

October 30, 2020

Maryland Department of the Environment, Water and Science Administration Sediment, Stormwater, and Dam Safety Program 1800 Washington Boulevard, Suite 440, Baltimore, MD 21230-1708 Phone: 410-537-3543 FAX: 410-537-3553 Web Site: www.mde.maryland.gov

RE: NPDES/MS4 - Year 2 Progress Report for the Universities at Shady Grove

To whom it may concern:

This submission package contains the Year Two Annual Reporting documents, in accordance with the NPDES/MS4 General Permit requirements for the Universities at Shady Grove. This package also contains supplemental documents (Appendices A, B, C, E, F, G, H, I and J), which are referenced in Appendix D, Section I of the submission.

It should be noted that USG (a USM Regional Center) and IBBR (part of University of Maryland at College Park institute) share the campus jointly; however, there are separate NOI's for USG and IBBR. This Year Two progress report only covers the 34 acres that are managed by USG, as shown on Appendix A.

Feel free to contact me if there are any questions regarding this submission package.

Thank You,

Paul Jackson Jr. Planning Manager The Universities at Shady Grove



MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER AND SCIENCE ADMINISTRATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR DISCHARGES FROM STATE AND FEDERAL SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

GENERAL DISCHARGE PERMIT NO. 13-SF-5501 GENERAL NPDES NO. MDR055501

Final Determination:April 27, 2018Effective Date:October 31, 2018Expiration Date:October 30, 2023

This National Pollutant Discharge Elimination System (NPDES) general permit covers State and federal small municipal separate storm sewer systems (MS4s) in certain portions of the State of Maryland. MS4 owners and operators to be regulated under this general permit must submit a Notice of Intent (NOI) to MDE by October 31, 2018. An NOI serves as notification that the MS4 owner or operator intends to comply with the terms and conditions of this general permit.

APPENDIX D

State and Federal Small MS4 Progress Report

Maryland Department of the Environment (MDE)

National Pollutant Discharge Elimination System (NPDES) Small Municipal Separate Storm Sewer Systems (MS4) General Permit

This Progress Report is required for those State and federal agencies covered under General Discharge Permit No. 13-SF-5501. Progress Reports must be submitted to:

Maryland Department of the Environment, Water and Science Administration Sediment, Stormwater, and Dam Safety Program 1800 Washington Boulevard, Suite 440, Baltimore, MD 21230-1708 Phone: 410-537-3543 FAX: 410-537-3553 Web Site: <u>www.mde.maryland.gov</u>

Contact Information

Permittee Name:	Universities at Shady Grove, Univ System of MD
Responsible Personnel:	Ellen Herbst, USM Vice Chancellor for Adm & Fin
Mailing Address:	3300 Metzerott Road
	Adelphi, MD 20783-1690
Phone Number(s)	301-445-1923
Fmail address:	
	enerosi@usm.edu
Additional Contact(s):	Jane Briggs, USG Dir of Facilities & Planning
Mailing Address:	9636 Gudelsky Dr., Rockville MD 20850
ļ	
Phone Number(s):	(301) 738-6111
Email address:	Jbriggs1@umd.edu

Signature of Responsible Personnel

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name

Signature

Date

Reporting Period (State Fiscal Year):			
Due Date	e: 10/31/2020	Date of Submission:	10/30/2020
Type of Report Submitted:			
In	npervious Area Restorat	tion Progress Report (Annual): 🔽
Si	x Minimum Control Me	easures Progress (Years 2 and	4): 🔽

Both: 🗹

Permittee Information:

Renewal Permittee:

New Permittee: \Box

Compliance with Reporting Requirements

Part VI of the Small MS4 General Discharge Permit (No. 13-SF-5501) specifies the reporting information that must be submitted to MDE to demonstrate compliance with permit conditions. The specific information required in this MS4 Progress Report includes:

- 1. Annual: Progress toward compliance with impervious area restoration requirements in accordance with Part V of the general permit. All requested information and supporting documentation must be submitted as specified in Section I of the Progress Report.
- Years 2 and 4: Progress toward compliance with the six minimum control measures in accordance with Part IV of the general permit. All requested information and supporting documentation shall be reported as specified in Section II of the Progress Report. MDE may request more frequent reporting and/or a final report in year 5 if additional information is needed to demonstrate compliance with the permit.

Instructions for Completing Appendix D Reporting Forms

The reporting forms provided in Appendix D allow the user to electronically fill in answers to questions. Users may enter quantifiable information (e.g., number of outfalls inspected) in text boxes. When a more descriptive explanation is requested, the reporting forms will expand as the user types to allow as much information needed to fully answer the question. The permittee must indicate in the forms when attachments are included to provide sufficient information required in the MS4 Progress Report.

Section I: Impervious Area Restoration Reporting Form

Section 1. Impervious Area Restoration Reporting
--

1.	a. Was the impervious area baseline assessment submitted in year 1? Yes No
	b. If No, describe the status of completing the required information and provide a date at which all information required by MDE will be submitted:
2	c. Has the baseline been adjusted since the previous reporting year? ✓ Yes □ No Complete the information below based on the most meant data.
2.	Complete the information below based on the most recent data:
	Total impervious acres of area covered under this permit: 13.71
	Total impervious acres treated by stormwater water quality best management practices (BMPs):
	Total impervious acres treated by BMPs providing partial water quality treatment (multiply acres treated by percent of water quality provided): 6.34
	Total impervious acres treated by nonstructural practices (i.e., rooftop disconnections, non-rooftop disconnections, or vegetated swales):
	Total impervious acres untreated: 4.78
	Twenty percent of this total area (this is the restoration requirement):
	Verify that all impervious area draining to BMPs with missing inspection records is not considered treated. Describe how this information was incorporated into the overall analysis:
	There are no missing inspection records, however, maintenance and inspection records are being developed for the BMP's that were built in November 2019 and not included in last report.
3.	Has an Impervious Area Restoration Work Plan been developed and submitted to MDE in accordance with Part V.B, Table 1 of the permit or other format?
	Has MDE approved the work plan?

