operator has limitations regarding available computer access or computer capability. If the operator wishes to obtain a waiver from submitting a report electronically, operators must submit a request to the Department. In that request, operators must document which exemption they meet, provide evidence supporting any claims, and a copy of their completed NOI form. A waiver may only be considered granted once operators receive written confirmation from the Department. If the Department grants the operator approval to use a paper NOI, and they elect to use it, the operator must request the form from the Department.

Part II.A.7 and II.A.8 specify that the person signing the documents must meet certain requirements. For a corporation: by a responsible corporate officer; For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; For a municipality, State, federal, or other public agency: by either a principal executive officer or a duly authorized official.

Part II.A.9: Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage
The deadlines set are consistent with MDE's other General Permit requirements, allowing for complete

review and issuance under the permit. The format in the table was adopted from EPA's CGP, as a clearer way to specify requirements and deadlines for each situation.

Part II.A.9 specifies the deadlines for submitting NOIs for permit coverage and special instructions for permit coverage in Table 1. NOI submittal deadlines vary depending on when the operator commences construction activity. Table1 summarizes the deadlines and permit coverage start dates based upon the type of construction project as follows:

Table 1 - ***Deadlines for Permit Coverage***

Type of Operator	**NOI Submittal Deadline**	**Special Instructions**
Operator of an Existing Construction Site (i.e. a site with 14GP coverage where construction activities commenced prior to the effective date of this permit).	Within 6 months after the effective date of this permit. Authorization to discharge under 14GP continues in the interim.	On eNOI select 'Continuation'. No additional fee, documentation or comment period is required.
Operator of a New Site (i.e. a site where construction activities commence on or after the effective date of this permit).	A minimum of 60 days prior to commencing construction activities.	
New Operator (i.e. an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction site that is either a "New site" or an "existing site").	A minimum of 30 days prior to date that the transfer will take place to the new owner/operator.	No additional fee or comment period is required.
Change in Construction Activity (i.e. a request to modify an existing registration for use of a chemical additive or other triggering activity requiring SWPPP).	A week prior to initiating the change.	In these cases were the SWPPP is required, include an updated SWPPP with the submission.
Increase in Construction Activity (i.e. a request to modify an existing registration for an increase in project acreage).	A minimum of 60 days prior to commencing construction activities.	If the increase is one acre or more, the process is the same as a new NOI. Fees are only assessed if the modification results in the total acreage being increased to the next fee tier.

Operator of an "emergency-related project" (i.e., a project initiated in response to a public emergency (e.g., mud slides, earthquake, extreme flooding conditions, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services).	No later than 7 calendar days after commencing construction activities.	The operator is considered provisionally covered under the terms and conditions of the permit immediately. After reviewing the NOI, the Department may request more information prior to issuing full coverage or deny continued coverage.

The term "operator of a new site" in Table 1 is used to describe projects that commence earth disturbing activities on or after the effective date of the permit. New sites include those new sources that are subject to the C&D rule's New Source Performance Standards (NSPS) because they commenced construction after February 1, 2010 (the effective date of the C&D rule). The term "new site" was adopted to avoid the confusion that would have resulted if the permit used the term "new source".

The term "operator of an existing construction site" in Table 1 refers to construction projects that commenced activities prior to the effective date of the permit. Existing sites include both those activities that began prior to the February 1, 2010 effective date of the NSPS of the C&D rule, and may have been covered under the 14-GP, and those activities that are subject to the NSPS because they commenced after February 1, 2010, but before the effective date of this permit.

Part II.A.10 Failure to Notify. Carried over from 14-GP Part II.D. If you miss the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the CWA until they are covered by this or a different NPDES permit. The Department may take enforcement action for any unpermitted discharges that occur between the commencement of construction activities and discharge authorization. Discharges are not authorized if your NOI is incomplete or inaccurate or if you are not eligible for permit coverage.

Part II.A.11 Modifying your NOI. The 14-GP required NOI modifications (Part II.A.4) for increases in acres disturbed, however the 20-CP has additional reasons such as use of chemical additives or activities requiring a SWPPP, which have been included in this condition.

11. Part II.B NOI Approval Process and Public Review Period

This process is carried over from the 14-GP. During this waiting period, the public has an opportunity to review the NOIs and review the E&SC Plans. Anyone wishing to provide feedback to the Department can send information for consideration. Where appropriate, the Department will address concerns raised (e.g., will direct the relevant operator to make improvements to the designed stormwater controls as necessary to meet the requirements of the permit). Depending on the nature of the issue and the timing of the comments, the Department will take appropriate action either prior

to or following discharge authorization. In addition, the Department may delay authorization if warranted, or may determine that the discharge is not eligible for authorization under this permit.

An exception to this process was added for certain common plan of development sites. For larger common plans of development where grading and utility work has been completed under an NOI, and individual builders are constructing single family homes on an individual lot or parcel, or small groups of homes are being constructed by a single builder within a common plan of development, there is no requirement for an additional notification period. The E&SC plan has already been approved, and the details for single family homes included in the detail. This change is meant to eliminate confusion that existed under the 14-GP, where these have been handled by transferring individual lots, essentially creating cases where 70 or more co-permittees exist at a single site. The Department prefers an NOI for the construction activity, so that an inspector will have records of the original common plan, as well as the documentation on individual lots. It is noted that neighboring Virginia provides coverage for single family homes in this situation with no NOI. Maryland prefers to have recorded those with activities in the development. However, for townhouses, institutional, commercial, or industrial development, the NOI and notification period still applies.

The section changed slightly, moving the requirements in the 14-GP Part II.B.4 into the 20-CP Part II.A.4.

Table 1 describes that operators of emergency-related projects are considered provisionally covered under the permit immediately upon the start of construction. Once the Department receives their NOI it will be processed for registration unless the Department notifies the operator that their authorization has been delayed or denied.

If the operator requests a waiver and submits a paper NOI, the period prior to permit coverage is the same as above, however this period commences only after the Department completes manual entry of the paper NOI information into eNOI. Note that if the paper NOI contains errors or is incomplete, this will result in delaying the commencement of the 14-day waiting period. The operator would be able to tell when the 14-day waiting period has begun by checking for their eNOI.

12. Part II.C Effective Date of Coverage.

This part is similar to Part II.F of the 14-GP, but now clarifies the registration information provided at the time of issuance. Once covered under the 20-CP, the permit requires a continuance to be filed at least 60 days prior to expiration to maintain permit coverage. Once a continuance is submitted, permit coverage will last until the earliest of the following: the operator submits an NOI and receives permit coverage under a reissued or replacement version of this permit, the Department issues an individual permit, the operator terminates permit coverage, or the Department terminates coverage.

13. Part II.D Transfer of Authorization.

This section was moved, and updated. Although EPA's CGP requires that a new owner file a new NOI, and the old owner file a NOT, Maryland process as laid out in the section allows for a joint filing, essentially processing both actions at once. The 14-GP did confuse operators by using the wording of Persons must transfer, where the operators then believed whenever a manager changed or they reorganize their organization, that they needed to transfer the permit. The permit transfer is meant

only for changes in actual ownership, as the registration is for the corporation or entity as defined in the permit signatory requirements. The Department believes the updated language will help clarify this common point of confusion. Also, transfers have been performed from a common plan of development to the individual operators within that developed area. This also is a point of confusion intended to be clarified in the language. In those cases, the sub-developer must file an NOI for the parcels they are responsible for developing, not a transfer of the larger NOI.

14. Part II.E E&SC Requirements for Coverage

Once construction has commenced, it is a condition of this permit that erosion and sediment control and stormwater management plan approvals be kept up to date. Construction activity may not continue if these plans have expired, but may resume once plans are renewed without payment of an additional fee as long as coverage under this General Permit is still in effect.

15. Part II.F How to Terminate Coverage.

This section was moved from Part II.I in the 14-GP and renamed from "Notice of Termination" to "How to Terminate Coverage", and the following conditions for terminating coverage were added, consistent with MDE guidance given to permittees and as provided by the EPA CGP.

Conditions for Terminating Coverage

You must terminate permit coverage only if one or more of the following conditions has occurred:

a. You have completed all construction activities at your site and, if applicable, construction support activities covered by this permit (see Part I.C.1.c), and you have met the following requirements:
   i. For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the permanent stabilization requirements for final vegetative or non-vegetative stabilization in Part III.A.2.f;
   ii. You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;
   iii. You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and
   iv. You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or
b. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or
c. Coverage under an individual or alternative general NPDES permit has been obtained. To terminate coverage under these conditions, you must submit a Notice of Termination form, which may be obtained through the electronic system designated by the

Administration, on MDE's website, or upon request to MDE.

16. Part III: Control Measures and Effluent Limitations

This section name changed slightly, in part to be consistent with Maryland's other General Permits and the EPA General Permits, but also the previous name, although much longer, didn't get to the heart of what is in the section. The items contained in this section are the heart of what each operator must do at their construction site in order to protect Maryland Waters. As noted below many are federally mandated as Effluent Limitations Guidelines. Many are required based on State Law.

The obvious key difference between this section and the 14-GP are the inclusion of many of the requirements in COMAR that are considered when Erosion and Sediment Control Plans are created. Whereas the 14-GP assumed the protections were sufficient, they are now limits included in the permit so that both the operator and inspector understand the significance of not including specific controls. Including those practices as permit limits does increase focus on them. We have also included the pollution prevention practices that will be important when SWPPPs are generated. The newly included controls and practices make it clear as to what the expectations are for operators. The other clarification is the distinction between Technology-Based (Part III.A) and Water Quality Based (Part III.B) limits. With this addition MDE is able to provide requirements for Sensitive Waters (Tier II), address local impairments, and include a provision for sites with discharges to bodies of water with TMDL wasteload allocations (Part V of the 14-GP).

17. Part III.A: Technology-Based Limits

Part III.A organizes the stormwater effluent limitations into four sections:

• Part III.A.1: Control Measure Selection and Design Considerations;

• Part III.A.2: Erosion and Sediment Control Requirements;

• Part III.A.3: Pollution Prevention Requirements; and

• Part III.A.4: Construction Dewatering Requirements.

The stormwater control requirements in Part III.A are the technology-based effluent limitations that apply to all discharges associated with construction activity eligible for permit coverage. The requirements in Part III.A generally apply the national effluent limitations guidelines and new source performance standards in the Construction and Development Rule ("C&D rule") in 40 CFR Part 450 promulgated on December 1, 2009 (74 Fed. Reg. 62996), and amended on March 6, 2014 (79 Fed. Reg. 12661). These requirements apply to all permitted sites, including construction support activities that are covered under the permit under Part I.C.1.c.

The Department's Incorporation of the Non-Numeric Limits

An operator can minimize the discharge of pollutants from construction sites by satisfying the non-numeric effluent limitations at 40 CFR 450.21 and by using various controls and practices, outlined in more detail by the State's design standards and E&SC / SWM plan approving agencies. The

Department refers to and makes use of the EPA crafted non-numeric effluent limits in the C&D rule to allow flexibility in how the permitting authority implements these requirements in permits. See 74 FR 63016.
As an example, 40 CFR 450.21(a)(5) requires construction operators to design, install, and maintain controls to "minimize sediment discharges from the site." Thus, each NPDES permitting authority has some discretion within this somewhat broad requirement, defined further at 40 CFR 450.21(a)(5), to further define what it means to minimize sediment discharges, or to achieve any of the other non-numeric limits. See 74 FR 63016.

Accordingly, this permit contains requirements that specifically implement or incorporate each of the C&D rule's non-numeric limits in order to minimize the discharge of pollutants from construction sites. This is consistent with EPA's objective to write general permits with conditions that are clear, specific, and measurable. Many states adopt the EPA CGP language outright. When Maryland adopts the same language, it provides consistency for permittees that do work in other states. In the sections that follow, the Department discusses the permit requirements, and explains how the language is consistent with the non-numeric effluent limits in the C&D rule upon which they are based.

a. Part III.A.1: Control Measure Selection and Design Considerations

Part III.A.1 establishes the overall principle for designing, installing, and maintaining stormwater controls that work to minimize the discharge of pollutants from construction sites, as required in 40 CFR 450.21.

Part III.A.1 Permit Requirements

Part III.A.1 includes the general requirement that the operator must design, install, and maintain stormwater controls required in Parts III.A.2 and III.A.3 to minimize the discharge of pollutants in stormwater from construction activities. Part III.A..1 includes design, installation, and maintenance requirements that must be followed for all such controls.

Part III.A.1.a: Design Factors

Part III.A.1.a requires the operator to account for design factors that address the corresponding C&D rule requirements in 40 CFR 450.21(a)(2) and (5).

Part III.A.1.a Permit Requirements

In the design of stormwater controls, operators must account for the following factors:

i. The expected amount, frequency, intensity, and duration of precipitation;

ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. You must design stormwater controls to control stormwater volume, velocity, and peak flow rates to minimize discharges of pollutants in stormwater and to minimize channel and streambank erosion and

scour in the immediate vicinity of discharge points; and

iii. The soil type and range of soil particle sizes expected to be present on the site.

It is important to consider precipitation characteristics so that earth-disturbing activities can be planned during periods with a lower risk of precipitation and so that erosion and sediment control practices can be designed to convey and manage the precipitation that is expected to occur. The requirement to design stormwater controls to account for the nature of stormwater runoff and run-on on the site and to reduce peak flowrates and total stormwater is intended to minimize scouring and erosion caused by stormwater discharges from the site. The requirement to account for soil characteristics, such as particle size distribution, erosivity, and cohesiveness, is also important for selecting and designing appropriate erosion and sediment controls.

Part III.A.1.b: Good Engineering Practices

Part III.A.1.b implements the C&D rule requirement to "install effective erosion and sediment

controls." Part III.A.1.b Permit Requirements

The operator must design and install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

In order for stormwater controls to be effective, they must be properly designed and installed. The Department notes that design specifications may be found in manufacturer specifications and/or in the State's 2011 Handbook or local ordinances. Additionally, where it is appropriate to depart from such specifications, this must reflect good engineering practice and must be explained in the E&SC Plan.

Part III.A.1.c: Complete Installation Prior to Commencement of Construction

Part III.A.1.c is intended to ensure that stormwater controls are installed and made operational to minimize pollutant discharges from the area of active disturbance.

Part III.A.1.c Permit Requirements

The operator must complete the installation of stormwater controls by the time each phase of construction has begun:

i. By the time construction activity in any given portion of the site begins, the operator must install and make operational any downgradient sediment controls (e.g., buffers, perimeter controls, exit point controls, storm drain inlet protection) that control discharges from the initial site clearing, grading, excavating, and other earth-disturbing activities. The Department notes that this requirement does not apply to the earth disturbance associated with the actual installation of these controls. Operators should take all reasonable actions to minimize the discharges of pollutants during the installation of stormwater controls.

ii. Following the installation of the initial controls, the operator must install and

make operational all stormwater controls needed to control discharges prior to subsequent earth-disturbing activities.

For example, prior to initial site clearing and grading activities, the operator must install perimeter controls, exit point controls, and, if applicable, storm drain inlet protections and natural buffers or equivalent sediment controls to control stormwater discharges from the initial disturbances. After this initial work is completed, the operator must install and make operational other controls, such as sediment traps or sediment basins that are expected to treat stormwater during the remaining phases of construction. Where a project is conducted in phases, such as for a large-scale road project, the requirement is to install such controls prior to commencing earth-disturbing activities for the particular phase. After initial controls are installed, the operator must install and make operational any remaining stormwater controls as conditions allow.

III.A.1.d: Maintain Controls in Effective Operating Condition

III.A.1.d implements the C&D rule requirement to "maintain effective erosion controls and sediment
controls" at 40 CFR 450.21(a) and the NPDES requirement at 40 CFR 122.41(e) to "at all times properly operate and maintain all facilities and systems of treatment and control …."

Part III.A.1.d Permit Requirements

During permit coverage, the operator must ensure that all stormwater controls are maintained and remain in effective operating condition and are protected from activities that would reduce their effectiveness.

i. Comply with any specific maintenance requirements for the stormwater controls listed in this permit, as well as any recommended by the manufacturer.

ii. If at any time you find that a stormwater control needs routine maintenance, you must immediately initiate the needed maintenance work, and complete such work by the close of the next business day.

iii. If at any time you find that a stormwater control needs repair or replacement, you must comply with the corrective action requirements in Part III.D.

b. Part III.A.2: Erosion and Sediment Control Requirements

Part III.A.2 implements the C&D rule's requirement at 40 CFR 450.21(a) to "design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants," as well as the requirements in 40 CFR 450.21(b) for soil stabilization. This is also consistent with the State's requirement to have E&SC and SWM plans approved by the appropriate approval authority.

Part III.A.2 Permit Requirements

Part III.A.2 requires the operator to implement erosion and sediment controls that

minimize the discharge of pollutants in stormwater from construction activities.

The specific sections of the permit within Part III.A.2 include requirements that articulate what is expected of 20-CP operators in order to comply with this effluent limitation established in the C&D rule.

Part III.A.2.a: This Part addresses the requirements for Natural Buffers / Stream Protection Zone.

The term Stream Protection Zone is defined in the permit. The purpose of the Stream Protection Zone is to establish first a preference for preserving natural buffers, and when that is not possible, to identify the required additional controls when development encroaches on a stream. Part III.A.2.a implements the C&D rule's requirement to minimize the discharge of pollutants from the site by providing and maintaining "natural buffers around waters of the United States… unless infeasible." See 40 CFR 450.21(a)(6).

Part III.A.2.a Permit Requirements

i. Provide and maintain buffers to edge of stream of at least 50 feet for Tier I watersheds, or an average of 100 feet for Tier II watersheds, and/or implement additional erosion and sediment controls.