If the answer to either question is No, describe the status of submitting (or resubmitting) the work plan to MDE and provide a date at which all outstanding information will be available:

In USG's Year One Progress Report, data was submitted that detailed the amount of storm water treatment on USG's campus met MDE's requirements, thus it was USG's understanding that the 20% restoration requirement was not applicable. Since USG's Year One submission, multiple meetings and conversations were held between USG, MDE and MES, which resulted in the need for the baseline assessment and stormwater treatment calculations to be revised, in order to reflect a true restoration target goal. Per MDE's September 9, 2020 response (attached as "Appendix F") to USG's revised impervious acre baseline document, USG must clarify and provide additional information and confirmations to MDE for several action items noted on the document, which will then allow MDE to approve the impervious acre baseline and confirm the Restoration Target goal. Due to these revisions, the Restoration Work Plan and corresponding Restoration Schedule have not been finalized for this reporting period. In reviewing the action items on the document, USG's plan is to have the action items completed and submitted to MDE by the end of the first quarter of 2021. If approved by MDE, USG will provide an update and submit the Restoration Work Plan and Restoration Schedule in advance of the next reporting period.

Describe progress made toward restoration planning, design, and construction efforts and describe adaptive management strategies necessary to meet restoration requirements by the end of the permit term: These efforts will commence after confirmation of the Restoration Requirements.

4. Has a Restoration Schedule been completed and submitted to MDE in accordance with Part V.B, Table 2 of the permit?
 □ Yes ☑ No

In year 5, has a complete restoration schedule been submitted including a complete list of projects and implementation dates for all BMPs needed to meet the twenty percent restoration requirement? \Box Yes \Box No

Are the projected implementation years for completion of all BMPs no later than 2025? \bigtriangledown Yes \Box No

Describe actions planned to provide a complete list of projects in order to achieve compliance by the end of the permit term:

Section I: Impervious Area Restoration Reporting

	The current actions planned are to restore the BMP's that have been identified as failing and are detailed in " <u>Appendix C</u> ". Detail action plan will be provided once the Restoration Target goal has been confirmed by MDE.
	Describe the progress of restoration efforts (attach examples and photos of proposed or completed projects when available): Identification of failed BMP's is complete and the preliminary scope of work to restore has been drafted. Once the restoration goal is confirmed, the detailed restoration activities will be formalized and estimated. The funding source still needs to be identified prior to bidding and scheduling the restoration efforts.
5.	Has the BMP database been submitted to MDE in Microsoft Excel format in accordance with Appendix B, Tables B.1.a, b, and c?
	Is the database complete? ☑ Yes □ No
	If either answer is No, describe efforts underway to complete all data fields, and a date that MDE will receive the required information: The database is complete, however USG's plan is to submit As-Builts by the end of the second quarter of 2021 for the BMP's that do not have As-Builts. The Urban BMP Database is attached as " <u>Appendix B</u> ".
6.	Provide a summary of impervious area restoration activities planned for the next reporting cycle (attach additional information if necessary): Activity planned is to identify a funding source to restore the failed BMP's and once the restoration requirements are confirmed to develop a detail scope of work for estimating/bidding.
7.	Describe coordination efforts with other agencies regarding the implementation of impervious area restoration activities: IBBR (an institute of The University of Maryland at College Park) shares a portion of USG's campus; USG coordinates campus restoration activities and campus improvement discussions with IBBR.
8.	List the total cost of developing and implementing impervious area restoration program during the permit term: Through USG's work with Maryland Environmental Service (who has been contracted to assist with USG's MS4 efforts) total consulting services cost to date has been \$77,000. The five BMP's that have been flagged as being substandard and in need of repair is estimated at \$400k.

Section II: Minimum Control Measures Reporting Forms

MCM #1: Personnel Education and Outreach

Г

1.	Does the permittee maintain a process and phone number for the public and/or staff to report water quality complaints? Yes No Number of complaints received: 0 Describe the actions taken to address the complaints:
2.	Describe training to employees to reduce pollutants to the MS4: USG Facilities staff have received training from UMCP-ESSR in regards to environmental practices and spill prevention and response. Additional training items and material are being developed to refresh and update based on the recent campus expansion. Additional materials are expected to include slide show presentations, handouts and information posted on USG's website. USG plans on having training items developed and distributed by the end of the second quarter of 2021.
3.	Describe the target audience(s): The target audience is the campus constituents (students, faculty, visitors and staff) and the surrounding neighboring community.
4.	Are examples of educational/training materials attached with this report? \Box Yes \bowtie No
	Provide the number and type of educational materials distributed:
	Describe how the personnel education program is appropriate for the target audience(s): The education program will be developed to target the student/faculty/staff audience because they are the most invested in protecting the USG campus environment. Studies have shown that participation is greater and more receptive when received by people who are invested in their neighborhood and community.
5.	Describe how stormwater education materials were distributed to the public and/or staff (e.g., newsletters, website): This is still under development, but the plan is to post this information on USG's website, presentations at student orientations, and include in materials provided while onboarding faculty/staff.

MCM #1: Personnel Education and Outreach

- Describe how educational programs facilitated efforts to reduce pollutants in stormwater runoff: Under development.
- 7. Provide a summary of activities planned for the next reporting cycle: This is still under development, but the plan is to post this information on USG's website, presentations at student orientations, and include in materials provided while onboarding faculty/staff.

8. List the total cost of implementing this MCM over the permit term: The total cost will be undetermined until these measures have been implemented for one year.

MCM #2: Public or Personnel Involvement and Participation

1.	Describe how the public or personnel involvement and participation program is appropriate for the target audience(s): The public or personnel involvement and participation program will be appropriate for the target audience because the target audience is invested in the USG community. Studies have shown that participation is greater and more receptive when received by people who are invested in their neighborhood and community. USG typically holds an annual campus clean-up effort that involves staff, faculty, students and the neighboring IBBR institutions in celebration of earth day. This event typically has 30+ participants and collects hundreds of pounds of trash and debris. Due to the epidemic this year the event was not held but will be scheduled as soon as conditions permit.
2.	Quantify and report public and/or staff involvement and participation efforts as shown below where applicable.
	Number of participants at public and/or staff events:
	Quantity of trash and debris removed at clean up events:
	Number of employee volunteers participating in sponsored events:
	Number of trees planted:
	Length of stream cleaned (feet):
	Number of storm drains stenciled:
	Number of public notices published to facilitate public and/or staff participation:
	Number of public and/or staff meetings organized:
	Total number of attendees at all public and/or staff meetings:
	Describe the agenda, items discussed, and collaboration efforts with interested parties for public and/or staff meetings:

MCM #2: Public or Personnel Involvement and Participation

Describe how public and/or staff comments have been incorporated into the permittee's MS4 program, including water quality improvement projects to address impervious area restoration requirements:

Describe any additional events and activities if applicable:

3. Provide a summary of activities planned for the next reporting cycle:

USG Earth Day activities will resume as possible. The USG campus is primarily operating under hybrid class schedules with majority of classes being delivered remotely and the population on campus is very limited.

The USG Green committee has been sending informational emails highlighting the campus sustainability initiatives sand developing a green newsletter that will be able to include additional educational that can help promote environmental stewardship.

4. List the total cost of implementing this MCM for the permit term: The estimated total cost of completing this MCM for the permit term is \$3k.

MCM #3: Illicit Discharge Detection and Elimination (IDDE)

Does the permittee maintain a map of the MS4 owned or operated by the permittee, including stormwater conveyances, outfalls, stormwater best management practices (BMPs), and waters of the U.S. receiving stormwater discharges?
 ✓ Yes □ No

If Yes, attach the map to this report and provide a progress update on any features that are still being mapped. (If submitting a map would compromise the operational security of an agency, indicate that the map is available for MDE review on site.) If No, detail the current status of map development and provide an estimated date of submission to MDE:

The current stormwater map is attached as "<u>Appendix E</u>", however, it is in the process of being updated to help make the map easier to read.

Does the permittee have a policy, or other agency directive, that prohibits illicit discharges?
 Vec.
 No.

Yes No

If Yes, describe the policy utilized for enforcement by the permittee (alternatively, a link may be provided to the permittee's webpage where this information is available). If No, describe the permittee's plan, including approximate time frame, to establish a policy that prohibits illicit discharges into the storm sewer system: USG currently follows the guidance from UMCP ESSR for compliance. While the University of Maryland and USG do not have a specific ordinance relating to illicit discharge detection and elimination, Section VI of the UMD Policies grants authority to the Department of Environmental Safety, Sustainability and Risk (ESSR), which was formerly known as the Department of Environmental Safety, to ensure compliance with all environmental regulations. ESSR currently is working with USG to implement a site specific IDDE Plan. The draft IDDE plan is attached as "<u>Appendix J</u>" for MDE preliminary review and comment. Final plan is expected to be submitted to MDE for approval by December

2020.

Did the permittee submit to MDE standard operating procedures (SOPs) in accordance with Part IV.C of the permit?
 □ Yes ☑ No

If No, provide a proposed date that SOPs will be submitted to MDE. MDE may require more frequent reports for delays in program development: The SOPs have been developed and are included in the draft IDDE plan attached as **"Appendix H"** for preliminary review and comment.

MCM #3: Illicit Discharge Detection and Elimination (IDDE)

Did MDE approve the submitted SOPs? □ Yes I No

If No, describe the status of requested SOP revisions and approximate date of resubmission for MDE approval: The final IDDE plan, which includes the SOPs, is expected to be submitted to MDE for approval by December 2020.

4. Describe how the permittee prioritized screening locations in areas of high pollutant potential and identify the areas within which screenings were conducted during this reporting period: The Gudelsky Pond is being proposed as a priority area to be screened as it is deemed

	to be in an area where high pollutants can potentially occur.
5.	Answers to the following questions must reflect this two-year reporting period.
	How many outfalls were identified on the map?
	How many outfalls were required to be screened for dry weather flows to meet the minimum numeric requirement based on property size? 0
	How many outfalls were screened for dry weather flows?
	Per the permittee's SOP, how frequently were outfalls required to be screened?
	At what frequency were outfalls screened during the reporting period? How many dry weather flows were observed?
	If dry weather flows were observed, how many were determined to be illicit discharges?
	Describe the investigation process to track and eliminate each suspected illicit discharge and report the status of resolution:
6.	Describe maintenance or corrective actions undertaken during this reporting period to address erosion, debris buildup, sediment accumulation, or blockage problems: There were no corrective actions needed during this period.

MCM #3:	Illicit Discharge	Detection	and Elimination (IDDE)
		200000000		

- 7. Is the permittee maintaining all IDDE inspection records and are they available to MDE during site inspections?
 □ Yes I No
- 8. If spills, illicit discharges, and illegal dumping occurred during this reporting period, describe the corrective actions taken, including enforcement activities, and indicate the status of resolution:

No occurrences of these during this reporting period.

9. Attach to this report specific examples of educational materials distributed to the public and/or staff related to illicit discharge reporting, illegal dumping, and spill prevention. If these are not available, describe plans to develop public and/or staff education materials and submit examples with the next Progress Report: These are currently being developed and are expected to be completed within the next six months.