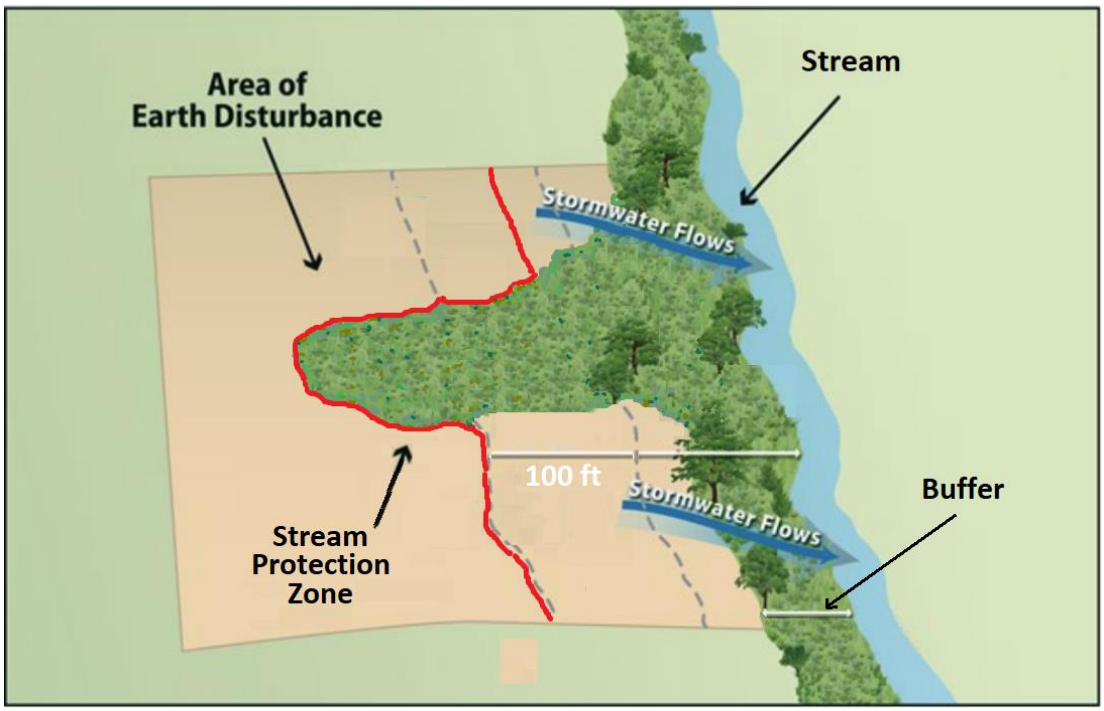


Figure 1 - Example of how the 100 foot buffer averaging occurs.

Appendix B was created using EPA's CGP as a template to facilitate understanding how to determine the Stream Protection Zone limit, and when infeasible, to provide and maintain an undisturbed natural buffer of any size and determine which type(s) of controls need to be considered if work is performed within that Zone.

This requirement for considering additional controls applies to all project sites that are situated within the Stream Protection Zone, with certain exceptions as allowed for in the Appendix B. The exceptions were adopted from EPA's CGP.

Background on the selection of 50 feet as the buffer for Tier I streams, and 100 feet for Tier II follows. The source of the research is identified and described in EPA's 2012 CGP Fact Sheet. The relevant facts are shared in this fact sheet. The selection of 50 feet as a buffer for these stream resources is consistent with EPA's CGP and neighboring jurisdictions that use the CGP or made use of the 2012 CGP fact sheet as their permit basis. Establishing buffers is also consistent with Maryland's Forest Protection requirements, as well as protections afforded under the Critical Area Commission. The considerations under this permit relate to specific erosion and sediment controls required if it is infeasible to maintain such natural buffers. Maryland's selection of a 100 feet Stream Protection Zone for Tier II watershed originates from the Department's 2011 Handbook, which recommends a minimum of 100 feet. This was based on riparian buffering recommendations adapted from Johnson, C.W. and Buffer, S. 2008. This selection is consistent with EPA's research as well (Figure 1 below "for the maintenance of the biological components of wetlands and streams"). The Handbook recommends more significant protections for steep sloped areas or where there are highly erodible soils which are addressed separately in the Handbook and in the permit.

> Purpose: To arrive at the 50 feet requirements, EPA examined many different options. Ultimately, EPA felt it was important to provide a uniform buffer performance standard, but to allow permittees the flexibility to achieve this standard without prescribing a minimum natural buffer width that must be complied with in all circumstances. EPA also determined it was appropriate to identify specific cases where compliance with this requirement is infeasible, and to specify alternative requirements in these cases. EPA first considered whether a buffer width would need to be specified at all in the permit, or whether the C&D rule language was sufficient. The C&D rule does not specify what size buffer is necessary to meet the requirement, but rather leaves this and other related determinations up to the permitting authority, including if a minimum buffer width is necessary at all. See 75 Fed. Reg. 63016-17. After considering the option of simply adopting the C&D rule language in the permit, EPA concluded that it would be appropriate to develop more specific language to be used as a permit condition. In EPA's view, to include no other requirements would leave the Agency with a permit requirement that would be difficult, if not impossible, to enforce, and would place the permittee in the position of having to guess what amount of a natural buffer is adequate to minimize the discharge of pollutants from the site, leading not only to uncertainty regarding compliance, but also inconsistencies among permitted sites. EPA believes that this permit should include minimum requirements that specify how to comply with the terms of the permit. After determining that it is appropriate to add specificity to the permit requirement, EPA evaluated different ways to articulate the permit conditions. A number of issues presented themselves during this process, which included the following:
> • How effective are natural buffers at removing sediment and other

pollutants?
• What size buffers are necessary to provide high level pollutant removal?
• What types of local and state regulations already affect the buffer area?
• Is a uniform buffer width requirement appropriate?
EPA explored all of these issues in arriving at the buffer requirements. Each are discussed in depth below.

The Pollutant Removal Effectiveness of Natural Buffers

EPA started by evaluating how effective buffers are at removing pollutants. To arrive at the minimum buffer width performance standard of 50 feet, EPA undertook a comprehensive review of the scientific literature with the goal of assessing the relationship between pollutant removal efficiency and buffer width. EPA was particularly interested in understanding the effectiveness of buffers at removing pollutants in construction site discharges. Sediment and turbidity are the most thoroughly documented pollutants associated with construction site stormwater discharges. Typical construction activities, such as clearing vegetation and excavating, moving, and compacting earth and rock increase the vulnerability of soil to the erosive powers of precipitation and stormwater runoff. Soil compaction reduces precipitation infiltration and increases overland water flow, thereby increasing the quantity of stormwater discharges available to erode soil. During precipitation events, the increased erosion can cause sediment to be discharged in stormwater from the site, which can lead to impairments of receiving waters. During the Phase I stormwater rulemaking, EPA identified nonconventional and toxic pollutants of concern in discharges from construction sites, stating "[c]onstruction sites also generate other pollutants such as phosphorus, nitrogen, and nutrients from fertilizer, pesticides, petroleum products, construction chemicals, and solid wastes." 55 Fed. Reg. 48033. These pollutants can be found in construction materials and equipment, historic site contamination, and natural soil and ground water constituents, and may be carried in stormwater in solution or adsorbed to transported sediment particles. Although EPA's focus was in determining the pollutant removal effectiveness of the buffer for pollutant parameters related to sediment, EPA took into account the ancillary benefits of buffers at removing other pollutants found in construction site stormwater discharges, particularly nitrogen and phosphorus. EPA found the scientific literature to widely support the pollutant-removal effectiveness of buffers (Wong & McCuen, 1982; Barling & Moore, 1994; Castelle et al., 1994; Schueler, 1995; Wenger, 1999; Correll, 2005; Mayer et al., 2005; Liu et al., 2008; Yuan et al., 2009). Natural buffers are particularly effective at removing sediment. Wenger found that riparian buffers reduce stream sedimentation through six different functions:
1. By displacing sediment-producing activities away from flowing water (setbacks);
2. By trapping terrestrial sediments in surface runoff;
3. By reducing the velocity of sediment-bearing storm flows, allowing sediment

to settle out of water and be deposited on land;
4. By stabilizing streambanks, preventing channel erosion;
5. By moderating stream flow during floods, reducing bed scour; and
6. By contributing large woody debris (snags); these can trap considerable sediment, at least temporarily.

Sediment removal in buffers occurs by increasing the hydraulic roughness of the flow surface, which enhances sediment deposition and filtration by vegetation. As sediment laden water flows through vegetation, the flow velocity is decreased and sediment is deposited (Barling & Moore, 1994). Coarser soil and organic particles settle more quickly than finer particles, which tend to stay in suspension. Sediment trapping performance was found to decrease as sediment particle size decreases. To capture fine suspended particles, buffers need to be wide enough to allow for infiltration (Wong & McCuen, 1982; Barling & Moore, 1994; Wenger, 1999; Liu et al., 2008). An early study on buffer sediment removal performance found the optimum distance for trapping sand, silt, and clay to be 3 m, 15 m, and 122 m, respectively (Wilson, 1967). Because nutrients are often present in construction site stormwater discharges, EPA found it useful to understand the performance of natural buffers at removing nitrogen and phosphorus. Scientific literature supports the effectiveness of buffers at removing nutrients. Because phosphorus tends to attach to sediment or organic matter, buffer widths sufficient to remove sediment are generally sufficient to remove phosphorus from construction site stormwater discharges (Wenger, 1999). However, finer sediment particles have a greater capacity to hold phosphorus than coarser particles, and therefore buffers should be sized wide enough to allow for infiltration of smaller phosphorus-attached sediment particles (Barling & Moore, 1994). Buffers were also found to be effective at removing nitrogen (Wenger, 1999). Unlike phosphorus, nitrogen is soluble, and readily moves through ground water. Buffers can remove nitrogen in surface flows through uptake by vegetation, denitrification, soil storage, ground water mixing, and microbial immobilization (Mayer et al., 2007; Wenger, 1999).

The Relationship Between Buffer Width and Pollutant Removal Effectiveness

EPA found numerous studies that examined the relationship between buffer width and pollutant removal performance (Young et al., 1980; Dillaha et al., 1989; Magette et al., 1989; Sheridan et al., 1999; Abu-Zreig et al., 2004; Peterjohn and Correll; 1984; and others). The results of these studies ranged widely, with some reporting very high sediment removal performance (i.e., over 90 percent removal) at buffer widths less than 15 feet, while others found similar sediment removal performance at widths of 80 feet or more. Many of these studies examined the efficacy of buffers under site-specific conditions, and looked at the performance of highly engineered vegetation types, such as those found in installed vegetated filter strips. EPA does not require the installation of vegetation in the buffer area, but rather requires that the existing natural vegetation not be disturbed. EPA cannot therefore reasonably

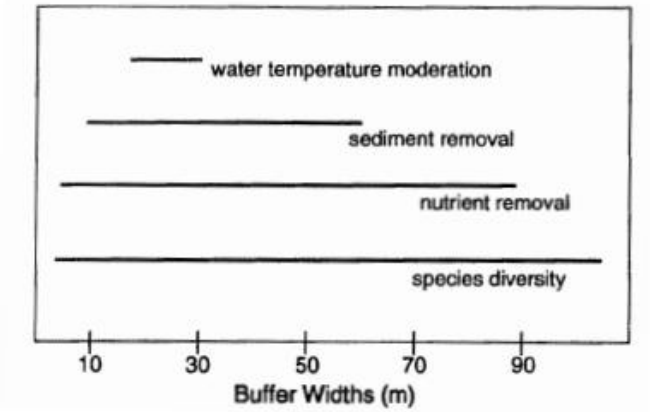
assume that a similar performance would be achieved with all types of vegetative cover that exist in all the areas where this permit is in effect. Nor can EPA assume that buffers of a specific width will perform similarly under various soil types, slopes, and other differences in site-specific conditions. Therefore, while informative, EPA found it necessary to conduct further research given that these studies alone do not offer a clear choice on what size buffers will best achieve a consistent pollutant removal performance for the range of conditions where this permit is effective. In determining the minimum buffer width to include, EPA found it useful to look at those studies that examined multiple sources of information in order to arrive at a recommendation for a minimum buffer width or a range of widths that would be most effective at removing pollutants. The studies EPA found to be particularly informative in terms of minimum buffer width requirements are included in Table 1, and are described below.

Study	Minimum Buffer Width for Sediment	Minimum Buffer Width for Nitrogen	Minimum Buffer Width for Phosphorus	Analysis Method
Castelle et al. (1994)	**33 - 200 ft**	**16 - 300 ft**	**16 - 300 ft**	Reviewed range of buffer widths in scientific literature to determine minimum buffer size requirements.
Liu et al. (2008)	**33 ft**	-	-	Applied logarithmic regression model to results of over 80 studies and predicted sediment trapping efficacy to reach its maximum at 33 feet.
Wenger (1999)	**50 - 100 ft**	**50 - 100 ft**	**50 - 100 ft**	Reviewed range of buffer widths in scientific literature to determine minimum buffer width requirements.
Yuan et al. (2009)	**>16 ft**	-	-	Applied logarithm model to results of 80 studies and predicted that buffers of 16 feet or greater remove at least 80 percent of sediment.
Mayer et al. (2005)	-	**>164 ft**	-	Performed linear and non-linear regression models on data from 89 studies to determine nitrogen removal effectiveness.

Table 1 - Summary of buffer widths for removal of sediment, nitrogen, and phosphorus from EPA's review of the scientific literature.

Castelle et al. reviewed studies that analyzed the pollutant removal functions of buffers. Among the parameters examined were sediment and nutrients. The results in Figure 1 below indicate that recommended buffer widths for sediment and nutrients in the literature vary widely. Recommended widths for sediment removal range from 33 to 200 feet, and for nutrients 16 to 300 feet. The range of widths informed Castelle et al.'s overall recommended buffer widths of 50 feet for the maintenance of physical and chemical characteristics of aquatic resources, and 100 feet for the maintenance of the biological components of wetlands and streams.

Figure 1 From Castelle et al. (1994), the range of buffer widths providing specific buffer functions.



A study by Liu, Zhang, and Zhang examined the sediment removal efficacy of buffers by performing a meta-analysis on over 80 different experiments. Figure 2 shows the results of a logarithmic regression model on the experiments that were reviewed. Liu et al. found that increasing buffer width increases sediment removal. However, the relationship between buffer widths and sediment removal is not linear. According to Liu et al., as buffer widths reach 10 m, or 33 feet, the increased removal percentage diminishes. This is explained by the fact that buffers are effective at removing a substantial percentage of coarser sediment particles within the first few meters, but larger widths are necessary to remove suspended fine sediments through infiltration. These results indicate that to remove a high percent (e.g., 90 percent or more) of sediment particles, buffer widths must be sized at a widths ranging from 33 to 50 feet.

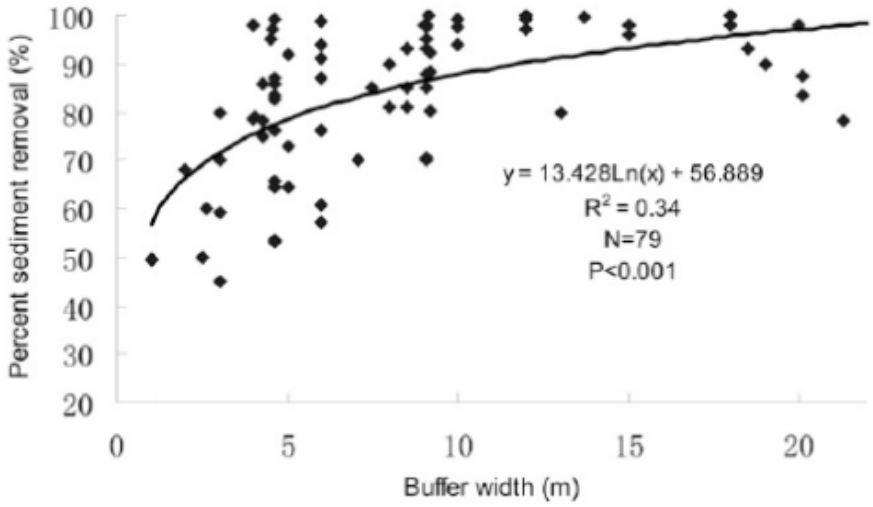
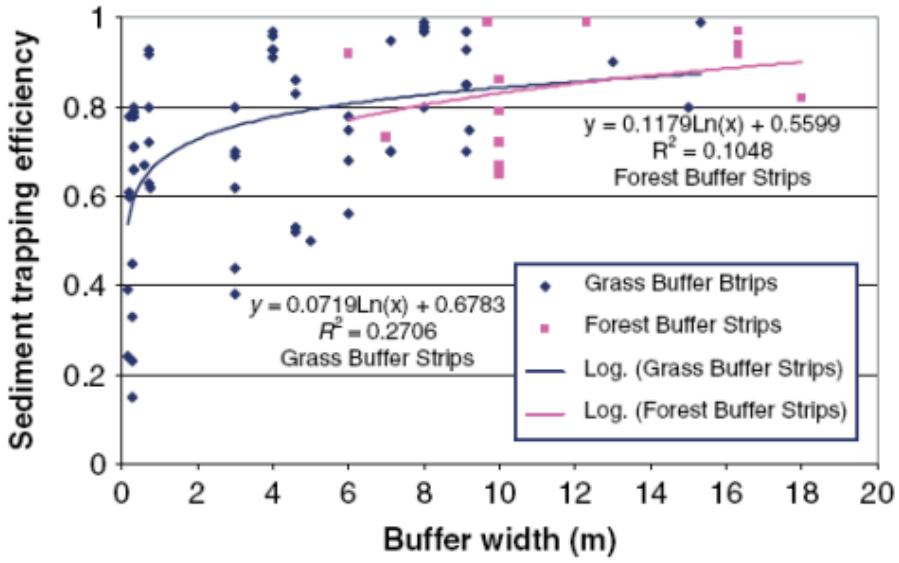


Figure 2 - From Liu et al. (2008), the relationship between buffer width and percent sediment trapping efficiency.

Yuan et al. (2009) similarly reviewed the available literature on the sediment removal performance of buffers and found that increasing buffer width increases sediment removal. Yuan et al. looked at the differences in buffer performance based on the type of

vegetation in addition to width, as shown in Figure 3. Buffer sediment removal performance did not vary widely by vegetation type, but in general, forested buffers were found to be wider than grassed buffers. Yuan et al. found that buffers of at least 5 meters, or 16 feet, are necessary to remove 80 percent of sediment. According to Figure 3, to remove higher percentages of sediment (e.g., 90 percent or more), buffers widths of at least 15 meters, or 50 feet, are necessary.