10. Specify the number of employees trained in illicit discharge detection and spill

prevention: 6

- Provide examples of training materials. If not available, describe plans to develop employee training and submit examples with the next Progress Report: These are currently being developed and are expected to be completed within the next six months.
- 12. List the cost of implementing this MCM during this permit term: The cost of implementing this MCM to date is \$17,691 for preparation of a Stormwater Pollution Prevention Plan, Illicit Discharge Detection and Elimination Plan and for preparation of an updated Spill Prevention, Control & Countermeasure Plan. The costs for the educational materials are currently unknown.

1.	Does the permittee have a process for receiving, investigating, and resolving complaints from interested parties related to construction activities and erosion and sediment control? ✓ Yes □ No
	Describe the process: Any stormwater complaints related to construction activities and sediment control are routed from USG's hotline through campus security to the Facilities Department. The Facilities Department investigates and resolves the complaint. It should be noted that aside from USG's recently completed Biomedical Science and Engineering Building, there is little to no construction on USG's campus.
	Provide a list of all complaints and a summary of actions taken to resolve them: There were no complaints during this reporting period.
2.	Total number of active construction projects within the reporting period:
	Provide a list of all construction projects and tabulate the total disturbed area: During this reporting period, construction was completed for USG's recently completed Biomedical Science and Engineering Building (BSE) in October 2019. The total disturbed area during the project is estimated at 60k sf.
3.	Total number of violation notices issued by MDE related to this MCM on the agency's property:
	Describe the status of enforcement activities:
	Describe how the permittee communicates and collaborates with MDE to maintain compliance with this MCM for all active construction projects on the agency's property: Construction documents are submitted to MDE for approval prior to start of construction. MDE performs random inspections during construction. Any amendments to the plans during construction are submitted and approved by MDE.
	Final inspection, certifications and as-built drawing are submitted to MDE.
	Are erosion and sediment control inspection records retained and available to MDE during field review of the agency MS4 program?
	If No, explain:

MCM #4: Construction Site Stormwater Runoff Control

4.	Number of staff trained in MDE's Responsible Personnel Certification:
5.	Describe the coordination with other entities regarding implementation of this MCM: Sediment control compliance was delegated to the Construction Manager. The University also employees onsite construction inspectors to oversee and inspect to make sure contractors are complying.
6.	List the total cost of implementing this MCM over the permit term: The cost of implementing this MCM was included in the CM contract and the earthwork subcontractor to install and maintain. Costs for this MCM cannot be determined.

MCM #5: Post Construction Stormwater Management

Г

1.	 Has an Urban BMP database been submitted in accordance with the database structure in Appendix B, Tables B.1.a, b, and c as a Microsoft Excel file? ✓ Yes □ No 								
	Describe the status of the database, efforts to complete all data fields, and provide a date as to when the required information will be submitted to MDE:								
2.	Total number of plans submitted to MDE for review and approval:								
	Total number of as-built plans submitted to MDE:								
	Number of submitted as-built plans approved by MDE:								
One of is for U BMP's plan is	f the action items from MDE's September 9, 2020 document (reference " <u>Appendix F</u> ") USG to submit As-Builts for BMP's that do not have them. Currently this amounts to 40 s which are referenced on the Urban BMP Database in " <u>Appendix B</u> ". USG's long term to have the As-Builts submitted to MDE by the end of the first quarter of 2021.								
3.	Total number of BMPs located on each property covered under the general permit (list individual property, and total BMPs for that property – provide separate attachment if necessary): There are 41 BMP's as referenced on " <u>Appendix B</u> ".								
	Does the permittee perform inspections for all structural BMPs in accordance with the Dam Inspection Checklist in Maryland Pond Code 378 at least once every three years? \overrightarrow{P} Yes \square No								
	If No, describe efforts to train staff and develop a program to perform these required inspections on a triennial basis:								
	Are BMP inspection records retained and available to MDE during field review of local programs? Ves Ves No								
4.	Provide a summary of routine maintenance activities for all BMPs: USG has included in our landscape contract requirements to inspect the BMPs monthly while services are being provided. USG has provided an inspection report template to contractor that lists the required fields to be filled out. USG requires the completed inspection reports to be submitted with the invoices in order to be paid.								

	Are BMP maintenance procedures consistent with maintenance requirements on MDE approved plans?
	Are completed BMP maintenance checklists available to MDE during field review of local programs? ☑ Yes □ No
	If either answer is No, describe planned actions to implement maintenance checklists and procedures and provide formal documentation of these activities:
	Describe all problems discovered during routine maintenance operations and repair work performed to restore the function of the BMP(s) (attach photos and additional documentation as needed): The majority of findings that require repair were loss in mulch depth and invasive weeds. Weeds are removed when observed. Mulch depth is adjusted during annual maintenance. An occasional washout may be observed that they will re-stabilize as needed.
5.	Number of staff trained in proper BMP design, performance, inspection, and routine maintenance: 1
6.	Provide a summary of activities planned for the next reporting cycle: Continue inspection and maintenance of the BMPs. Develop facility staff training activities to bring awareness to the importance of proper maintenance.
	A Stormwater Pollution Prevention Plan (SWPPP) is in final draft and is attached as <u>"Appendix I"</u> for MDE preliminary review. USG expects to submit final plan by December 2020.
7.	List the total cost of implementing this MCM over the permit term: The cost of implementing this MCM so far has been minimum since they are continuously maintained.