Figure 3 From Yuan et al. (2009), the relationship between buffer width, vegetation type, and percent sediment trapping efficiency.



In a 2005 report, EPA reviewed 89 riparian buffer studies to determine the relationship between nitrogen removal effectiveness and buffer width. It was concluded that nitrogen removal performance varied, but generally wider buffers (> 50 m, or 164 feet) more consistently remove more nitrogen than narrower buffers. Figure 4 shows the relationship between buffer width and nitrogen removal from surface flow. Buffers of 30, 115, and 250 meters (or 100, 380, and 820 feet) are shown to remove 50, 75, and 90 percent of nitrogen, respectively. These results indicate that while buffers are effective at removing nitrogen, wider widths are necessary to remove a significant percentage.

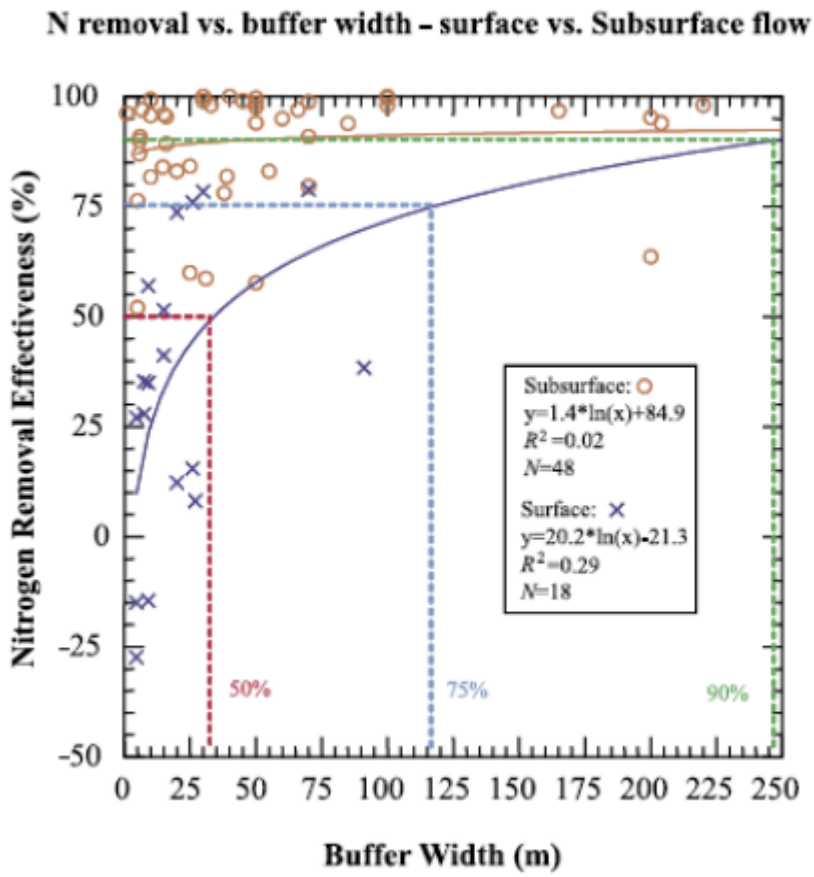


Figure 4 - From Mayer et al. (2005), the relationship between buffer width and percent nitrogen removal.

Taking all of the above information into account, EPA has concluded that while buffers are very effective at removing pollutants, because buffer performance varies from study to study, it is challenging to determine the minimum width that would be adequate for removing construction site pollutants from stormwater for the majority of sites. Buffer pollutant removal performance is not only a function of buffer width but is also a function of many other site-specific factors, including vegetation type, slope, soil type, and infiltration rate (Wenger, 1999). Despite this challenge, EPA believes it is appropriate to include a minimum fixed-width buffer to serve as a performance standard by which to achieve sufficient pollutant removal and to provide permittees with a sense of clarity about their requirements. Most studies concluded that wider buffers consistently remove higher percentages of pollutants; however, EPA's aim was to determine the minimum width necessary to achieve an adequate removal of pollutants in most circumstances. While recognizing the wide variability in buffer effectiveness, based on soil type, vegetation, slope, etc., EPA was primarily focused on determining the minimum buffer width that would generally remove a substantial majority of sediment particles, but also provide significant removal of nutrients. The recommended buffer widths EPA reviewed for sediment removal ranged from 16 to 200 feet, and for nutrients ranged from 16 to 300 feet (see Table 1). However, by reviewing analyses of multiple buffer studies, EPA was able to relate specific buffer widths to expected pollutant removal potential. Both Liu et al. and Yuan et al.'s analysis of over 80 buffer studies determined that 90 percent of sediment can

be expected to be removed from buffers of 50 feet, which can also be assumed to be of sufficient width for removing a significant percentage of sediment-attached phosphorus. Mayer et al. found buffers of 50 feet to be capable of removing 35 percent of nitrogen from surface flows. EPA concluded from these analyses that 50-foot buffers generally remove most sediment from stormwater flows through buffers, and provide ancillary benefits by removing significant amounts of nutrients. EPA also recognizes that the requirement in the C&D rule is to establish buffers "where feasible" and that feasibility is thus also an important consideration. EPA reviewed buffer width requirements in states and localities where this permit would apply to determine what is already required in these areas, and thus shed light on what is feasible. This review is summarized below. Based on its assessment of buffer effectiveness, EPA came to the conclusion that 50 feet would be an appropriate minimum buffer width performance standard to substantially reduce pollutant discharges, while EPA's review of existing state and local requirements convinced EPA that such a requirement would be "feasible," subject to certain limitation that are recognized in the "Exceptions" section of the permit *(Maryland included these in Appendix B)*. EPA thus concluded that it would be appropriate to require a 50-foot natural buffer in the permit for sites where surface waters are located on or immediately adjacent to the property on which the construction activities will occur. EPA recognizes that the pollutant removal performance of 50-foot buffers will vary from site-to-site, but based on the information reviewed, buffers of 50 feet are shown to consistently achieve significant pollutant removal benefits. Recognizing the need for flexibility, the 50-foot buffer does not represent a fixed width requirement for all sites, but rather serves as the basis for a minimum pollutant removal performance that must be achieved on the sites. This minimum pollutant removal performance can be achieved by providing the minimum width of 50 feet, or by providing alternative controls. As noted above, Maryland considers the additional protection for sensitive high quality stream resources as a prudent measure for Tier II streams.

Part III.A.2.b: Minimize Soil Compaction

Part III.A.2.b implements the C&D rule requirement to "minimize soil compaction." The requirement is intended to allow for infiltration and retention of stormwater to reduce stormwater discharge volume and velocity.

Part III.A.2.b Permit Requirements in any areas of the site where final vegetative stabilization will occur or where infiltration practices will be installed, the operator must:

i. Restrict vehicle and equipment use in these locations to avoid soil compaction; and

ii. Before seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

To comply with this requirement, operators may either restrict vehicle and equipment use on areas that will be vegetatively stabilized or where infiltration practices will be installed, or use soil conditioning techniques to decompact soils to support vegetative growth. Specific types of soil conditioning techniques could include deep-ripping and decompaction or sub-soiling. The Department also notes that the requirement to minimize soil compaction does not apply to

areas that will not be used for final vegetative stabilization or for areas where infiltration practices will not be installed. For example, the requirements do not apply to disturbed areas that will become paved surfaces, such as roads, foundations, footings, or on embankments, or on areas where soil compaction is necessary by design.

Part III.A.2.c: Preserve Native Topsoil

Part III.A.2.c implements the C&D rule requirement to preserve topsoil, unless infeasible at 40 CFR 450.21(a)(8).

Part III.A.2.c Permit Requirements

The operator must preserve native topsoil on the site, unless infeasible.

The requirement to preserve topsoil will help to maintain the soil structure on construction sites and provides a growing medium for vegetative stabilization measures. Better vegetative stabilization reduces erosion rates of the underlying soil and also increases the infiltrative capacity of the soil, thereby reducing the amount of sediment transported to downslope sediment and perimeter controls. Topsoil can be preserved by stockpiling the native topsoil on the site for later use (e.g., for vegetative stabilization), or by limiting disturbance and removal of the topsoil and associated vegetation. For example, topsoil can be preserved by limiting clearing and grading to only those areas where necessary to accommodate the building footprint. The Department notes that some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, the Department recognizes that preserving topsoil at the site would not be feasible. In addition, some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil. The Department notes that the language in EPA's CGP, that stockpiling of topsoil in off-site locations, or transfer of topsoil to other locations, is an acceptable practice. However, EPA notes that stormwater discharges from any construction support activities meeting the requirements of Part I.C.1.c will be subject to the permit requirements. Maryland jurisdictions maintain their own requirements that specify what type of soil must be maintained on-site and what may be removed. Nothing in this condition is meant to affect that.

Part III.A.2.d: Minimize Steep Slope Disturbances

The requirement in Part III.A.2.d implements the C&D rule requirement to "minimize the disturbance of steep slopes" at 40 CFR 450.21(a)(4).

Part III.A.2.d Permit Requirements

The operator must minimize the disturbance of "steep slopes" (as defined in Appendix A).

The permit does not prevent or prohibit disturbance on steep slopes. The Department recognizes that for some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If disturbances to steep slopes are required for the project, the Department would recognize that it is not feasible to avoid the

disturbance of steep slopes. The Department also notes that the requirement to minimize the disturbance of steep slopes does not apply to the creation of soil stockpiles. The Department includes EPA's incorporation by reference to the discussion in the 2012 CGP fact sheet concerning this requirement. See part 2.1.2.6 "Minimize the Disturbance of Steep Slopes" on pages 67 through 68 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf. For information specific to Maryland requirements, refer to the 2011 Handbook.

Part III.A.2.e: Install Perimeter Controls

The perimeter control requirements in Part III.A.2.e implement the C&D rule requirement to "install effective erosion and sediment controls."

Part III.A.2.e Permit Requirements

Operators must install sediment controls, such as filter berms, silt fences, vegetative strips, and temporary diversion dikes, along any perimeter areas of the site that will receive pollutant discharges, and comply with the following perimeter control requirement:

i. Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

ii. Exception: For areas at "linear construction sites" (as defined in Appendix A) where perimeter controls are infeasible (e.g., due to a limited or restricted right-of-way), implement other practices as necessary to minimize pollutant discharges to perimeter areas of the site. The requirement instructs operators as to where downslope sediment controls should be installed so that they are effectively situated to minimize the discharge of pollutants on the site.

The requirement in (i) above makes operators aware that they must maintain perimeter controls so that they remain effective throughout the duration of permit coverage. This requirement implements the C&D rule requirement to "maintain effective erosion controls and sediment controls" at 40 CFR 450.21(a).

The requirement in (ii) above provides flexibility for linear construction sites by allowing them to document in the SWPPP when it is infeasible to install perimeter controls in certain areas of the site, and instead allowing the use of other types of practices that will adequately minimize pollutant discharges to perimeter areas of the site. The Department established this provision in order to recognize that for some linear projects, perimeter controls are not always feasible (e.g., due to limited available space to install perimeter controls), and that other types of practices can be employed to minimize pollutant discharges. For example, in urban areas where, due to right-of-way limitations, perimeter controls could cause a safety hazard to vehicles and/or pedestrians, perimeter controls may not be feasible. Other practices that could be implemented to minimize pollutant discharges from perimeter areas for these types of sites could include conducting earth disturbances only on days when no precipitation will occur; limiting disturbances and stabilizing areas of exposed soil

immediately; and avoiding disturbances to environmentally sensitive areas. The types of other practices to be implemented to adequately minimize pollutant discharges from perimeter areas must be based on site specific conditions and reflect good engineering judgment.

While perimeter controls may not be feasible in the above circumstances, operators are reminded of the requirement under Part III.A.1.a to account for the required design factors for their stormwater controls and their overall obligation in Part III.A to minimize sediment discharges. In addition, the operator must ensure that sediment and other pollutants, which may escape the area of disturbance onto off-site streets, other paved areas, and sidewalks, are removed consistent with the mitigation requirements in Part III.A.2.h.iv.

The Department also notes that Part III.A.2.e only applies along any perimeter areas of the site that will receive pollutant discharges. If a portion of the construction site's perimeter area does not receive pollutant discharges, perimeter controls are not required in that portion of the site. Therefore, perimeter controls are not necessary in the perimeter area surrounding construction activities in areas of sites where no pollutant discharges occur, which for certain linear construction sites could include:

- Pole sites where only overhead work is conducted;
- Use of pre-existing access roads or pad areas where no expansion or below-grade improvements (e.g., no new earth disturbances) will occur; and
- Areas where vegetation is left in place but needs to be trimmed (e.g., mowing, weed whacking, etc.) to allow temporary access (e.g., overland travel) or use of a site (e.g., wire stringing site). In such circumstances, the ground cover (i.e., grasses and other low-growing vegetation, such as mosses, ferns, vines, shrubs, herbaceous plants, and root mats that are planted or that naturally occur) is retained and no grading occurs.

Part III.A.2.f: Site Stabilization

Part III.A.2.f implements the C&D rule requirement for soil stabilization in 40 CFR 450.21(b). This part requires the operator to implement and maintain stabilization measures that minimize erosion from exposed portions of the site.

Part III.A.2.f Permit Requirements

Changes were made to this section from the previous permit. The 14-GP refers to permanent stabilization, whereas EPA or other states use the term Final Stabilization. The Department preserves the concept of permanent stabilization in the Appendix A definitions, to mean Final Stabilization; however, the 20-CP will begin to refer to this as Final Stabilization since it is vegetation and isn't really considered a permanent feature. It is subject to changes. In addition, during the drafting of the new permit, the Department found that the 14-GP contained errors in the definition for this section. Those have been corrected (i.e. implement the 2 following…when there were actually 3 following bullets). Specific stabilization requirements in Maryland are more restrictive than those requirements in EPA's CGP. Stabilization requirements in Maryland are specified in regulation (COMAR 26.17.01.07), in the 2011 Handbook as well as Department

issued guidance. The 20-CP permit specifies how those requirements are to be applied to those areas covered by the 20-CP. EPA's stabilization requirements for dischargers to Tier 2 bodies of water are equal to those in Maryland for either Tier I or Tier II, thus Maryland's Tier II requirements have not been altered in this renewal and are similar to Tier I.

Further background for the concepts identified in this Part. In the C&D rule, EPA emphasizes the importance of effective and speedy stabilization of soils exposed throughout the construction process in order to reduce the amount of soil eroded on construction sites and the amount of sediment and other pollutants discharged from the site. EPA indicates in the rule that initiating soil stabilization measures immediately after land has been disturbed and construction activity has ceased is an important non- numeric effluent limitation. EPA also states that it "sees no compelling reason why permittees cannot take action immediately to stabilize disturbed soils on their sites" (see 74 Fed. Reg. 63005, December 1, 2009). EPA also observes that erosion control measures, such as mulch, are readily available and operators need only plan accordingly to have appropriate materials and laborers present when needed.

Furthermore, "simply providing some sort of soil cover on these areas can significantly reduce erosion rates, often by an order of magnitude or more. Vegetative stabilization using annual grasses is a common practice used to control erosion. Physical barriers such as geotextiles, straw, rolled erosion control products and mulch and compost are other common methods of controlling erosion. Polymers (such as PAM) and soil tackifiers are also commonly used. These materials and methods are intended to reduce erosion where soil particles can be initially dislodged on a C&D site, either from rainfall, snow melt or up-slope runoff." See 74 Fed. Reg. 63012.

The permit carries forward these important principles and factors by incorporating specific provisions intended to implement the C&D rule's stabilization deadline requirements. The following section provides support for these provisions.

Stabilization Deadlines (Part III.A.2.f)

- Deadline to Initiate Stabilization refers the permittee to the specific portions of the Handbook related to stabilization. After initial soil disturbance or redisturbance, permanent (2011 ESC Handbook Section B-4-5) or temporary (2011 ESC Handbook Section B-4-4) stabilization is required within:

    i. Three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
    ii. Seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.

The State also has specific criteria laid out in COMAR 26.17.01.07.B.6(f), and the 14-GP listed the reference to that regulation with the caveat that those must be met even if approved plans have a less stringent requirement (see COMAR 26.17.01.08.G), and in the 2011 Standards and Specifications for Soil Erosion and Sediment Control or any updated standards issued by MDE (after their effective date). In review of the COMAR reference, the requirements now laid out in the Stabilization Deadlines is consistent with COMAR, is at least as restrictive as EPA's approach, and effectively is not a substantial change from the

14-GP. Listing the specific regulatory language in the permit vs just including a reference to COMAR makes it easier for the permittee to understand and comply with the requirements.

The EPA CGP permit also provides examples of activities that would constitute the immediate initiation of stabilization:

1. Prepping the soil for vegetative or non-vegetative stabilization as long as seeding, planting, and/or installation of non-vegetative stabilization products takes place as soon as practicable, but no later than 1 calendar day of completing soil preparation;

2. Applying mulch or other non-vegetative product to the exposed area;

3. Seeding or planting the exposed area;

4. Starting any of the activities in # 1 – 3 on a portion of the entire area that will be stabilized; and

5. Finalizing arrangements to have the stabilization product fully installed in compliance with the deadlines for completing stabilization.

The Department includes resources for operators and engineers on the guidelines in the 2011 MARYLAND EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL, specifically SECTION B - GRADING AND STABILIZATION.

It is important to clarify the C&D rule requirement by specifying what it means to have construction activities temporarily or permanently cease. It is also important for construction operators to understand that stabilization must begin immediately when there is no justification for leaving areas exposed. For example, if 14 days will pass between the time when clearing and grading has been completed and further construction activities will occur, there is no reason why the exposed portions of the site cannot be stabilized temporarily to prevent erosion and sediment discharge during the time of inactivity on any portion of the site. EPA clarifies in the CGP that the initiation of stabilization means that the operator has taken action to implement the stabilization measures, including, for example, finalizing arrangements to have the stabilization product delivered, scheduling the installation of the product, and/or prepping the soil. The Department looks to the C&D rule, and EPA's CGP being a model of its implementation, to provide the minimum requirements, and to build on that in cases where the State or Local authorities determine more restrictive stabilization is required.

Exceptions to the Deadlines for Initiating and Completing Stabilization

The Department notes that with respect to the exception to the final stabilization criteria for restored agricultural areas, the permit retains the requirement from the 14-GP that areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to preconstruction agricultural use, are not covered by the exception and must meet the conditions for stabilization.

EPA's permit acknowledges that some portions of some projects are intended to be left

unvegetated or unstabilized following construction. An example would be a dirt access road or a utility pole pad where the final plan calls for the area to remain a dirt road or an unstabilized pad. EPA does not expect temporary or permanent stabilization measures to be applied to these areas. EPA notes that for the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. The Department has included this exception in this section.

Part III.A.2.g: Direct Stormwater to Vegetated Areas

Part III.A.2.g implements the C&D rule requirement at 40 CFR 450.21(a)(6). This requirement reduces the discharge of sediment and other pollutants through filtration and infiltration.

Part III.A.2.g Permit Requirements

Direct stormwater to vegetated areas and maximize stormwater infiltration and filtering to reduce pollutant discharges, unless infeasible.

Operators can comply with this requirement by directing non-erosive flows leaving silt fences, filter berms, or other perimeter controls and sediment basins to natural buffers adjacent to streams or other vegetated areas on or adjacent to the property on which the construction activities will occur. Note that some site operators have found the use of level spreaders or other practices to be effective to prevent erosive discharges. These practices will help to prevent the formation of gullies and associated erosion. Examples of where it may be infeasible to direct discharges from stormwater controls to vegetated areas include those areas where pervious or vegetated areas within the project footprint are non- existent, such as in some highly urban areas.

Part III.A.2.h: Minimize tracking of sediment at entrance or exit from construction site

Collectively, the requirements in Part III.A.2.h will result in the minimization of sediment that can be tracked out from the site onto paved surfaces and subsequently discharged in stormwater. The following practices are required for minimizing sediment track-out:

Part III.A.2.h Permit Requirements

i. Restrict vehicle use to properly designated exit points;

ii. Use appropriate stabilization techniques (e.g., use of aggregate stone with an underlying geotextile or non-woven filter fabric, and turf mats such as those found in 2011 ESC Handbook Section B-1 or B-2) at all points that exit onto paved roads. I. *Note that EPA's CGP Exception where "Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project" has not been included in this permit. Proper stabilization is required on all construction sites.*

iii. Implement additional track-out controls (e.g., wheel washing, rumble strips, and rattle plates) as necessary to ensure that sediment removal occurs prior to vehicle exit;

and

iv. Where sediment has been tracked out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the U.S.

The requirement to restrict vehicle use to properly designated exit points in (i) above, the requirement for appropriate stabilization techniques at all points that exit onto paved roads in (ii) above, and the requirement for the use of additional controls as necessary to ensure that sediment removal occurs prior to vehicle exit in (iii) above, implement the C&D rule requirement to "minimize sediment discharges from the site." The requirement in (ii) above also implements the C&D rule requirement to "minimize the amount of soil exposed during construction activity." The requirement in (d) above implements the C&D rule requirements to "minimize sediment discharges" and the requirement to "minimize the discharge of pollutants from equipment and vehicle washing …."

In the exception language in (ii), EPA acknowledges that the use of exit points for certain narrow linear utility projects can differ from traditional residential or commercial construction projects, where the same exit points are consistently used throughout the life of a project. Linear utility project disturbances, which include natural gas and electric transmission lines, typically consist of multiple disconnected areas of disturbance associated with access roads, stringing pull stations, laydown/staging yards, and pads. Maryland may consider this exception for future permit renewals, but is not including it at this time. .

We note that EPA no longer allows for hosing down or sweeping pollutants into a stormwater conveyance where it is connected to a sediment basin, sediment trap, or similarly effective controls. Upon further consideration, EPA is concerned that this practice will lead to these controls being compromised, and that sweeping, shoveling, and vacuuming are standard and readily available approaches for removing sediment track-out.

Part III.A.2.i: Minimize Dust

The requirement is intended to minimize the discharge of sediment in stormwater from the generation of dust.

Part III.A.2.i Permit Requirements

On areas of exposed soil, the operator must minimize dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged in stormwater from the site.

Dust suppression techniques prevent dust from being generated, minimizing the potential for the dust to accumulate where it is likely to discharge from the site in stormwater discharges.

Part III.A.2.j: Sediment Trap or Basin

Part III.A.2.j This section is new to the permit and was adopted from the EPA CGP, to outline the minimum requirements that will apply to installation of sediment basins or similar impoundments. However, the concepts are already included in Maryland's 2011 Handbook and thus the reference to the Handbook is included in the condition.

Sediment basins are often used on construction sites to minimize sediment discharges. They are typically placed at or near low points of drainageways in order to temporarily detain stormwater discharges, allowing sediment particulates to settle. Sediment basins are also often designed to reduce peak flowrates, reducing downstream flooding and channel erosion. At the point of discharge, which is typically a pipe or channel, installation of riprap or other stabilization measures is often necessary because the concentrated discharge can cause erosion and additional pollutant discharges to Waters of This State. Sediment basins are also often designed to reduce flow duration impacts by reducing the total volume of stormwater being discharged or by providing extended detention to reduce discharge rates. The purpose of the requirements in this part is to provide specific design and maintenance requirements for the proper implementation of sediment basins, if used on a site.

The requirements implement the following C&D rule requirement: "When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible." EPA notes in the permit that the circumstances in which it will be infeasible to design outlet structures in this manner should be rare. Exceptions may include areas with extended cold weather and where using surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If the operator determines that it is infeasible to meet this requirement, the operator must provide documentation in the SWPPP to support its determination, including the specific conditions or time periods when this exception will apply.

Part III.A.2.k: Protect Storm Drain Inlets

Part III.A.2.k implements the C&D rule requirement to "minimize sediment discharges from the site" by requiring stormwater inlets to be protected with sediment controls during construction.

Part III.A.2.k Permit Requirements

i. Install inlet protection measures that remove sediment from discharges prior to entry into any storm drain inlet that carries stormwater flow from your site to a Water of This State, provided you have authority to access the storm drain inlet (2011 ESC Handbook Section E-9); and

ii. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.

Inlet protection measures prevent sediment-laden stormwater from being discharged into storm drains, and ultimately surface waters. The maintenance requirements in (ii) support the need for the inlet measures to be kept in working condition so that they are effective at preventing the discharge of pollutants. Note that inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

Note that under the 20-CP, the Department requires installation of inlet protection measures to any storm drain inlet that carries stormwater flow from the site to Waters of this State that you have authority to access, even if it is first directed to a sediment basin, sediment trap, or similarly effective controls. The Department is concerned that if the sediment basin, sediment trap, or similarly effective controls were to be compromised, unprotected inlets that receive stormwater from these controls would also be compromised.

Part III.A.2.l: Minimize Erosion of Stormwater Conveyances

Part III.A.2.l implements the C&D rule requirement to "control stormwater discharges… to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points."

Part III.A.2.l Permit Requirements

The operator must control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

Examples of control measures that can be used to comply with this requirement include the use of erosion controls and/or velocity dissipation devices (e.g., check dams, sediment traps), within and along the length of a stormwater conveyance and at the outfall to slow down runoff.

Part III.A.2.m: Use of Treatment Chemicals

EPA allowed for use of Chemical Additives in their 2012 permit, at a time when they were considering turbidity limits, understanding that Chemical Additives are required for various soil profiles that contain clay fines that do not readily settle with conventional practices. During that time they had performed intensive research in to toxicity and various concerns with the products. EPA's Fact Sheet incorporates by reference (which the Department made use of) the discussion in the 2012 CGP fact sheet concerning the agency's rationale supporting these requirements. See section "Use of Treatment Chemicals. (Part 2.1.3.3)" on pages 71 through 75 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf.

Cationic chemical additives pose a higher risk to aquatic life because they bind to fish gills. As a result, the EPA and other states we researched include separate provisions in CGPs for use of anionic and cationic additives. MDE places a higher standard on the cationic chemicals, and can require residual testing, pH testing or place other controls as necessary for those sites where use of cationic chemicals is identified in the NOI. The anionic chemicals can be chosen from the list https://mdewwp.page.link/MDFlocs once a product has been verified by an overview of test results.

Part III.A.2.m establishes the minimum requirements that apply to the use of treatment chemicals at permitted construction sites. These are new to Maryland's permit. Although we borrowed the structure from EPA CGP, the Department had specific requirements that would help to streamline the process and rather than rely on the EPA Region to make a call on Cationic Chemicals, the intent of the language was to provide the requirements and expectations in the permit. We did look to other States to provide input to the process, and found the toxicity evaluation and listing of chemicals that had been reviewed in both North Carolina and Wisconsin to be useful guides. Both States use EPA methods to use WET tests performed with the additive to determine concentrations that are toxic. In this way they can specify concentrations that are acceptable. The Department intends to require Safety Data Sheets (SDS) and Whole Effluent Toxicity (WET) test results for any chemical additives the operators may want to use. Once the Department reviews the information, the product and maximum concentrations will be posted on MDE website https://mdewwp.page.link/MDFlocs. In this way operators can choose the more commonly used additives and be confident in their use, in order to protect Waters of this State. The 15-MM permit initially proposed a process to require additive information on the NOI (similar to EPA), and the 17-HT General Permit (Maryland Permit which includes safe use of chemicals for Dewatering) further refined the process to what is being proposed in this permit. The permit requirements follow:

m. If you are using chemical additives (defined in Appendix A) for control of sediment (such as polymers or flocculants) at your site, you must comply with the requirements identified in this section. You shall refer to the most current version of Standards for Use of Chemical Additives for Sediment Control document available on the Department's website for specific instructions on information which must be included in your SWPPP, additional requirements, and assistance in applying for additive use.

i. The use of chemical additives for sediment control should only be considered in the event that water quality standards cannot be met using conventional best management practices.
ii. Should the use of chemical additives be necessary, you must utilize conventional best management practices for erosion and sediment controls prior to and after the application of chemical additives.
iii. Additives may only be applied where treated stormwater is directed to a sediment control (e.g., sediment basin, perimeter control) prior to discharge. This permit intends to authorize additives used to create flocculation of suspended materials in stormwater or groundwater. It does not authorize use of additives for bank or soil stabilization.
iv. Chemical additives must be approved by the Department prior to use. The Department maintains a current list of pre-approved polymers/flocculants including approved application method and maximum allowable dosage concentration or application rate on its website (https://mdewwp.page.link/MDFlocs).
v. If you wish to use a chemical additive which is not found on the approved list, you must

request approval by following the Department's Procedures for Review of Chemical Additives for Sediment Control. You may not begin use of any chemical additive absent from the pre- approved list until you receive written approval from the Department.

vi. You are required to identify all additives you will be using on your Notice of Intent (pursuant to Part II.A.1 of this permit). If you wish to change to or add another preapproved chemical, you shall provide notification to the Industrial and General Permits Division within 30 days of commencing the use of the new pre-approved additive.

vii. You must minimize exposure of stored chemicals to stormwater. Store all treatment chemicals in leakproof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means (e.g., storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill).

viii. You must comply with relevant local requirements affecting the use of chemical additives. If requested by the E&SC plan approval authority, provide an SDS with your E&SC plan.

ix. You must use chemical additives and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals.

x. You must document any departures from good engineering practices or dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals.

xi. Selection of additives and dosing rates should be determined based on site-specific test results. Documentation of the chemical selection process and dosing rate determination shall be included in your SWPPP. Dosing rates cannot exceed those found on the Department's list of pre-approved additives.

xii. Ensure that all persons who handle and use chemical additives at the site are provided with appropriate, product-specific training. At a minimum, this training must cover proper dosing requirements and safe handling practices.

xiii. You must notify and receive approval from the Department's Industrial and General Permits Division at least 30 days prior to using cationic chemical additives (as defined in Appendix A).

xiv. To receive authorization to use cationic chemical additives under this permit, you must identify in your SWPPP appropriate controls and implementation procedures (including where the chemical is applied, description of active treatment systems required, dosing, filtering, pH monitoring, etc.) designed to ensure that your use of cationic chemical additives will not lead to a violation of water quality standards. See the Standards for Use of Chemical Additives for Sediment Control document for additional instructions for completing your SWPPP and requesting use of cationic chemical additives.

xv. A copy of the SWPPP section regarding use of cationic chemical additives must be submitted along with the NOI and Request for Use of Cationic Chemical Additives form. You are required to comply with all such requirements if the Department has authorized you to use cationic chemical additives at your site.

xvi. Depending on the additive selected for use, you may be required to sample discharges and test for residuals or other components. Any such monitoring requirement will be laid out in your registration letter. Results of required monitoring shall be maintained with the SWPPP and made available if requested by Department personnel.

xvii. Authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards. If you use polymers and/or other chemical treatments as part

of your controls, you must identify the polymers and/or chemicals used and the purpose in your SWPPP.

Part III.A.2.n: The permittee shall consider all listed rare, threatened, and endangered species and/or their habitat

This condition is carried over from the 14-GP, to provide protections for endangered or threatened species and their critical habitat. "The permittee shall consider Federal and State listed rare, threatened, and endangered species habitat in the design of the erosion and sediment control plan in accordance with the 2011 Standards and Specifications for Soil Erosion and Sediment Control, Section A-4. If rare, threatened, and endangered species habitat is identified, the permittee shall contact the appropriate approval authority to determine additional regulatory requirements."

Part III.A.2.o: Manage Stockpiles or Land-Clearing Debris Piles

The requirements in this section are new to this permit and are adopted from the EPA CGP and are intended to prevent the discharge of sediment from stockpiled soil and dirt on the site. It is consistent with the State's 2011 ESC Handbook Section B-4-8.

Part III.A.2.o Permit Requirements

Operators must manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil.

a. Locate the piles outside of any natural buffers established under Part III.A.2.a and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated;

b. Install a sediment barrier along all downgradient perimeter area (e.g., include berms, dikes, fiber rolls, silt fences, sandbags, gravel bags, or straw bale);

c. For piles that will be unused for 14 or more days, provide cover (e.g., tarps, blown straw and hydroseeding) or appropriate temporary stabilization (consistent with Part III.A.2.f); and

d. You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or Waters of This State.

We note that it is EPA's judgment that cover or appropriate temporary stabilization for these piles, such as tarps, blown straw, and hydroseeding, are all readily available and common erosion and sediment control products and technologies that operators will likely already be using to comply with the stabilization requirements. The use of these technologies for covering or temporarily stabilizing stockpiles when piles are inactive poses a small incremental cost relative to the total cost of all other stormwater controls on the site. In addition, some cover technologies, such as tarps, can be reused multiple times on the same site due to their durability and longevity.

Some states have similar requirements for stockpile cover or stabilization. For example, Delaware's sediment and stormwater regulations state that "Following soil disturbance or redisturbance, Permanent or Temporary Stabilization shall be completed for perimeter sediment controls, topsoil stockpiles, and all other disturbed or graded areas on the project site within 14 calendar days unless more restrictive Federal requirements apply." [Delaware Department of Natural Resources and Environmental Control, Regulations Governing the Control of Water Pollution, Section 9.1.02, known as Special Conditions for Stormwater Discharges Associated with Construction Activities. Available at http://regulations.delaware.gov/AdminCode/title7/5000/5101.pdf] Another example is in Minnesota's CGP, which states "The Permittee(s) must stabilize all exposed soil areas (including stockpiles).

Stabilization must be initiated immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period
exceeding 14 calendar days." [Minnesota Pollution Control Agency, General Permit Authorization to Discharge Stormwater associated with Construction Activity under the National Pollutant Discharge Elimination System/ State Disposal System Program. Available at https://www.pca.state.mn.us/sites/default/files/wq-strm2-68a.pdf] North Dakota CGP stabilization requirements for exposed soil also cover stockpiles that are not temporary, defined as land being idle for 14 or more calendar days. [North Dakota Department of Health, Authorization to Discharge Under the North Dakota Pollutant Discharge Elimination System - Stormwater Associated with Construction Activity, page 25. Available at http://www.ndhealth.gov/WQ/Storm/Construction/NDR10per20150401F.pdf]

c. Part III.A.3: Pollution Prevention Requirements

Part III.A.3 Implements the C&D rule requirements in 40 CFR 450.21(d) and (e) for pollution prevention measures and prohibited discharges.

Part III.A.3 Permit Requirements

The permit requires operators to implement pollution prevention controls in accordance with the requirements in Part III.A.3 to minimize the discharge of pollutants in stormwater and to prevent the discharge of pollutants from spilled or leaked materials from construction activities.

Part III.A.3.a: Equipment and Vehicle Fueling and Maintenance Requirements

Part III.A.3.a implements the 40 CFR 450.21(d)(3) requirement to "minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures" and the 40 CFR 450.21(e)(3) requirement prohibiting the discharge of "fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance."

Part III.A.3.a Permit Requirements

The operator must comply with the following requirements:

i. Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities;

ii. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;

iii. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

iv. Use drip pans and absorbents under or around leaky vehicles;

v. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements; and

vi. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

Examples of effective means of eliminating the discharge of spilled or leaked chemicals include, but are not limited to, locating activities away from Waters of This State and stormwater inlets or conveyances so that stormwater coming into contact with these activities cannot reach Waters of This State; providing secondary containment (e.g., spill berms, decks, spill containment pallets) and cover where appropriate; and having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill.

Part III.A.3.b: Equipment and Vehicle Washing Requirements

Part III.A.3.b implements the 40 CFR 450.21(d)(1) requirement to "Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge."

Part III.A.3.b Permit Requirements

The operator must comply with the following requirements:

i. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters;

ii. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and

iii. For storage of soaps, detergents, or solvents, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.

The requirement that operators must properly manage wash waters reduces the discharge of pollutants, such as sediment and other pollutants, from the site. Examples provided in the permit for providing an effective means of minimizing the discharge of pollutants from the washing of equipment or vehicles include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls. This requirement also implements the 40 CFR 450.21(e)(4) prohibition against discharging soaps or solvents, and is consistent with the eligibility condition that allows the use of non-stormwater wash waters as long as they do not contain soaps, solvents, or detergents.

Part III.A.3.c: Storage, Handling, and Disposal Requirements

Part III.A.3.c requires operators to comply with specific pollution prevention standards for activities that may result in pollutant discharges.