MCM #5: Post Construction Stormwater Management

1.	Provide a list of topics covered during the last training session related to pollution prevention and good housekeeping, and attach to this report specific examples of training materials: A comprehensive Pollution Prevention and Good Housekeeping training program is under development. USG plans to complete the development and implement the training schedule by the end of the first quarter of 2021.
	List all training dates within this two-year reporting period:
	Number of staff attended:
2.	Are the good housekeeping plan and inspection records at each property retained and available to MDE during field review of the local program? \Box Yes \bigtriangledown No
	If No, explain: The plan hasn't been fully developed, finalized and implemented yet.
	Provide details of all discharges, releases, leaks, or spills that occurred in the past reporting period using the following format (attach additional sheets if necessary).
	Property Name: Date:
	Describe observations:
	Describe permittee's response:
3.	Quantify and report property management efforts as shown below, where applicable (attach additional sheets if necessary).
	Number of miles swept:
	Amount of debris collected from sweeping (indicate units):
	If roads and streets are swept, describe the strategy the permittee has implemented to maximize efficiency and target high priority areas:
	Number of inlets cleaned:

Ment not i onution i revention und Good Housekeeping
Amount of debris collected from inlet cleaning (indicate units):
Describe how trash and hazardous waste materials are disposed of at permittee owned and operated property(ies), including debris collected from street sweeping and inlet cleaning: Trash is collected and placed in the campus compactor, single stream recycle material is collected and placed in designated dumpsters, and compostables are collected and placed in large trash containers. Containers are disposed based on usage via service
Hazardous waste is collected and stored in hazardous storage closet within the buildings. Collection is scheduled, performed, tracked and reported by UMCP-ESSR on behalf of USG.
Does the permittee have a current State of Maryland public agency permit to apply pesticides?
If No, explain (e.g., contractor applies pesticides): Contractor applies any pesticides if required.
Does the permittee employ at least one individual certified in pesticide application? \Box Yes \checkmark No
If Yes, list name(s):
If the permittee applied pesticides during the reporting year, describe good housekeeping methods (e.g., integrated pest management, alternative materials/techniques):
Grounds contractor is required to attempt, when reasonably possible, to resolve insect and disease concerns by removing insects, removing infested plant parts, and pruning prior to applying chemicals and to the maximum extent practical, they should use "environmentally friendly" pesticides and herbicides. Weeds are required to be controlled by hand and approved mechanical methods. Chemical treatments that are "environmentally friendly" are permitted as a last option when other methods prove ineffective or impractical. If used, pre-emergent and post-emergent herbicides are applied sparingly and discretely.
All chemical applications are required to conform to current county, state, and federal laws, utilizing EPA registered materials and application methods. Any spraying associated with insect or disease control utilizing high pressure or high volume sprayers shall be done between 11:00 p.m. and 8:00 am. Pesticide application with single nozzle low-pressure fan or cone jet nozzles shall be allowed during other times.

CD F 116 **D** 11

	MCM #6: Pollution Prevention and Good Housekeeping
	Chemical sensitive individuals will be contacted prior to all applications.
	USG also has an integrated pest management plan that was created as part of the LEED certification for the new BSE facility recently completed. USG uses an external contractor for routine pest management inspection and control within the facilities. USG does not apply pesticides unless a situation is observed. If required, contractor submits MSDS sheets and proposed application measures for review and approved prior to application.
	If the permittee applied fertilizer during the reporting year, describe good housekeeping methods (e.g., application methods, chemical storage, native or low maintenance species, training):
	responsibility.
	If the permittee applied materials for snow and ice control during the reporting year, describe good housekeeping methods (e.g., pre-treatment, truck calibration and storage, salt domes):
	USG subcontracts out snow removal and ice control. Subcontractor occasional may store salt bags under cover in one of the parking garages but primarily will bring the product with them during the snow event. USG policy and contract requires to treat ice with sand and either magnesium chloride or calcium chloride ice melt mixture. Sodium chloride is not permitted for use. Contractor assumes this responsibility for calibration of truck and hand spreaders.
	Describe good housekeeping BMP alternatives not listed above:
4.	If applicable, provide a status update for permittee owned or operated properties regarding coverage under the Maryland General Permit for Stormwater Discharges Associated with Industrial Activity or an individual industrial surface water discharge permit:
5. T	List the total cost of implementing this MCM over the permit term: he cost of implementing this MCM is currently unknown at this time. However, the cost

of magnesium or calcium chloride products applied is 3x the cost of sodium chloride products so depending on the amount and number of snow and ice events in a season this can become a substantial cost impact.



Appendix A

USG Site Map





Appendix **B**

Urban BMP Database

APPENDIX B: URBAN BMP DATABASE

Table B.1.a. BMP Reporting Requirements

This table represents the basic data elements that are required of all structural, ESD and alternative Best Management Practices (BMPs)														
BMP_ID ¹	REPORTING_YE AR	MD_NORTH ²	MD_EAST	PERMIT_NUM	LOCAL_BMP_ID	BMP_NAME	BMP_CLASS	BMP_TYPE	CON_PURP OSE	LAST_INSP_D ATE	BMP_ST ATUS	MAIN_D REINSP_D ATE ATE	REINSP_S TATUS	GEN_COMMENTS
USG19BMP00001	2019	158592.9121	382612.8465	5 13-SF 5501	08-SF-0247	Travilla Gateway Garage Baysaver	S	XOGS	REDE	6/27/2019	P			BaySaver, Pretreatment Credit Only
USG19BMP00002	2019	158507.8265	382664.1875	513-SF 5501	BMP00002	Building 2 Sand Filter	S	FSND	NEWD	1/11/2019	F			
USG19BMP00008	2019	158461.9453	382517.7791	1 13-SF 5501	03-SF-0279	Green Roof at Building 3	E	AGRE	REDE	6/27/2019	Р			No Design Plans
						5								BaySaver
							-				_			, Pretreatment Credit Only - Plans had 0.11 more DA
USG19BMP00009	2019	158401.7903	382528.9745) 13-SF_5501	03-SF-0279	Building 3 Baysaver	S	XOGS	REDE	6/27/2019	Р			
USG19BMP00010	2019	158280.7799	382623.8966	3 13-SF_5501	16-SF-0044	BSE ESD-8	E	MMBR	REDE		P			
USG19BMP00012	2019	158363.5978	382918.1225	13-SF_5501	BMP00012	Micro-Bioretention 4 at Shady Grove Garage	E	MMBR	NEWD	1/8/2019	Р			Filter media depth determined from overflow inlet inverts
USG19BMP00013	2019	158355 0224	382932 8523	3 13-SE 5501	BMP00013	Micro-Bioretention 5 at Shady Grove Garage	F	MMBR	NEWD	1/11/2019	Р			STD
	2010	100000.0221	002002.0020			Miller Blereterition out chady crove cardge				1/11/2010	•			Treatment filter depth assumed from Typical MDE Designs
USG19BMP00014	2019	158304.9582	382901.8775	5 13-SF_5501	BMP00014	Micro-Bioretention 3 at Shady Grove Garage	E	MMBR	NEWD	1/11/2019	Р			STD
USG19BMP00015	2019	158254.2953	382863.4784	4 13-SF_5501	BMP00015	Micro-Bioretention 2 at Shady Grove Garage	E	MMBR	NEWD	1/15/2019	Р			Filter media depth determined from overflow inlet inverts
USG19BMP00017	2019	158234.8149	382894.6457	/ 13-SF_5501	BMP00017	Micro-Bioretention 1 at Shady Grove Garage	E	MMBR	NEWD	1/15/2019	Р			Filter media depth determined from overflow inlet inverts
USG19BMP00018	2019	158202.0436	382770.0917	/ 13-SF_5501	BMP00018	Bioretention 9 at Parking Lot 1	S	FBIO	NEWD	1/11/2019	Р			
USG19BMP00019	2019	158187.7871	382811.4598	3 13-SF_5501	BMP00019	Bioretention 8 at Parking Lot 1	S	FBIO	NEWD	1/15/2019	F			Bio8 (ID#19)
USG19BMP00020	2019	158169.4363	382816.6197	/ 13-SF_5501	BMP00020	Bioretention 7 at Parking Lot 1	S	FBIO	NEWD	1/11/2019	F			Bio7 (ID#20)
USG19BMP00021	2019	158178.6135	382768.3286	3 13-SF_5501	BMP00021	Bioretention 5 at Parking Lot 1	S	FBIO	NEWD	1/11/2019	F			Bio5 (ID#21)
USG19BMP00022	2019	158160.5992	382768.5889	€ 13-SF_5501	BMP00022	Bioretention 6 at Parking Lot 1	S	FBIO	NEWD	1/11/2019	F			Bio6 (ID#22)
USG19BMP00023	2019	158197.4072	382735.0511	13-SF_5501	14-SF-0205	Micro-Bioretention 3 at New Campus Entry	E	MMBR	REDE	1/11/2019	Р			
USG19BMP00024	2019	158198.7169	382687.9331	13-SF_5501	14-SF-0205	Micro-Bioretention 2 at New Campus Entry	E	MMBR	REDE	1/11/2019	Р			
USG19BMP00025	2019	158184.006	382680.419	€ 13-SF_5501	14-SF-0205	Micro-Bioretention 1 at New Campus Entry	E	MMBR	REDE	1/11/2019	Р			
USG19BMP00026	2019	158139.3293	382595.6051	13-SF_5501	BMP00026	Gudelsky Pond	S	PWET	NEWD	1/8/2019	Р			Credit Sharing with Montgomery County, and UMD
USG19BMP00027	2019	158412.6877	382639.5859	€ 13-SF_5501	16-SF-0044	BSE ESD-13	E	MMBR	REDE		Р			
USG19BMP00028	2019	158284.4832	382564.1415	5 13-SF_5501	16-SF-0044	BSE ESD-9	E	MMBR	REDE		Р			
USG19BMP00029	2019	158303.3197	382552.9166	3 13-SF_5501	16-SF-0044	BSE ESD-10	E	MMBR	REDE		Р			
USG19BMP00030	2019	158296.731	382588.3088	3 13-SF_5501	16-SF-0044	BSE ESD-5	E	MMBR	REDE		Р			
USG19BMP00031	2019	158331.5408	382572.2397	/ 13-SF_5501	16-SF-0044	BSE ESD-3	E	MMBR	REDE		Р			
USG19BMP00032	2019	158383.8795	382580.817	/ 13-SF_5501	16-SF-0044	BSE Cistern #1	E	MRWH	REDE		Р			
USG19BMP00033	2019	158329.8029	382662.0177	/ 13-SF_5501	16-SF-0044	BSE Cistern #2	E	MRWH	REDE		Р			
USG19BMP00034	2019	158314.0939	382632.4654	4 13-SF_5501	16-SF-0044	BSE ESD-6	E	MMBR	REDE		Р			
USG19BMP00035	2019	158343.4201	382541.0596	3 13-SF_5501	16-SF-0044	BSE ESD-12	E	MMBR	REDE		Р			
USG19BMP00036	2019	158322.7846	382547.0566	3 13-SF_5501	16-SF-0044	BSE ESD-11	E	MMBR	REDE		Р			
USG19BMP00037	2019	158351.9782	382566.4497	/ 13-SF_5501	16-SF-0044	BSE ESD-2	E	MMBR	REDE		Р			
USG19BMP00038	2019	158371.75	382559.1536	i 13-SF_5501	16-SF-0044	BSE ESD-1	E	MMBR	REDE		Р			
USG19BMP00039	2019	158310.1113	382580.5892	2 13-SF_5501	16-SF-0044	BSE ESD-4	E	MMBR	REDE		Р			
USG19BMP00040	2019	158318.6979	382647.0605	ن 13-SF_5501	16-SF-0044	BSE ESD-7	E	MMBR	REDE		Р			
USG19BMP00041	2019	158365.5008	382660.5512	2 13-SF_5501	16-SF-0044	BSE ESD-14	E	MIBR	REDE		Р			
Note: The following	g template is based	d on recent MD F	hase II NPDES	data reporting r	requirements. Defi	nitions of each column and data elements can b	e found in the	three descript	ions sheets.					
Note: Several Exam	ple BMPs have be	en incorporated	to help display	/ the new struct	ure.	1	T	1	T	_				
¹ Every BMP Identified in this table should match BMP_ID data entered in either "Table B1.bESD.STRUCTURAL" sheet or "Table B.1.cAlternative" sheet														
² Northing and Fast	ing are geographic	points used to l	locate BMPs N	Aarvland require	es using State Plane	NAD 83 meters for geographic location. You ca	n use Geograph	hic Information	Systems (GIS	5) or other				
computer program	s to provide these	coordinates	State Divit 5, IV	iai yiana require		The company of geographic location. Tou ta	in use deograph							
	s to provide triese	coordinates.										1 1	1	J
Questions on Mary	land specific storm	nwater <u>design? F</u>	ollow the link	below.										
Link to Manuland's Stormwater Design Manual														