Part III.A.3.c Permit Requirements

The operator must comply with the following requirements:

i. For building materials and building products (e.g., asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles), provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

ii. For pesticides, herbicides, insecticides, fertilizers, and landscape materials:

* In storage areas, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these chemicals to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas; and

* Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label (see also Part 2.3.5).

iii. For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:

* Store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these containers to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas (e.g., having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and

* Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. The operator is prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

iv. For hazardous or toxic wastes:

* Separate hazardous or toxic waste from construction and domestic waste;

* Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

* Store all outside containers within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in a covered area, having a spill kit available on site);

* Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements;

* Clean up spills immediately, using dry clean-up methods, and dispose of used materials properly. The operator is prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

* Follow all other federal, state, tribal, and local requirements regarding hazardous or toxic waste.

v. For construction and domestic wastes:

* Provide waste containers (e.g., dumpster, trash receptacle) of sufficient size and number to contain construction and domestic wastes;

* Keep waste container lids closed when not in use and close lids at the end of the business day for those containers that are actively used throughout the day. For waste containers that do not have lids, provide either (1) cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, or (2) a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment);

* Clean up and dispose of waste in designated waste containers; and

* Clean up immediately if containers overflow.

vi. For sanitary waste, position portable toilets so that they are secure and will not be

tipped or knocked over, and located away from Waters of This State and stormwater inlets or conveyances.

The Department acknowledges how EPA incorporates by reference the discussion in the 2012 CGP fact sheet concerning these requirements. See section VII.3.3 "Pollution Prevention Standards (Part 2.3.3)" on pages 83 through 87 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf.

Part III.A.3.d: Applicator and Container Washing Requirements

Part III.A.3.d implements the requirements of 40 CFR 450.21(e)(1) and (e)(2). The requirements apply to the washing of applicators and containers used for stucco, paint, concrete, form release oils, curing compounds, or other materials.

Part III.A.3.d Permit Requirements

i. Direct wash water into a leak-proof container or leak-proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation;

ii. Handle washout or cleanout wastes as follows:

* Do not dump liquid wastes in storm sewers or Waters of This State;

* Dispose of liquid wastes in accordance with applicable requirements in Part III.A.3.c; and

* Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part III.A.3.c; and

iii. Locate any washout or cleanout activities as far away as possible from Waters of This State and stormwater inlets or conveyances, and, to the extent feasible, designate areas to be used for these activities and conduct such activities only in these areas.

Part III.A.3.e: Fertilizer Application Requirements

The fertilizer discharge restrictions in Part 2.3.5 of EPA's CGP are included to prevent the discharge of nutrients in stormwater and to further implement the C&D rule requirement to "minimize the discharge of pollutants" at 40 CFR 450.21(d) and including Agriculture Article § 8-803.4 (Maryland Fertilizer Law for application of commercial fertilizer,).

Part III.A.3.e Permit Requirements

The following requirements apply if the operator will be applying fertilizer on the construction site:

i. Apply at a rate and in amounts consistent with manufacturer's specifications, or document in the SWPPP departures from the manufacturer specifications where appropriate in accordance with Part III.F;

ii. Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

- Avoid applying before heavy rains that could cause excess nutrients to be discharged;
- Never apply to frozen ground;
- Never apply to stormwater conveyance channels; and

iii. Follow all other federal, state, tribal, and local requirements regarding fertilizer application, including Agriculture Article § 8-803.4.

Part III.A.3.f: Emergency Spill Notification

Part III.A.3.f prohibits the discharge of toxic or hazardous substances from a spill or other release and requires operators to comply with federal reporting requirements of 40 CFR Part 110, Part 117, and Part 302 in the event that a leak, spill, or other release contains a toxic or hazardous substance in an amount equal to or in excess of a reportable quantity.

Part III.A.3.f Permit Requirements

The permit prohibits operators from discharging toxic or hazardous substances from a spill or other release. Furthermore, where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the operator must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as the operator has knowledge of the release. Operators must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

d. Part III.A.4: Construction Dewatering Requirements

Part III.A.4 implements the C&D rule requirement that prohibits "discharges from dewatering activities, including discharges from dewatering of trenches and excavations" unless managed by "appropriate
controls."

Part III.A.4 (III.A.4.a – III.A.4.g) Permit Requirements
The operator must comply with the following requirements to minimize the discharge of pollutants in ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, in accordance with Part I.C.2 of the permit:

III.A.4.a. Treat dewatering discharges with controls to minimize discharges of pollutants (e.g., appropriate controls include sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, filtration systems (e.g., bag or sand filters) and passive treatment systems that are designed to remove sediment; appropriate controls to use downstream of dewatering controls to minimize erosion include vegetated buffers, check dams, riprap, and grouted riprap at outlets). Appropriate controls are identified in the 2011 ESC Handbook Section F, and may also require use of chemical additives as provided in this

permit that are designed to remove sediment. Appropriate controls to use downstream of dewatering controls to minimize erosion include vegetated buffers, check dams, riprap, and grouted riprap at outlets;

III.A.4.b. Do not discharge visible floating solids or foam;

III.A.4.c. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

III.A.4.d. To the extent feasible, use vegetated, upland areas of the site to infiltrate dewatering water before discharge. The operator is prohibited from using Waters of This State as part of the treatment area;

III.A.4.e. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.2.11;

III.A.4.f. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

III.A.4.g. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

The specific restrictions in Part III.A.4 provide the permit's interpretation of what is meant by "appropriate controls" in the C&D rule. These specific requirements, in part, also implement the C&D rule requirements to control peak flowrates and total stormwater volume (40 CFR 450.21(a)(2)), to minimize sediment discharges (40 CFR 450.21(a)(5)), and to direct stormwater to vegetated areas (40 CFR 450.21(a)(6)).

18. Part III.B: Water Quality-Based Effluent Limitations

This 20-CP includes water quality-based effluent limits (WQBELs), which are additions to the 14-GP approach, in order to control discharges as necessary to more effectively meet applicable water quality standards. The provisions of Part III.B constitute the WQBELs of the permit and supplement the permit's technology-based effluent limits in Part III.A.

Part III.B.1: General Effluent Limitation to Meet Applicable Water Quality Standards

Part III.B.1 requires that all operators control their stormwater discharges as necessary to meet applicable water quality standards, consistent with 40 CFR 122.44(d)(1).

Part III.B.1 Permit Requirements

The permit requires discharges of stormwater to be controlled as necessary to meet applicable water quality standards.

In EPA's CGP, the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being

controlled as necessary to meet applicable water quality standards. In a similar fashion, the Department has similar expectations. If at any time the operator becomes aware, or the Department determines, that the discharge is not being controlled as necessary to meet applicable water quality standards, the operator must take corrective action as required in Parts III.D.1 and III.D.2, and document the corrective actions as required in Part III.D.3. This is a change from the previous permit, which dealt only with the "Prevention of the Discharge of Significant Amounts of Sediment".

The Department may also insist that the operator install additional controls (to meet the narrative water quality-based effluent limit above) on a site-specific basis, or require the operator to obtain coverage under an individual permit, if information in the NOI or from other sources indicates that the operator's discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA-established or approved TMDL.

If during the operator's coverage under a previous permit, the operator was required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA- approved or established TMDL (for any parameter) or to otherwise control the discharge to meet water quality standards, the operator must continue to implement such controls as part of coverage under this permit.

To support the Department's expectation that compliance with the conditions and effluent limitations in this permit will result in discharges that meet applicable water quality standards, the permit includes additional water quality-based effluent limitations, which, in combination with the technology-based effluent limits in Part III.A, the Department expects to be as stringent as necessary to achieve water quality standards. These additional WQBELs will apply in the permit where the Department has determined that discharges from construction sites may have the reasonable potential to cause or contribute to exceedances of applicable water quality standards, such as when a waterbody is impaired for sediment or nutrients, which are parameters associated with stormwater discharges from construction sites. The fact sheet discusses these additional requirements below for Part III.B.2.

Part III.B.2: Discharge Limitations for Sites Discharging to Sensitive Waters

Part III.B.2 addresses discharges to Tier II streams or watersheds.

Part III.B.2 Permit Requirements

This Part informs operators that for any portion of the site that discharges to a water that is identified by the Department or EPA as Tier II for antidegradation purposes, they must perform an antidegradation review (COMAR 26.08.02.04-1), which is accomplished by completing the antidegradation checklist in Appendix C. The checklist affirms that you will comply with the inspection frequency specified in III.C, the stabilization deadline specified in Part III.A.2.f, and the additional controls required when work is considered within Stream Protection Zones as specified in Part III.A.2.a and Appendix B. The antidegradation checklist includes verification of whether the stream has assimilative capacity or if any waivers were

allowed. Operators with discharges to Tier II streams with no assimilative capacity may be subject to additional review by the Department. In addition, on a case-by-case basis, the Department may notify operators of new sites or operators of existing sites with increased discharges that additional analyses, stormwater controls, or other measures are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary.

Tiers 2 and 3 refer to waters either identified by the state as high-quality waters or Outstanding National Resource Waters under 40 CFR 131.12(a)(2) and (3). Maryland refers to Tier II vs Tier 2 found in the Federal Regulations. Maryland doesn't currently have any Tier III waters. For the purposes of this permit, you are considered to discharge to a Tier II water if the first Water of this State to which you discharge is identified by the Department or EPA as Tier II. For discharges that enter a storm sewer system prior to discharge, the Waters of this State to which you discharge is the first Waters of this State that receives the stormwater discharge from the storm sewer system. See the Maryland list of Tier II waters at https://mdewwp.page.link/Tier2Map.

The Department may determine on a case-by-case basis that a site discharges to a sensitive water.

The rationale for EPA's CGP more stringent requirements for Tier 2 designated waters was explained in the 2012 CGP fact sheet as follows:

> *"As stated in Part 3.1 of the [2012] CGP permit, in the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards (which include state antidegradation requirements). More specifically, by imposing on operators that discharge to Tier 2, Tier 2.5, or Tier 3 waters the requirement to comply with the additional requirements, on top of the permit's other effluent limits and conditions, to stabilize exposed areas faster and to conduct more site inspections than other sites, It is EPA's judgment that authorizing these discharges will not result in a lowering of water quality. Thus, EPA has determined that compliance with the CGP generally will be sufficient to satisfy Tier 2 (or 2.5) and Tier 3 antidegradation requirements because the controls will not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary, assuming of course that the discharger is in compliance with any other applicable state or antidegradation conditions that are included in Part 9 of the permit. Furthermore, the controls in the permit are sufficiently stringent that they would generally satisfy the requirement at the heart of Tier 2 review, that the discharge is necessary to accommodate important economic or social development in the area where the discharge is located. Construction is usually important to economic and social development, and the controls already required in Part 2 of this permit have been identified by EPA in its effluent limitations guideline for the construction and development category as the level of pollutant abatement that is the best available technology economically achievable. However, in cases where information submitted with the NOI, or available from other sources, indicates that further review and/or conditions are necessary either for a new project or an existing project with a*

significantly increased discharge, EPA will conduct this review and require any appropriate additional controls."

The conclusion that compliance with the 20-CP (as with the EPA CGP) will generally meet the Tier II antidegradation requirements depends on several key aspects of the permit.

First, all construction sites that will be subject to this permit must meet the stringent general effluent limits set out in Part III.A. Through compliance with these limits alone, the Department expects that the discharge of pollutants will be reduced and/or eliminated so that there should not be a lowering of water quality. The Department looks to the EPA's experience in this regard in determining our basis. EPA bases this conclusion in part on the fact that the limits in this permit are based on the nationally-developed effluent limitations guidelines process that defined the BAT/BCT/BPT and NSPS level of control. EPA also is imposing on these sites the requirement to meet even more stringent controls defined in their permit for more frequent inspections and stricter stabilization deadlines, which now are reflected in the 20-CP. Maryland has added Stream Protection Zones with buffer requirements, as described previously in this Fact Sheet, in this version to include the State's longstanding 100 foot buffer requirement for these sensitive waters. Furthermore, once installed and implemented, the operator is obligated to maintain these controls and to correct deficiencies where an inspection determines that deficiencies exist. Where the Department determines through its oversight activities (e.g., onsite inspection) that a discharger is not meeting its limits, such a deficiency will constitute a violation of the permit and will require follow-up corrective action.

Second, there may very well be individual cases where the Department determines that further controls are necessary or that coverage under the 20-CP is no longer appropriate to protect the Tier II status of the receiving water. For this reason, the Department is using the EPA CGP language and has included the following language in Part III.B.2: "on a case-by-case basis, the Department may notify operators of such new sites or operators of existing sites with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary." It is anticipated that if the Department decides to require a Tier II review for a particular new project or an existing project with a significantly increased discharge, the Department may either change the terms of coverage or terminate 20-CP coverage and require an individual permit.

Part III.B.3: Discharge Limitations for Sites Discharging to Impaired Waters

For impaired waters, EPA's CGP requires more frequent inspections and more stringent deadlines for stabilization. When this was evaluated against Maryland's requirements, it is clear that Maryland's existing frequency of inspections and deadlines for stabilization for all sites is already as stringent as EPA's requirements for discharges to impaired waters. Therefore, there was no change required for these waters. However, if the operator discharges to a water that is impaired, the Department reserves the right to require additional controls as necessary for a discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary.

Polychlorinated Biphenyls (PCB) Related Impairment Requirements:
The state is addressing PCB impairments related to construction in the same fashion that the EPA CGP does. Part III.B.3 includes a new requirement for operators discharging to waters impaired for polychlorinated biphenyls (PCBs) to implement controls to minimize the exposure of building materials containing polychlorinated biphenyls-(PCBs) to precipitation and stormwater during demolition of any structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980. Buildings and structures originating or remodeled between the years of 1950-1979 often contain polychlorinated biphenyls (PCBs) in materials such as caulk and paint. Without proper controls, the demolition of such structures can cause PCBs to be released into the environment and discharged into Waters of This State during storm events. To address this concern, Part III.B.3 requires controls to be implemented to minimize exposure of building materials containing PCBs to precipitation and stormwater, and to ensure that such materials are disposed in compliance with applicable state, federal, and local laws. The requirement is limited to the demolition of buildings or structures with at least 10,000 square feet of floor space built or renovated before January 1, 1980 on sites that discharge to PCB-impaired waters. This requirement helps to ensure that authorized discharges will meet WQS.

Lacking any substantial research in Maryland, we looked to EPA and the CGP for direction on PCBs. The presence of PCBs in certain building components, especially in caulk and fluorescent light bulbs, has been a focus of EPA's research over the past several years. The following is a summary of the findings from EPA studies establishing the presence of PCBs in building materials, particularly in school buildings:

- Caulk put in place between 1950 and 1979 may contain as much as 40 percent PCBs and can emit PCBs into the surrounding air. PCBs from caulk may also contaminate adjacent materials such as masonry or wood.

- Fluorescent lighting fixtures that still contain their original PCB-containing light ballasts have exceeded their designed lifespan, and the chance for rupture and emitting PCBs is significant. Sudden rupture of PCB-containing light ballasts may result in exposure to the occupants and may also result in the addition of significant clean-up costs.

- Some building materials (e.g., paint and masonry walls) and indoor dust can absorb PCB emissions and become potential secondary sources for PCBs. When the primary PCB emitting sources are removed, the secondary sources often emit PCBs.

See EPA's webpage, Polychlorinated Biphenyls (PCBs) in Building Materials, located at https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-building-materials, for more information.

Releases of PCBs into the environment from building materials containing PCBs has also been well studied in certain regions of the country. In Washington State, stormwater was identified as the largest delivery pathway to surface waters for PCBs. Washington's "PCB Chemical Action Plan" identifies PCBs in caulk and paint as the second largest source of PCBs, accounting for 87

metric tons of PCBs in WA, with 160 kg/yr. released to the environment. (2015. PCB Chemical Action Plan. Washington State Department of Ecology. https://fortress.wa.gov/ecy/publications/SummaryPages/1507002.html). The Plan states that "Releases from building materials can be greatly accelerated during remodeling and demolition. There is an opportunity, through use of best management practices, to prevent releases of PCBs during remodeling and demolition."

Another Washington State Department of Ecology report, focusing on the Puget Sound Basin, (2011. Control of Toxic Chemicals in Puget Sound Phase 3: Primary Sources of Selected Toxic Chemicals and Quantities Released in the Puget Sound Basin. Ecology Publication No. 11-03-024. https://fortress.wa.gov/ecy/publications/documents/1103024.pdf) estimates 59 metric tons of PCBs are in building sealants in that area with about 110 kg released annually. This is likely an underestimate because the report did not consider all uses in buildings, e.g., windows, uses in residential buildings, or in other structures, such as bridges and sidewalks.

Building materials and caulk were also found to be potential sources of PCBs at both the Lower Duwamish Waterway (2011 Lower Duwamish Waterway Survey of Potential PCB-Containing Building Material Sources. Prepared for Ecology. https://fortress.wa.gov/ecy/gsp/DocViewer.ashx?did=41052) and Commencement Bay/Nearshore Tideflats Superfund sites in Washington State. The Rainier Commons building, currently a Toxic Substances Control Act (TSCA) cleanup site, was found to contain high concentrations of PCBs in caulk and paint that entered the stormwater system via catch basins on site. This system drains to the Lower Duwamish Waterway cleanup area. Elevated concentrations of PCBs in roadway caulk were found during source tracing by the City of Tacoma in response to the re- contamination of the Thea Foss Waterway in Commencement Bay. (2015. Thea Foss and Wheeler- Osgood Waterways 2014 Source Control and Water Year 2014 Stormwater Monitoring Report, City of Tacoma. Section 2.1.3. http://cms.cityoftacoma.org/enviro/SurfaceWater/SourceControlWYRpt/Report.pdf)

Releases of PCBs into the environment from PCB-containing building materials have also been well studied in the San Francisco Bay region. The San Francisco Bay Regional Water Quality Control Board found that "of the sources to the Bay, stormwater runoff contributes the greatest mass of PCBs." (2013. San Francisco Bay Regional Water Quality Control Board. San Francisco Bay PCBs TMDL – Implementation at Cleanup Sites. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaypcbs/SF%20Bay
%20 PCBs%20TMDL%20-
%20Considerations%20for%20Cleanup%20Sites%20September%205%202013.pdf). A study of buildings within greater San Francisco Bay region found PCBs in 88% of the caulk samples tested; 40% of the samples contained >50 ppm PCBs, and 20% > 10,000 ppm PCBs. Data suggest a correlation between PCB levels observed in the water with construction activity. Based on these studies, the San Francisco Bay Regional Water Quality Control Board stated that controlling demolition of buildings containing PCBs could significantly reduce the loading of PCBs in their stormwater.