Appendix C

Restoration Activity Schedule

Phase II MS4 Restoration Activity Schedule										
	Tot	al Acreage (29.44); I	mpervious A	Acre Baselin	e (13.71); 20% Ro	estoration Targ	et (0.96 acres)			
Type of Restoration Project	BMP Code ¹	BMP ID (Optional)	Cost (\$K) ²	Imperv Acres Treated	Imperv Acre Target and Balance	Project Status ³	Year Complete or Projected Implementation Year (by 2025)	MD Grid Coordinates (Northing/Easting)		
Gudelsky Pond (over										
management nested	PWET	USG19BMP00026		0.29	0.67	С	2019	158139.33	382595.605	
redevelopment)										
BSE ESD-8	MMBR	USG19BMP00010		0.11	0.56	С	2019	158280.78	382623.897	
BSE ESD-13	MMBR	USG19BMP00027		0.02	0.54	С	2019	158412.69	382639.586	
BSE ESD-9	MMBR	USG19BMP00028		0.04	0.5	С	2019	158284.48	382564.141	
BSE ESD-10	MMBR	USG19BMP00029		0.03	0.47	С	2019	158303.32	382552.917	
BSE ESD-5	MMBR	USG19BMP00030		0.04	0.43	С	2019	158296.73	382588.309	
BSE ESD-3	MMBR	USG19BMP00031		0.04	0.39	С	2019	158331.54	382572.24	
BSE Cistern #1	MRWH	USG19BMP00032		0.22	0.17	С	2019	158383.88	382580.817	
BSE Cistern #2	MRWH	USG19BMP00033		0.04	0.13	C	2019	158329.8	382662.018	
BSE ESD-6	MMBR	USG19BMP00034		0.04	0.09	С	2019	158314.09	382632.465	
BSE ESD-12	MMBR	USG19BMP00035		0.02	0.07	С	2019	158343.42	382541.06	
BSE ESD-11	MMBR	USG19BMP00036		0.02	0.05	С	2019	158322.78	382547.057	
BSE ESD-2	MMBR	USG19BMP00037		0.04	0.01	С	2019	158351.98	382566.45	
BSE ESD-1	MMBR	USG19BMP00038		0.01	0.00	С	2019	158371.75	382559.154	
BSE ESD-4	MMBR	USG19BMP00039		0.04	-0.04	С	2019	158310.11	382580.589	
BSE ESD-7	MMBR	USG19BMP00040		0.06	-0.1	С	2019	158318.7	382647.06	
BSE ESD-14	MIBR	USG19BMP00041		0.02	-0.12	С	2019	158365.5	382660.551	
						ļ				
L										
L										

Enter Impervious Acreage Baseline	13.71
20% Impervious Acre Target Calulated	0.96



Appendix E

USG Stormwater Map





Maryland SERVICE 5500 LINE	The Universities at Shady Grove Stormwater Map	L 0 125 250 500 Feet
BMP Drainage Area	SWMFAC 🍪 Manhole 🕂 Head/Endwall M Contr X Outfall 🔹 Inlet 🗦 Culvert Pipe	ol Structure — Drain — - Ditch



Appendix F

MDE September 09, 2020 Follow Up Response to USG's revised impervious acre baseline document



Lany Hogan, Governor Boyd K. Rutherford, J. Governor

Ben Grumbles, Secretary Horeolo Tablada, Deputy Secretary

September 9, 2020

Ms. Ellen Herbst USM Vice Chancellor for Administration and Finance Universities at Shady Grove 3300 Metzeroft Road Adelphi, MD 20783

Dear Ms. Herbst:

The Maryland Department of the Environment, Water and Science Administration (Department) has completed a review of the Universities at Shady Grove's (USG) revised impervious acre baseline submitted under the National Pollutant Discharge Elimination System (NPDES) General Permit No. 13-SF-5501 for Discharges from State and Federal Small Municipal Separate Storm Sower Systems (MS4). The Department offers the following comments on USG's revised impervious acre baseline and restoration target:

Impervious Acre Baseline

- Impervious acres treated by best management practices (BMPs) built under new development regulations were deducted from the total impervious area on site (i.e., 13.7) acres). According to Table 1 data, the deduction totals 1 22 acres.
- USG stated that the remaining impervious area was considered treated by Gudelsky Pond with a
 rainfall depth treated (P_E) of 0.5 inch, but further noted that "impervious being treated by post 2006
 redevelopment or restoration projects was excluded from the Gudelsky Pond impervious since this
 treatment will be claimed as part of USG's restoration credit." USG reported that Gudelsky Pond
 treats 4 62 acres of the remaining 12.49 impervious acres. The Department requests verification that
 impervious acres draining to redevelopment BMPs were considered to have no existing treatment
 toward baseline credit (i.e., treatment from Gudelsky Pond is 0) so that this area could be considered
 restoration
- After deducting acres treated by new development BMPs and Godelsky Pond, USG's untreated impervious acre baseline is 7.87 acres and therefore, the restoration target is 1.57 acres.
- If the above assumption related to Gudelsky Pond is confirmed by USG, the Department approves the impervious acre haseline.