The Department (similar to EPA focus) is purposefully limiting this new requirement to apply to sites that discharge to waters with known impairments for PCBs. Over 4,500 water bodies

nationally are currently listed in the PCB polluted category, making this the sixth-highest water pollution cause nationwide. (Summaries of Water Pollution Reporting Categories, ATTAINS parent cause category summaries, adapted from doc. no. EPA841-R-12-104, October 2012.) This includes 81,610 miles of rivers and streams, 3,204,534 acres of lakes and ponds, and 400,094 square miles of bays and estuaries that are impaired for PCBs. (National Causes of Impairment, Size of Assessed Waters with Listed Causes of Impairment, available at https://ofmpub.epa.gov/waters10/attains_nation_cy.control#causes). This includes Maryland Waters impaired for PCB in sediment. (https://mdewwp.page.link/MDIRMap) The Department does not currently have data on the number of construction projects subject to the 20-CP that may involve demolition of a structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980 on sites that discharge to waters impaired for PCBs. In listening sessions with interested parties, there was confusion as to whether a construction SW (14-GP or 20-CP) permit is even required for demolition of structures that meet the criteria above. This condition will reinforce that permit coverage is required. However, it may be that erosion and sediment control plans are not always required. At this time, the Department does not have an estimate for the number of operators that will be affected by this requirement. However, the Department will be adding a new question on the NOI form asking about the prevalence of demolition of a structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980.

There are a variety of controls that can be implemented to minimize the potential discharge of PCBs from demolition activities, and can also be effective in controlling the release of other hazardous substances like asbestos and lead-paint. The following examples provide guidance for operators in selecting the site-specific controls to meet this requirement in Part III.B. These examples are not required or exhaustive. Operators have flexibility in selecting the specific controls they will implement to meet this requirement in Part III.B, but must ensure that such controls minimize exposure of building materials to precipitation and stormwater, and ensure that such materials are properly disposed.
Operators must also document the selected controls in the SWPPP.

- Separate work areas from non-work areas and select appropriate personal protective equipment and tools.
- Construct a containment area so that all dust or debris generated by the work remains within the protected area.
    - Apply plastic sheeting to the floor, ground, or other applicable surfaces to prevent contamination of the building interior or exterior from dust generated by the work.
    - Put all necessary tools and supplies on the protective sheeting in the work area before you begin work to avoid stepping off the protective sheeting before the work is complete.
    - Construct a decontamination area outside of the work area by placing heavy plastic sheeting on the ground. Use this area for removing personal protective equipment and for cleaning equipment used in the enclosure.
        - ♣ Every time you leave the plastic sheeting, remove disposable shoe covers, and wipe or vacuum shoes, especially, the soles, before stepping off the plastic sheeting. A large disposable tack pad on the floor can help to clean the soles of shoes.

- ♣ Remove or vacuum off Tyvek suits when exiting the work area so the dust stays inside the work area.

- For locations where a containment area cannot be constructed, consider the following techniques:
    - Cover the ground and plants with heavy plastic sheeting to catch debris. The covering should extend at least ten feet out from the building. Secure the covering to the exterior wall with a wood strip and staples, or tape.
    - Seal off any vents or air exchange systems into the building that are located within the work area.
    - Move or cover any play areas within 20 feet of the work area. To prevent debris from falling beyond the ten-foot covering when working on the second story or above, extend the sheeting farther out from the base of the building and to each side of the area where materials are being disturbed.
    - To prevent the spread of debris when work is close to a sidewalk, street, or property boundary, or the building is more than three stories high, scaffolding sides should be covered in plastic.
    - Avoid working in high winds. Otherwise, take special precautions to keep the work area contained when the wind is strong enough to move dust and debris. For example, a wind screen can be constructed of plastic at the edge of the ground-cover plastic to keep dust and debris from migrating.
- For inside work, consider placing the containment area under negative air pressure and/or using high-efficiency particulate air (HEPA).
- Use tools that minimize dust and heat (<212° F). Detailed information on tools can be found at https://www3.epa.gov/epawaste/hazard/tsd/pcbs/pubs/caulk/guide/guideappendix.htm.
    - When using electromechanical tools, use HEPA vacuum attachments to contain the dust generated.
    - Use wet sanders and misters to keep down the dust created during sanding, drilling, and cutting.
- Leave the work area clean at the end of every day and at the end of the project.
    - Daily activities include:
        - ♣ Pick up as you go. Put trash in heavy-duty plastic bags.
        - ♣ Vacuum the work area with a HEPA vacuum cleaner frequently during the day and at the end of the day.
        - ♣ Clean tools at the end of the day.
        - ♣ Dispose of or clean off personal protective equipment.
        - ♣ Properly dispose of wastewater produced during the job.
    - End of project activities include:
        - ♣ Make sure all trash and debris, including building components, are disposed of properly.
        - ♣ Vacuum any exposed surfaces, including walls and ceilings, with a HEPA vacuum cleaner.
        - ♣ Mist dusty sections of the plastic sheeting with water before taking them down to keep dust from becoming airborne again.
        - ♣ Remove plastic sheeting carefully, fold it with the dirty side in, tape it

shut, and properly dispose of it.

♣ Visually inspect the site to ensure that no dust or debris is present and re-clean the area thoroughly if you find dust or debris.

- The following are also recommended practices for minimizing PCB exposure to workers, building occupants, and community members during demolition activities:
    - Use site security measures to prevent access of unauthorized persons to the work areas until after the final cleanup. Examples of security measures include:
        - Lock fence gates or doors to the work areas during off hours.
        - Place signs, barrier tape and/or cones to keep all non-workers out of the work area. Signs should be in the primary languages of the occupants, and should say "Do Not Enter - Authorized Personnel Only" and "No Eating, Drinking, or Smoking."
        - Establish a system to identify authorized persons and any limitations to their approved activities.
        - Provide a means for approving all visitors to the work area; ensure trained site personnel accompany visitors at all times and provide them with appropriate personal protective equipment.
    - Close windows and doors within 20 feet of the work area to keep dust and debris from getting into the building.
    - Change out of work clothing before going home, and launder non-disposable protective clothing separately from family laundry.

19. Part III.C: Site Inspection Requirements

Part III.C.1: Person(s) Responsible for Inspecting Site

Part III.C.1 clarifies that it is the operator who will be responsible for ensuring that the person who conducts inspections, whether he/she is a member of the project staff or a third party, must be a “qualified person.” In Maryland that means that the person conducting the inspection must hold a valid certificate of attendance from a training program for responsible personnel as required by Section 4- 104(b) of the Environment Article, unless the erosion and sediment control plan approval authority has waived the requirement for a Certificate of Training in accordance with Section 4-104(c) of the Environment Article.

Part III.C.1 Permit Requirements

Part III.C.1 clarifies that the person(s) inspecting the site may be a person on the project staff or a third party hired to conduct such inspections. Whoever will be charged with conducting the inspections must be a “qualified person,” who is knowledgeable in the principles and practice of erosion and sediment controls, and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater control measures selected and installed to meet the requirements of the permit.

Part III.C.2: Frequency of Inspections

Part III.C.2 requires the operator to, at a minimum, conduct a site inspection in accordance with one of two schedules, unless they are subject to the Part III.C.3 site inspection frequency for discharges to sensitive waters or qualify for a Part III.C.4 reduction in the inspection frequency.

Part III.C.2 Permit Requirements

Part III.C.2 requires the operator to conduct inspections of the site and establishes the required minimum inspection frequency. The operator has the option to either (1) conduct a site inspection once every four (4) business days; or (2) conduct a site inspection once every 7 days and within 24 hours of the occurrence of a storm event.

This provision provides a new choice between the inspection frequencies, and includes 0.25 inches of rain over 24 hour as a rainfall event. In the past it was left open as a measurable storm event.

The one option remains largely unchanged, with the addition of defining what a storm event is (0.25 inches of rain in 24 hours). This allows operators to conduct their inspection within 24 hours of the conclusion of a storm event. In the Department's judgment, it is important for inspections to be conducted within a day of the occurrence of a rainfall event so that the operator could catch any potential problems on the site and correct such problems before a prolonged discharge of pollutants occurs.
Requiring inspections to be conducted within 24 hours of the occurrence of a qualifying storm event provides assurance that, during multiple days of discharge from a single storm event, problems with the control of pollutants will be identified sooner and corrected in accordance with the corrective action timeframes specified in Part III.D of the permit.

The new option to inspect every four business days is more frequent than contemplated in the existing weekly inspection. This option is consistent with EPA, as well as neighboring states, where more frequent inspections is an option. By scheduling inspections every 4 business days, there are several benefits to water quality. Problems with controls may be found ahead of a storm event, especially if it hasn't rained during the week. It is also more effective for the operators to schedule the contractor or responsible person on a regular schedule, easier for an MDE inspector to verify compliance and more efficient to get work done as a result. For these reasons, it was important for the State to consider the option. It is the Department's position that this is an effective option.

Part III.C.3: Increase in Inspection Frequency for Sites Discharging to Sensitive Waters

Part III.C.3 This requirement is new to the General Permit and requires increased inspection frequencies for the portion of any sites discharging to a water identified by the Department or EPA as Tier II for antidegradation purposes.

Part III.C.3 Permit Requirements

The operator must conduct inspections in accordance with the following inspection frequencies: Once every 4 calendar days and when possible within 24 hours of a storm event

of 0.25 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge. To determine if a storm event of 0.25 inches or greater over the course of 24 hours has occurred on your site, the operator must either keep a properly maintained rain gauge on the site, or obtain the storm event information from a weather station that is representative of its location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, the operator must keep a record of rainfall occurrences in accordance with Part III.C.7.f.

As noted in the fact sheet section on Part III.B, it is the Department's judgment that these inspection requirements will enhance the operator's ability to find and correct problems before a discharge of pollutants occurs. The Department expects that compliance with the water quality-based effluent limits in the permit, in combination with the general effluent limits in Part III.A, will result in discharges that meet applicable water quality standards. The Department clarifies that the more frequent site inspections are required only for those portions of the site that are discharging to the sensitive water. For example, for a highway construction project spanning many miles over multiple watersheds, the increase in inspection frequency would only be required in areas of the site that discharge to or within one mile upstream of the sensitive water. The Department also notes that if the operator qualifies for the reduced inspection frequency specified in Part III.C.4, they may comply with that reduced frequency despite the fact that they discharge to a sensitive water. This is because the reduced frequencies in Part III.C.4 apply only to situations where the reduced inspection frequency is justified by circumstances that ensure protection of all waters, including sensitive waters.

Part III.C.4: Reductions in Inspection Frequency

Part III.C.4 identifies that a reduction in the frequency of inspections is allowed in any areas of the site that have achieved temporary or final stabilization as required in Part III.A.2.f. The permit enables the operator to reduce the frequency of inspections to once per month in any area of the site where the stabilization steps in Part III.A.2.f have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to the frequency specified in Part III.C.2 or III.C.3 if applicable. The operator must document the beginning and ending date of this period in its SWPPP.

Areas of the site that have achieved temporary or final stabilization present a significantly lower risk of producing unacceptable discharges of pollutants in stormwater to surface waters. It is the Department's judgment that the reduction in inspection frequency will provide a benefit in reduced administrative burden to the operator.

Part III.C.5: Areas That Must Be Inspected

Part III.C.5 describes the areas on the site that must be inspected (III.C.5.a – III.C.5.f).

Permit Requirements. The permit specifies which areas of the site must be inspected during each site inspection, which include, at a minimum, the following:

III.C.5.a. All areas that have been cleared, graded, or excavated, and that have not yet completed stabilization consistent with Part 2.2.14.a;
III.C.5.b. All stormwater controls (including pollution prevention controls) installed at the site to comply with this permit;
III.C.5.c. Material, waste, borrow or equipment storage and maintenance areas that are covered by this permit;
III.C.5.d. All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;
III.C.5.e. All points of discharge from the site; and
III.C.5.f. All locations where stabilization measures have implemented.

Operators are not required to inspect areas of the site that, at the time of the inspection, are considered unsafe to inspection personnel.

The 14-GP didn't contain a list equivalent to this; however, it did specify the use of a check list provided by MDE. By including requirements in the permit, MDE can allow for alternative checklists that meet these requirements. The requirements added are the ones required by the EPA CGP and are consistent with MDE's own checklist and methodology.

Part III.C.6: Requirements for Inspections

Part III.C.6 includes specific requirements regarding the focus of the

inspection. Part III.C.6 (III.C.6.a – III.C.6.g) Permit Requirements

The permit requires that inspections, at a minimum, consist of the following:

III.C.6.a. Check whether all stormwater controls (i.e., erosion and sediment controls and pollution prevention controls) are properly installed, appear to be operational, and are working as intended to minimize pollutant discharges.

III.C.6.b. Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

III.C.6.c. Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts III.A and/or III.B;

III.C.6.d. Check for signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to the discharge at points of discharge and, if applicable, the banks of any Waters of This State flowing within or immediately adjacent to the site;

III.C.6.e. Identify any incidents of noncompliance observed.

III.C.6.f. If a discharge is occurring during the inspection, the operators must:

i. Identify all points at the site; and
ii. Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color; odor; floating, settled, or

suspended solids; foam; oil sheen; and other indicators of stormwater pollutants.

III.C.6.g. Based on the results of the inspection, complete any necessary maintenance under Part III.A.1.d and corrective actions under Part III.D.

Part III.C.7: Inspection Report Part

Part III.C.7 Consistent with the Department's inspection report form, the listing of the requirements provides a consistent means of documenting the results of each inspection in cases where alternative reports are requested or desirable.

Part III.C.7 Permit Requirements
The operator must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. the date and time of the inspection;
b. the name(s) of the individual(s) who performed the inspection;
c. Weather information (current conditions as well as time and amount of last recorded precipitation).
d. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part III.C.6, including any necessary maintenance or corrective actions; (such as whether significant amounts of sediment were observed as described in Part III.C.6.d, Prevention of the Discharge of Significant Amounts of Sediment, above; an assessment of the condition of erosion and sediment controls and how any deficiencies were or are being addressed; and a description and date of any erosion and sediment control implementation and maintenance performed, including identification of any controls that have not been installed as required)
e. A description of the site's present phase of construction;
f. If you are inspecting your site at the frequency specified in Part III.C.3 (discharges to Sensitive Waters), and you conducted an inspection because of rainfall measuring 0.25 inches or greater in a 24 hour period, you must include the applicable rain gauge or weather station readings that triggered the inspection; and
g. If you determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations to which this condition applies.

Part III.C.8: Recordkeeping Requirements

Part III.C.8.a. The Requirement to Post a Notice of Your Permit Coverage is to provide notice to the public, and any other interested parties that discharge from the construction site are authorized by the Department. By providing notice of permit coverage and other information about the site, interested parties are more easily able to obtain information about the construction site, such as the SWPPP, and identify the site when reporting potential permit violations. Note that operators are only required to provide copies of the SWPPP, upon request, to the representatives from the Department, EPA, local agency approving stormwater management plans; or the operator of a storm sewer system receiving discharges from the site. The Department may provide access to portions of the SWPPP to a member of the public upon request.

Part III.C.8.b. This Part requires inspection reports be kept at the site and available to inspectors. The permit requires that the operators keep a copy of all inspection reports at the site or at an easily accessible location, so that they are available at the time of an on-site inspection or upon request by representatives from the Department or EPA.

Part III.C.8.c: Record Retention. This requirement is to retain all reports a minimum of three years comes from the standard permit condition requirements at 40 CFR 122.41(j)(2).

Part III.C.8.d. When a permit is transferred, the original permittee must maintain the records in Part III.C.8.b above that document the permit activity up to the date of transfer. The original permittee must maintain those records for three (3) years from the date of transfer. Both the original permittee and the new permittee must maintain a copy of the Transfer of Authorization document.

Part III.C.8.e. The permittee shall ensure that samples and measurements taken for the purpose of monitoring are representative of the monitored activity. If the director requires monitoring at a site covered by this permit, the permittee shall use monitoring procedures that are sufficiently sensitive to meet an imposed limit, in accordance with federal regulations at 40 CFR 122.44(i)(1)(iv). Records of monitoring information must include:

i. the date, exact place, and time of sampling or measurements;
ii. the individual(s) who performed the sampling or measurements;
iii. the date(s) analyses were performed;
iv. the individual(s) who performed the analyses;
v. the analytical techniques or methods used;
vi. the results of such analyses; and
vii. all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation.

Part III.C.8.f. Reporting Requirements. The permittee shall submit, upon request by MDE, the information maintained in accordance with Part III.C.8 to the Compliance Program.

20. Part III.D: Corrective Actions

The title of this section (formally IV.B) has changed from “Prevention of the Discharge of Significant Amounts of Sediment” to “Corrective Actions”. This was to make it easier to find the section, which is cross referenced throughout the permit. The requirements were compared with the EPA CGP, and when conditions that related to high quality waters or other new permits, addressed with additional language from the EPA CGP. Most however remains the same as the 14-GP.

Part III.D: Conditions Triggering Corrective Action

Part III.D explains when an operator is expected to take corrective action. Part III.D (III.D.1.a – III.D.1.e) Permit Requirements

Part III.D.1 defines the conditions under which an operator must take corrective action at their site:

III.D.1.a. A stormwater control needs repair or replacement (beyond routine maintenance required under Part III.A.1.d); or

III.D.1.b. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or

III.D.1.c. The operator's discharges are causing an exceedance of applicable water quality standards; or

III.D.1.d. A prohibited discharge has occurred (see Part I.D) ; or

III.D.1.e. There are indications of significant amounts of sediment discharging such as:

i. Earth slides or mud flows;
ii. Concentrated flows of stormwater such as rills, rivulets or channels that cause erosion when such flows are not filtered, settled or otherwise treated to remove sediment;
iii. Turbid flows of stormwater that are not filtered, settled or otherwise treated to reduce turbidity;
iv. Deposits of sediment at the construction site in areas that drain to unprotected stormwater inlets or catch basins that discharge directly to surface waters;
v. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity;
vi. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity; or
vii. Discharges from the construction site to municipal conveyances, curbs and gutters, or streams running through or along the site where visual observations show that the discharges differ from ambient conditions in terms of turbidity so as to indicate significant amounts of sediment present in them.

The conditions in III.D.1.e that require corrective action are substantively similar to and consistent with those from Part IV.B of the 14-GP. The others (a-d) are from EPA's CGP and are consistent with Corrective Actions in other General Permits issued by the Department. This includes the recently added EPA triggering condition for corrective action if a stormwater control needs repair or replacement (Part III.D.1.a).

Part III.D.2: Corrective Action Deadlines

Part III.D.2 These deadlines remain the same as in the previous permit (Part IV.B.2 combined with Part
IV.B.3 with the addition of SWPPP documents to be reviewed). It establishes deadlines for initiating and completing work to correct the conditions identified at the site in accordance with Part III.D.1. Corrective action is distinguished from routine maintenance of stormwater controls and pollution prevention measures required in Parts III.A.1.d and III.A.3.

Part III.D.2 Permit Requirements

Language from Part III.B.2 “the permittee must undertake the following actions and record the dates and results of these actions in an onsite logbook”.

a. Within one day the permittee shall inspect erosion and sediment control practices to verify compliance with its approved Plans. Any deficiencies, including, but not limited to, failure to follow the approved sequence of construction, failure to maintain approved buffers, grading beyond the limit of disturbance, or any approved sediment and erosion controls found to be missing, improperly installed or in need of maintenance must be corrected immediately and may be considered to be a violation of this permit until such time that they are corrected.

b. If the site is found to be in compliance with its approved Plans, the permittee shall, by the next business day, contact the Compliance Program of the Water and Science Administration in MDE, the enforcement authority for the site (if it is not MDE), and the appropriate approval authority for Erosion and Sediment Control and inform the authorities about the conditions observed during the inspection cited above. In addition to any requirements imposed by the delegated enforcement authority or MDE, the permittee shall, after notifying the enforcement authority, implement any of the following that are determined to be appropriate towards the prevention of further triggering events:

i. Any change that may be approved in the field by the inspector for the enforcement authority for the site;
ii. Modifications to the Plans allowed as field modifications by the approval authority;
iii. Performing temporary or permanent seeding of disturbed areas more frequently than required by the approved Plan or regulation; or
iv. Increasing buffer distances.

The permittee shall implement any changes needed based on the above review within four days after the triggering event is observed.

”Language from (Part IV.B.3 with the addition of SWPPP documents to be reviewed) “If additional triggering events are observed, the permittee shall, through its site engineer, determine if the Erosion and Sediment Control Plan and Stormwater Management Plan are adequate, if an update to a SWPPP is required or whether additional on-site practices or plan modifications are required. Within three days of the second observation of a triggering event, the permittee shall contact the Compliance Program of the Water and Science Administration in MDE, the enforcement authority for the site (if it is not MDE), and the approval authority for the Plans and advise them that:

a. The permittee observed a triggering event;
b. The event happened despite the fact that erosion and sediment controls were properly installed and maintained; and
c. The permittee is reviewing plans and will afford the approval authority the opportunity to concurrently review them.

The permittee’s review of plans shall begin within three days of the triggering event. The permittee must submit revised plans to the approval authority no later than 14 days after the second observation of a triggering event. The permittee must obtain approval of the revised

Plans from the approval authority and begin implementation of the changes immediately upon approval."

Part III.D.3: Corrective Action Report

The 14-GP had a section labeled "Part IV.B.3 Corrective Action Required and Corrective Action Report", however had no corrective action report requirements. That section was combined with the III.D.2: Corrective Action Deadlines, since the language was actually made up of various actions with deadlines. The section now contains only requirements for a Corrective Action Report. Since these were not included in the previous permit, these are new requirements for proper documentation of all corrective actions that must be taken under this part of the permit (as identified by the EPA CGP).

Part III.D.3 Permit Requirements

Part III.D.3 requires that operators complete a corrective action report for each corrective action taken in accordance with this part of the permit.

This requirement is similar to the EPA CGP.

Part III.D.3.a requires the operator to immediately record some basic information with respect to the initial finding of the triggering condition.

Part III.D.3.a Permit Requirements

Within 24 hours of identifying the corrective action condition, the operator must document the specific condition and the date and time it was identified.

Part III.D.3.b requires the operator to document the completion of corrective actions that were identified in Part III.D.2.

Part III.D.3.b Permit Requirements

Within 24 hours of completing the corrective action (in accordance with the deadlines in Part III.D.2), the operator must document the actions taken to address the condition, including whether any SWPPP modifications are required.

Part III.D.3.c establishes requirements for accountable documentation of compliance with the corrective action requirements in this permit. Part II.A.8 provides signature requirements for reports.

Part III.D.3.c Permit Requirements

Each corrective action report must be signed in accordance with Part II.A.7 of this permit. The requirement in III.D.3.d is intended to ensure that the Department officials have immediate access to such records during an on-site inspection.

Part III.D.3.d Permit Requirements

The operator must keep a copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by the Department.

The requirement in Part III.D.3.e to retain all reports a minimum of 3 years comes from the standard permit condition requirements at 40 CFR 122.41(j)(2).

Part III.D.3.e Permit Requirements

The operator must keep all corrective action reports completed for this Part for at least three (3) years from the date that permit coverage expires or is terminated.

21. Part III.E: Staff Training Requirements

The staff training requirements in Part III.E are to ensure that each member of the stormwater team understands the requirements of the permit and his or her particular responsibilities relating to complying with those requirements. This section has been expanded to address situations where a SWPPP is now implemented. The 14-GP stated very succinctly Part III.D "The permittee must ensure that responsible personnel holding a valid certificate of attendance at training program in accordance with Environment Article § 4-104 are on site as required by the approved Erosion and Sediment Control Plan. The permittee must ensure that all site personnel are trained to understand aspects of permit and plan compliance relevant to their specific duties, including but not limited to BMP installation/maintenance and preventing and reporting spills and damaged BMPs." So the 14-GP was specific to the E&SC plan. The 20-CP contains requirements for the staff training, and includes which staff need training, and that they need access to documentation. This addition is consistent with the EPA CGP, which also deals with training for SWPPP related activities.

Part III.E Permit Requirements

Part III.E requires the operator, or group of multiple operators, to assemble a "stormwater team" to carry out compliance activities associated with the requirements in the permit. The requirements to conduct training prior to commencing construction activities will not apply to emergency-related construction activities that are eligible for permit coverage under Part II; however, for such activities, training must be conducted prior to NOI submission.

III.E.1 Prior to the commencement of construction activities, the operator must ensure that the following members of the stormwater team receive training to ensure that they understand the permit requirements and their specific responsibilities with respect to those requirements:

a. Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls);

b. Personnel responsible for the application and storage of treatment chemicals (if applicable);

c. Personnel who are responsible for conducting inspections as required in Part 4.1; and

d. Personnel who are responsible for taking corrective actions as required in Part 5.

Part III.E.2 specifies that the operator is ultimately responsible for ensuring that all activities on the site comply with the requirements of the permit. The operator is not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

Part III.E.3 specifies that the content and extent of training must be tailored to match the stormwater team member's duties and responsibilities related to the permit's requirements. At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g.,
only personnel responsible for conducting inspections need to understand how to conduct inspections):

a. The permit deadlines associated with installation, maintenance, and removal of stormwater controls and with stabilization;

b. The location of all stormwater controls on the site required by this permit and how they are to be maintained;

c. The proper procedures to follow with respect to the permit's pollution prevention requirements; and

d. When and how to conduct inspections, record applicable findings, and take corrective actions.

III.E.4 Each member of the stormwater team must have easy access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the operator's SWPPP, and other relevant documents or information that must be kept with the SWPPP.

Part III.E also specifies the minimum understanding that applicable members of the stormwater team should have with respect to the pertinent aspects of permit compliance. All of the above listed areas that must be understood by stormwater team members relate to specific permit provisions in the 20- CP.

If the person requiring training is a new employee who starts after commencement of construction activities, the operator must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit. New training may not be necessary for some employees if the operator is able to ensure that the employee, due to prior training, already understands the applicable topic area.

The Department also notes that for emergency-related projects, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply. Because immediate authorization is available for these projects, given the urgency of the timing associated with such projects, it is the Department's judgment that it is appropriate to provide greater flexibility in the initial weeks of construction. However, the permit requires that upon submittal of the NOI, personnel be trained in accordance with this section.

22. Part III.F: Stormwater Pollution Prevention Plan (SWPPP)

This entire section is new to the State's General Permit. The State has a long standing process and regulatory framework for creation of E&SC plans which only address sediment and nutrient pollution; however, this new requirement is meant to address other potential pollutants often found at construction sites that are not addressed under that framework.

Part III.F describes the requirements for developing and maintaining a SWPPP. It follows the EPA CGP general structure of what to include in the SWPPP, when the permittee is required to create one. Using this established framework will allow the State to make use of Templates developed by EPA, to use Guides provided by EPA, and MDE is being substantively similar to other states that use the EPA CGP as a model permit. For those permittees that do business in other States, it provides an understandable framework, and for those in the State, it provides a proven basis. Furthermore, the SWPPP requirement is only applicable to certain conditions, which are: a. Use Chemical Additives for Sediment Control, b. Have potential for any of the non-stormwater discharges prohibited above (whether the site is known to be contaminated by PCBs, PFAS, mercury, lead, or other metals, or any other source of toxic industrial pollution) c. Have activities requiring the pollution prevention measures referenced in Part III.A.3, or d. Are sharing liability between and among operators on the same site.

Part III.F.1: General Requirements

Part III.F.1 establishes the overall requirement that operators develop SWPPPs prior to submitting their NOIs, when they are required to have a SWPPP (a. Use Chemical Additives for Sediment Control, b. Have potential for any of the non-stormwater discharges prohibited above (whether the site is known to be contaminated by PCBs, PFAS, mercury, lead, or other metals, or any other source of toxic industrial pollution) c. Have activities referenced in Part III.A.3,or d. Are sharing liability between and among operators on the same site.). The SWPPP must be in place prior to discharging so that the appropriate erosion and sediment controls are selected and to ensure that the eligibility and other requirements under the permit will be met.

Part III.F.1 Permit Requirements

The SWPPP is intended to serve as a road map for how the construction operator will comply with the effluent limits and other conditions of this permit. The language in this Part "The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts III.A and III.B." clarifies that the SWPPP does not establish the effluent limits that apply to the construction site's discharges; these limits are established in the permit. This is consistent with the EPA, when they emphasize that while the requirement to develop a SWPPP, to keep it updated, and to include in it all of the required minimum contents consistent with Part III.F.2 are enforceable permit requirements, the site-specific details of these SWPPPs do not establish separately enforceable limits, terms, or conditions of the permit. The fact that the SWPPP is an external tool and not considered to include effluent limits enables the operator to be able to modify and retool its approach during the course of the permit term in order to continually improve how it complies with the permit.

The new language in this Part also provides that where there are multiple operators associated

with the same site, they may develop a group SWPPP instead of multiple individual SWPPPs. For instance, if both the owner and the general contractor of the construction site meet the definition of an operator and must obtain NPDES permit coverage, either party could develop a group SWPPP that applies to both parties, as long as the SWPPP addresses both parties' permit-related functions. Another example is where there are multiple operators associated with the same site through a common plan of development or sale (such as a housing development) at which a shared control exists. In this scenario, the operators may develop a group SWPPP instead of multiple individual SWPPPs, and divide amongst themselves various permit-related functions provided that each SWPPP, or a group SWPPP, documents which operator will perform each permit-related function, including those related to the installation and maintenance of the shared control. Regardless of whether there is a group SWPPP or multiple individual SWPPPs, all operators are legally responsible for compliance with the permit. In other words, if Operator A relies on Operator B to satisfy its permit obligations, Operator A does not have to duplicate those permit-related functions if Operator B is implementing them for both operators to be in compliance with the permit. However, Operator A remains responsible for permit compliance if Operator B fails to implement any measures necessary for Operator A to comply with the permit.

In addition, all operators must ensure, either directly or through coordination with other operators, that their activities do not compromise any other operators' controls and/or any shared controls.

Part III.F.2: SWPPP Contents

Part III.F.2 includes the minimum requirements that must be included in the SWPPP, as follows.

Part III.F.2.a: All Site Operators

Part III.F.2.a provides information about other operators engaged in activities covered under the permit. Part III.F.2.a Permit Requirements
Part III.F.2.a requires that the SWPPP contain a list of all other operators who will be engaged in construction activities at the site, and the areas of the site over which each operator has control. For construction sites with only one operator, this provision does not apply.

Part III.F.2.b: Stormwater Team

The requirement in Part III.F.2.b to provide information about the Stormwater Team in the SWPPP provides assurance that specific staff members are identified as responsible for overseeing the development of the SWPPP and are responsible for ensuring compliance with the permit requirements. Identification of staff members on the stormwater team in the SWPPP provides notice and clarification to facility staff and management (e.g., those responsible for signing and certifying the plan) of the
responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

Part III.F.2.b Permit Requirements

Part III.F.2.b requires the operator to identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities, including which members are responsible for conducting inspections. This requirement is also a logical extension of the need for the operator to designate personnel (whether or not they are members of the operator's staff or a subcontractor's) that are assigned the responsibility of carrying out the permit's requirements related to preparing the SWPPP, installing and maintaining stormwater control measures, conducting inspections, taking samples (if required), and implementing corrective actions.

Part III.F.2.c: Nature of Construction Activities

The provision in Part III.F.2.c requiring a description of the nature of the construction activities taking place on the construction site provides general information about the construction project, which can be readily understood by an MDE inspector or other third party who may be unfamiliar with the purpose and general layout of the projects.

Part III.F.2.c Permit Requirements

Part III.F.2.c requires that the SWPPP describe the nature of the construction activities, including:

i. A description of the nature of your construction activities, including the age or dates of past renovations for structures that are undergoing demolition;
ii. The size of the property (in acres or length in miles if a linear construction site);
iii. The total area expected to be disturbed by the construction activities (to the nearest quarter acre or nearest quarter mile if a linear construction site);
iv. A description of any on-site and off-site construction support activity areas covered by this permit (see Part I.C.1.c);
v. The maximum area expected to be disturbed at any one time, including on-site and off-site construction support activity areas;
vi. A description and projected schedule for the following:
    - Commencement of construction activities in each portion of the site, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
    - Temporary or permanent cessation of construction activities in each portion of the site;
    - Temporary or final stabilization of exposed areas for each portion of the site; and
    - Removal of temporary stormwater controls and construction equipment or vehicles, and the cessation of construction-related pollutant-generating activities.
vii. A list and description of all pollutant-generating activities (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations) on the site. For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels) associated with that activity, which could be discharged in stormwater from your

construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction;

viii. Business days and hours for the project;

ix. If you are conducting construction activities in response to a public emergency (see Part I.F.1), a description of the cause of the public emergency (e.g., mud slides, earthquake, extreme flooding conditions, widespread disruption in essential public services), information substantiating its occurrence (e.g., state disaster declaration or similar state or local declaration), and a description of the construction necessary to reestablish affected public services.

Operators must describe the "age and/or dates of past renovation for structures that are undergoing demolition" to document any relevant information related to the provision in Part III.B.3 on implementing pollution prevention controls to minimize the exposure of polychlorinated biphenyl-(PCB) containing building materials for demolition of any structure built or renovated before January 1, 1980.

Identification of the size of the property, total area expected to be disturbed by construction activities, description of construction support activities, and the area expected to be disturbed provides the operator, among other things, with information about properly designing and installing stormwater control measures to minimize the discharge of pollutants, as well as information about the placement and type of stabilization practices that should be implemented to minimize the discharge of pollutants in stormwater.

This Part also requires the schedule for activities such as commencement of construction, temporary or permanent cessation of construction, temporary or final stabilization, and removal of controls.
Operators include a site phasing plan as part of the schedule for activities. The purpose of requiring documentation of the sequencing of construction activities is to assist operators with planning their construction activity sequencing in conjunction with the control measures they intend to use to meet the effluent limitations in this permit. Proper construction site planning limits the amount of land disturbed at one time and limits the exposure of unprotected soils through rapid stabilization, which in turn reduces the amount of sediment that gets discharged from the construction site. This requirement provides operators a better understanding of the site runoff characteristics throughout all phases of construction activity, which will help them to plan for the types of stormwater control measures necessary to meet effluent limitations. It is the Department's judgment that documenting this schedule of activities will help operators to minimize earth disturbances to the extent necessary for the construction activity, which will also minimize pollutants discharged in stormwater. If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant to "lock in" the operator to meeting these dates. When departures from initial projections are necessary, this should be documented in the SWPPP itself, or in associated records, as appropriate.

The Department also clarifies that in the description of each pollutant-generating activity,

operators must list any known hazardous or toxic substances, such as PCBs and asbestos, which will be disturbed or removed during construction. Operators must also document the business days and hours for the project so that Department, or any authorized representative, can be informed of normal operating hours in the instance of an inspection.

Part III.F.2.d: Site Map

Part III.F.2.d requires that the SWPPP contain a legible site map, or series of maps. It is possible to use a Map from the approved E&SC, and include written information over it. The requirements in Part III.F.2.d.i and III.F.2.d.ii provide a visual depiction of where construction activities are occurring in relation to the boundaries of the property.

Part III.F.2.d.i - ii Permit Requirements for the site map include:

i. Boundaries of the property. The map(s) in the SWPPP must show the overall boundaries of the property.

ii. Locations where construction activities will occur. The map(s) in the SWPPP must show the locations where construction activities will occur, including:

- Locations where earth-disturbing activities will occur (note any phasing), including any demolition activities;
- Approximate slopes before and after major grading activities (note any steep slopes (as defined in Appendix A));
- Locations where sediment, soil, or other construction materials will be stockpiled;
- Any Waters of This State crossings;
- Designated points where vehicles will exit onto paved roads;
- Locations of structures and other impervious surfaces upon completion of construction; and
- Locations of on-site and off-site construction support activity areas covered by the permit (see Part I.C.1.c).

Consistent with EPA, the Department includes the areas of demolition activities on the site map.

The requirement in Part III.F.2.d.iii compels operators to develop an understanding of the location of any waters flowing through or near the property where the construction will take place.

Part III.F.2.d.iii Permit Requirements

iii. Locations of all Waters of This State within and one mile downstream of the site's discharge point. Also identify if any are listed as impaired, or are identified as a Tier II water.

Requiring a visual showing these waters will provide operators with information necessary to comply with the requirements for impaired waters (Parts III.B.1), and Tier II protected waters (Part III.B.2). Identifying the location of these waters on the site map will also help operators comply with the Erosion and Sediment Control requirements (Part III.A.2),

particularly those related to buffers (Part III.A.2.a), and Pollution Prevention Standards (Part III.A.3).

Part III.F.2.d.iv requires documentation on the site map of areas of threatened or endangered species critical habitat. This requirement is consistent with Part III.B.3 from the 14-GP.

The requirement in Part III.F.2.d.v to map pre-construction cover on the site will assist operators in understanding how stormwater moves onto, through, and from the property prior to construction, and how any changes in this cover due to construction activities may affect the flow of stormwater.

The requirement in III.F.2.d.vi to map the flow of stormwater on the site will provide valuable information to assist with planning, designing, and installing the appropriate stormwater control measures necessary to meet the permit's requirements regarding erosion and sediment controls,
pollution prevention, and stabilization. Specifically it will also assist the operator with complying with the requirements in Part III.A.2.g to "Direct stormwater to vegetated areas."

The requirements in Part III.F.2.d.vii informs the operator and, for the Department's purposes, documents where both non-stormwater and stormwater discharges will occur.

There are multiple uses for the information required in Part III.F.2.d.vii, among which include: (1) learning where sewer inlet protections will need to be installed prior to commencing construction disturbances; and (2) helping to plan stormwater controls that will reduce the erosive force of the discharge. The permit notes that the requirement to show storm drain inlets in the immediate vicinity of the site only applies to those inlets that are easily identifiable from the site or from a publicly accessible area immediately adjacent to the site.

The requirement in Part III.F.2.d.viii to identify the locations of all pollutant-generating activities on the site map will provide operators with an understanding of how the location of their various pollutant- generating activities will correspond to the areas of disturbance at the site, the potential impacts of where these activities are located on the discharge pollutants, and the ideal locations for stormwater control measures to reduce or eliminate such discharges. This information will be used to comply with the pollution prevention requirements in Part III.A.3.

The requirement in Part III.F.2.d.ix to show on the site map the location of stormwater control measures is intended to provide a spatial correlation between pollutant sources on the site, the flow of stormwater through and from the site, and the location of Waters of This State. Locations of stormwater controls, including natural buffer areas and any shared controls utilized to comply with this permit. The permit requires identification on the site map of the location of stormwater control measures.

It is the Department's judgment that by requiring such information on the site map (or the

E&SC Plan drawing), the operator will be better able to locate stormwater control measures strategically so as to comply with the permit's requirements for erosion and sediment and pollution prevention in Parts III.A.2 and III.A.3. The requirement to show on the site map where areas of exposed soil will be stabilized, or have already been stabilized, provides operators with a visual aid that will help them to comply with the temporary and final stabilization requirements in Part III.A.2.f. The requirement to document natural buffer areas is included to help operators implement Part III.A.2.a to "Provide and maintain natural buffers."

The requirement in Part III.F.2.d.x to show where chemicals will be applied on the site, and where they will be stored, is included to help operators implement Part III.A.2.m (treatment chemicals) and Part III.A.3.c (storage, handling and disposal of building products, materials, and waste). This requirement encourages the operator to think strategically about where the chemicals are applied and stored to minimize the risk of accidental release.

Part III.F.2.e: Non-Stormwater Discharges

Part III.F.2.e requires operators to create a comprehensive list of all non-stormwater discharges expected to occur from the site. Documentation in the SWPPP of all non-stormwater discharges from the site provides operators with information that will help them to minimize non-stormwater associated pollutant discharges, and to ensure that only authorized non-stormwater discharges occur.

Part III.F.2.e Permit Requirements

Part III.F.2.e requires the SWPPP to identify all sources of allowable non-stormwater discharges listed in Part I.C.2.

Part III.F.2.f: Description of Stormwater Controls

Part III.F.2.f requires operators to include in the SWPPP a description of stormwater controls that will be implemented. Although this Part requires the SWPPP to include details on stormwater controls that will be implemented, departing from the individual design details on the site is not considered a permit violation.

Part III.F.2.g: Procedures for Inspection, Maintenance, and Corrective Action. Describe the procedures you will follow for maintaining your stormwater controls, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part III.A.1.d, Part III.C, and Part III.D of this permit. Also include:

i. The inspection schedule you will follow, which is based on whether your site is subject to Part III.C.2 or Part III.C.3, or whether your site qualifies for any of the reduced inspection frequencies in Part III.C.4;

ii. If you will be conducting inspections in accordance with the inspection schedule in Part III.C.a, or Part III.C.3, the location of the rain gauge or the address of the weather station you

will be using to obtain rainfall data; and

iii. Any maintenance or inspection checklists or other forms that will be used.

Part III.F.2.h: Staff Training. Include documentation that the required personnel were, or will be, trained in accordance with Part III.E.

Part III.F.2.i: Compliance with Other Requirements.

i. Threatened and Endangered Species Protection. Include documentation required in Part III.A.2.n supporting your eligibility with regard to the protection of threatened and endangered species and designated critical habitat.

ii. Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls. If you are using any of the following stormwater controls at your site, document any contact you have had with the Department for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR 144 -147. Such controls would generally be considered Class V UIC wells:

iii. Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

iv. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and

v. Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Part III.F.2.j: SWPPP Certification. You must sign and date your SWPPP in accordance with Part I.F.5.

Part III.F.2.k: Post-Authorization Additions to the SWPPP. Once you are authorized for coverage under this permit, you must include the following documents as part of your SWPPP:

iv. Any correspondence exchanged between you and the Department related to coverage under this permit;

v. A copy of the acknowledgment letter you receive from the Department assigning your NPDES ID (i.e., permit tracking number);

vi. A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

Part III.F.3: On-Site Availability of the SWPPP

Part III.F.3 instructs the operator on the requirements for retaining the SWPPP on-

site. Part III.F.3 Permit Requirements

The operator must keep a current copy of the SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by the Department, or local agency approving stormwater management plans; or the operator of a storm sewer system receiving discharges from the site.

The Department may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public but may not be withheld from EPA, USFWS, or NMFS. (Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.)

If an on-site location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of the operator's construction site.

Part III.F.3 requires operators to retain copies of their SWPPP on site, and to make the document available to EPA or the Services immediately upon request. If a member of the public wishes to have access to the non-CBI portions of the operator's SWPPP, they must first contact the Department. The Department may require that a copy be sent to the agency so that it can be provided to the requestor. The mechanism for providing the Department with a copy of the SWPPP is at the discretion of the operator (e.g., web-based, hard copy), though the Department strongly encourages that SWPPPs be provided electronically.

Part III.F.4: Required SWPPP Modifications

Part III.F.4.a: List of Conditions Requiring SWPPP Modification

Part III.F.4.a sets out the conditions requiring the SWPPP to be modified. Part III.F.4.a Permit Requirements
The operator must modify the SWPPP, including the site map(s), within seven (7) days of any of the following conditions:

i. Whenever new operators become active in construction activities on the site, or changes are made to the construction plans, stormwater controls, or other activities at the site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered under Part 5. The operator is not required to modify the SWPPP if the estimated dates in Part 7.2.3.f change during the course of construction;

ii. To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

iii. If inspections or investigations by the Department or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;

iv. Where the Department determines it is necessary to install and/or implement additional controls at the operator's site in order to meet the requirements of this permit, the following must be included in the SWPPP:

- i A copy of any correspondence describing such measures and requirements; and
- ii A description of the controls that will be used to meet such requirements.

v.To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls implemented at the site; and

vi. If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater controls is made, including use of a different treatment chemical, different dosage, or different area of application. The requirement in Part III.F.4.a to maintain a modified SWPPP under any of the conditions listed above provides assurance that the SWPPP will be updated to accurately reflect the conditions on the construction site. It is important that the SWPPP be accurate in terms of changes to construction plans, stormwater controls, changes in operational control, and other important changes on the site, so that the facility personnel have access to a SWPPP that is current, and so that inspectors are provided with accurate site information for compliance purposes.

Part III.F.4.b: SWPPP Modification Records

Part III.F.4.b requires the operator to maintain a record of all SWPPP

modifications. Part III.F.4.b Permit Requirements

The operator must maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part III.F.2.j) and a brief summary of all changes.

The requirement to maintain a record of all SWPPP modifications is to ensure that a record of all of the changes to the SWPPP is kept. Keeping a record of such changes will help facility personnel to stay current with the changes that have been made to the SWPPP, and will allow inspectors to determine if appropriate modifications were made to the SWPPP under the required circumstances.

Part III.F.4.c: Certification Requirements

Part III.F.4.c establishes the certification requirement for SWPPP modifications, as follows: Part III.F.4.3 Permit Requirements
All modifications made to the SWPPP consistent with Part III.F.4 must be authorized by a person identified in Part I.F.5.

The requirement that the SWPPP and all modifications be authorized by a person identified in Part I.F.5 is consistent with standard NPDES permit conditions described in 40 CFR 122.22 and is intended to ensure that the operator certifies any SWPPP modifications.

Part III.F.4.d: Required Notice to Other Operators

Part III.F.4.d specifies the notice requirement for other operators when the SWPPP is modified. Part III.F.4.d Permit Requirements Part III.F.4.d requires operators, upon determining that a modification of the SWPPP is required, if there are multiple operators covered under the permit, to immediately notify any operators who may be impacted by the change to the SWPPP.

The requirement in Part III.F.4.d ensures that any other operators covered under the permit are kept up to date on the SWPPP so that they can comply with the modifications to the pollution prevention plan.

23. Part VI Standard Permit Conditions

The standard permit conditions are included in Maryland's General permits as required by 40 CFR122.41. The conditions include:

A. Duty to Comply
B. Duty to Reapply (found in Part I)
C. Property Rights.
D. Water Construction and Obstruction
E. Right of Entry
F. Duty to Provide Information.
G. Availability of Reports
H. Submitting Additional or Corrected Information
I. Removed Substances
J. Toxic Pollutants
K. Oil and Hazardous Substances Prohibited
L. Proper Operation and Maintenance.
M. Bypass
N. Upset
O. Need to Halt or Reduce Activity Not a Defense.
P. Duty to Mitigate
Q. Permit Actions.
R. Severability.
S. Reopener Clause for Permits
T. Civil and Criminal Liability
U. Action on Violations
V. Civil Penalties for Violations of Permit Conditions.
W. Criminal Penalties for Violations of Permit Conditions.
X. Administrative Penalties for Violations of Permit Conditions.

24. Part V. AUTHORITY TO ISSUE GENERAL NPDES PERMITS

This part confirms Maryland's authority to issue General Permits and is where the Director signs the permit. On September 5, 1974, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of an NPDES permit program for discharges into navigable waters under Section 402 of the federal Clean Water Act, 33 U.S.C. Section 1342. On May 15, 1989, EPA and Maryland entered into a superseding Memorandum of Agreement for such discharges. On September 30, 1990, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of a general permit program. Under the authorizations described above, this general discharge permit serves as both a State

of Maryland general discharge permit and an NPDES general discharge permit.

25. Appendix A – Definitions

Definitions were chosen from either federal and/or state Regulations, the EPA CGP or the previous permit (14-GP) for reference by those regulated by this permit.

26. Appendix B – Stream Protection Zones

The appendix uses the EPA CGP as a basis for defining the extent of a buffer (or Stream Protection Zone). The available options when work is performed with this Stream Protection Zone are derived from the 2011 Handbook. These options and this appendix are not meant to replace the Handbook, but to help clarify the rationale behind the selection of the options. Reference Page 34 (A-4) for the specific options that were included in this Appendix.

27. Appendix C – Antidegradation Checklist

The checklist was developed by selecting all elements in the permit related to Tier II, and including them in a fashion that provides the permittee flexibility to describe the rationale for their selected options. Certain options must be selected, such as the inspection frequency or stabilization rate. Other options have to do with whether the buffer was impacted, and if it was which of the options were chosen. In this way, the permittee can call attention to the features on the approved E&SC plan, and provide documentation for those interested in the project.

STANDARD INSPECTION FORM FOR MARYLAND DEPARTMENT OF THE ENVIRONMENT GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

General Information			
Project Name			
Permittee			
Permit Number		**Date of Inspection**	
Start Time		**End Time**	
Inspector's Name(s)			
Responsible Personnel Certification # (required under Part IV.C.1)			
Inspector's Contact Information			
Date Earth Disturbance Began			
Describe present phase of construction	☐ Clearing/Grubbing ☐ Rough Grading ☐ Infrastructure ☐ Demolition ☐ Building Construction ☐ Final Grading ☐ Final Stabilization Notes:		
Type of Inspection (check all that apply): ☐ Weekly routine ☐ Pre-storm event ☐ During storm event ☐ Post-storm event ☐ Due to a discharge of significant amounts of sediment ☐ Monthly for stabilized areas; list phases/lots stabilized:			
Has there been a storm event since the last inspection? ☐ Yes ☐ No **If yes, provide:** Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			

Permit Coverage and Plans				
	Subject	**Status**	**Corrective Action Needed and Notes**	**Date Corrected**
1	Was an NOI submitted for all disturbed acres?	❑Yes ❑No		
2	Is the permittee listed above still in control of permitted activities at the site? (If no, submit a Transfer of Authorization form to MDE via ePermits)	❑Yes ❑No		
3	Do the approved plans reflect current site conditions?	❑Yes ❑No		
4	Are the approved E&S and SWM plans maintained at the site?	❑Yes ❑No		
5	Have the E&S or SWM plan approvals expired?	❑Yes ❑No		
5	Are the NOI, permit documents, and all inspection reports and enforcement actions on file at the site, and a notice of permit coverage posted?	❑Yes ❑No		
6	Is the site permanently stabilized, temporary erosion and sediment controls are removed or set to be removed, and stormwater discharges from construction activity are eliminated?	❑Yes ❑No		
7	If #6 is Yes, has a Notice of Termination been submitted to MDE?	❑Yes ❑No		

Permit Coverage and Plans				
	Subject	**Status**	**Corrective Action Needed and Notes**	**Date Corrected**
8	Are all discharges composed entirely of stormwater or as authorized by the permit?	❑Yes ❑No		
Discharge of significant amounts of sediment				
Subject		**Status**	**Notes**	
Is there evidence of the discharge of significant amounts of sediment to surface waters, or conveyance systems leading to surface waters?		❑Yes ❑No		
If "yes" is checked above, have all applicable notification requirements in Part IV.B of the General Permit been met?		❑Yes ❑No		
A discharge of significant amounts of sediment may be indicated by (but is not limited to) observations of the following. Note whether any are observed during this inspection:				
1	Earth slides or mud flows	❑Yes ❑No		
2	Concentrated flows of stormwater such as rills, rivulets or channels that cause erosion when such flows are not filtered, settled or otherwise treated to remove sediment	❑Yes ❑No		
3	Turbid flows of stormwater that are not filtered, settled or otherwise treated to reduce turbidity	❑Yes ❑No		
4	Deposits of sediment at the construction site in areas that drain to unprotected stormwater inlets or catch basins that discharge directly to surface waters	❑Yes ❑No		
5	Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity	❑Yes ❑No		
6	Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity	❑Yes ❑No		
7	Discharges from the construction site to municipal conveyances, curbs and gutters, or streams running through or along the site where visual observations show that the discharges differ from ambient conditions in terms of turbidity so as to indicate significant amounts of sediment present in them	❑Yes ❑No		

BMPs						
	BMP/activity (some recommended items to check included below)	**Installed/Implemented?**	**Maintenance Required?**	**Location**	**Corrective Action Needed and Notes (note any BMPs required by plans but not yet installed)**	**Date Correction Completed**
1	Temporary stabilization - in accordance with 26.17.01.07(B)(6)(f)	❑Yes ❑No	❑Yes ❑No			
2	Permanent stabilization - in accordance with 26.17.01.07(B)(6)(f)	❑Yes ❑No	❑Yes ❑No			
3	Stockpile protection - check for stabilization, silt fence or other controls	❑Yes ❑No ❑Not Used	❑Yes ❑No			
4	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No			
5	Silt fence - check for proper installation including toeing in, stakes and supports, gaps and tears, and sediment buildup	❑Yes ❑No ❑Not Used	❑Yes ❑No			
6	Check dams, dikes, and diversion ditches	❑Yes ❑No ❑Not Used	❑Yes ❑No			
7	Storm drain inlet protection - check for gaps, tears, sediment buildup	❑Yes ❑No ❑Not Used	❑Yes ❑No			
8	Construction entrance - check for trackout, soil buildup on entrance	❑Yes ❑No	❑Yes ❑No			

BMPs						
	BMP/activity (some recommended items to check included below)	**Installed/Implemented?**	**Maintenance Required?**	**Location**	**Corrective Action Needed and Notes (note any BMPs required by plans but not yet installed)**	**Date Correction Completed**
9	Sediment basins/traps - check for sediment buildup, erosion, proper outlet structures	❑Yes ❑No ❑Not Used	❑Yes ❑No			
10	Outfall protection - check for erosion, sediment	❑Yes ❑No ❑Not Used	❑Yes ❑No			
11	Is trash/litter from work areas contained to prevent discharge to surface waters?	❑Yes ❑No	❑Yes ❑No			
12	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No			
13	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No			
14	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No			
15	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No	❑Yes ❑No			
16	(Other)	❑Yes ❑No	❑Yes ❑No			