Restoration Progress

The impervious acres treated by redevelopment BMPs included in Table 1 total 3.26 acres, exceeding the restoration requirement. USG stated that these facilities are "eligible to be credited over 1" if additional storage is provided." Additional restoration credit may be available for redevelopment BMPs that have a P_E greater than 1 inch. However, the Department requires additional information to approve the reported acres. During redevelopment projects, half of the existing untreated impervious area is required to be treated or removed. Any net increase in impervious area is required to comply with new development regulations. Redevelopment projects often include BMPs designed to meet hoth redevelopment and new development requirements and therefore, cannot be assumed to provide over management when the P_E is greater than 1 inch. USG must review the design plans and determine if the BMPs were built exclusively to meet redevelopment requirements. The Department requirements information on the existing and proposed impervious acres for the project and the plan

Ms. Ellen Herbst. Page 2

approval number(s) used to submit the project to the Department's Plan Review Division (i.e., the SF number).

- The Department requests the number of impervious acres draining to the BMPs built to meet redevelopment requirements in Table 1 to verify that rainfall depth treated above 1 inch is credited at the reduced rate when applicable (e.g., 1 acre draining to a BMP with a P₂ of 1.4 would receive a credit of 1.1 acres of impervious area treated).
- The redevelopment BMPs that are credited toward restoration must be submitted in the Restoration. Activity Schedule using the Excel template with the next Progress Report.

Additional Comments

- BMPs built in November 2019 were assumed to be passing because of their recent built date. These
 BMPs will require maintenance inspections to confirm that they continue to function as designed.
 Inspection and maintenance information must be included in the BMP database to be annually
 updated and submitted.
- USG reported that all BMPs still need as-builts except for Gudelsky Pond, and the Pr values used were based on design plans. For BMPs that do not have as-builts submitted to the Department's Plan Review Division, USG must develop a long-term plan to complete this work and submit the plan with the next Progress Report.
- USG provided impervious acre baseline data for the Institute for Bioscience and Biotechnology Research (IBBR) property, which is covered under the University of Maryland, College Park's (UMD) Notice of Intent. Recalculations of the baseline can be submitted with UMD's 2020 Progress Report. However, the Department advises that the IBBR pond cannot receive any impervious acre treatment credit because it is not designed in accordance with Maryland's Stormwater Design Manual. This pond was built for aesthetic reasons and not for stormwater management. The baseline and restoration target must be revised to reflect a Pr of 0.

The Department recognizes the significant effort necessary to implement a stormwater program and commends USG for its continued progress. If you have any questions on this review, please contact me at Christina.Lyerly@Maryland.gov or 410-537-3546, or Deborah Cappuccitti at Deborah.Cappuccitti@Maryland.gov or 410-537-3533.

Sincerely,

Onite Zyer

Christina M. Uyetly 💭 Natural Resources Planner IV Water and Science Administration


Appendix G

USG's Plan to bring the failing BMP's into compliance by the end of the permit term



The Universities at Shady Grove commissioned Maryland Environmental Service (MES) to perform a full assessment of the storm drain and stormwater infrastructure on USG's campus. As part of MES' findings, seven BMP's on campus are in need of repair; four are bioretention ponds, two are infiltration trenches and one is a sand filter. The repairs needed to bring these facilities up to current standards are elaborate and quite extensive. Due to the needed repairs, the unexpected costs and budget constraints, USG expects this to be an ongoing, phased process and will address the most egregious of the failing BMP's first. Listed below is USG's priority list for making the repairs to the failing BMP's. This is projected to be a five year plan, with the understanding that the costs need to be added to our five-year budget forecast.

- 1) Make repairs to the four-Bioswales/Bioretention ponds at Parking Lot 1.
- 2) Make repairs to the Sand Filter behind Building II.

The failing BMPs are identified on the Appendix B BMP Database sheet as BMP ID's 002, 019, 020, 021 and 022.



Appendix H

USG IDDE Plan (Draft)

THE UNIVERSITIES AT SHADY GROVE

Department of Facilities Management

ILLICIT DISCHARGE DETECTION AND ELMINATION (IDDE) PLAN

April 2020



IDDE Plan April 2020

Table of Contents

SEC	CTION 1: PURPOSE AND FACILITY DESCRIPTION 1
1.1	Purpose of Illicit Discharge Detection & Elimination Plan1
1.2	Background Information and Site Description1
1.3	Definitions
SEC	CTION 2: STORMWATER MAPPING5
SEC	
SEC	0 TION 5: ORDINANCES
3.1	State Ordinances
3.2	County Ordinances
3.3	City Ordinances
3.4	University Policies
CE	
SEC	TION 4: DETECTION PROCEDURES
4.1	Prohibition of Illicit Discharges
Table	1
4.2	Prohibition of Illicit Connections
4.3	Procedure to Report an Incident
4.3.1 4.3.2	Notification of Spills
4.4	Inspection Procedures
4.4.1	Outfall Inspections
Table 4.4.2	3Error! Bookmark not defined. Source Identification
4.5	Immediate Response Procedures
4.6	Investigation and Response Procedures
4.6.1	Investigation Protocol
4.7	Recordkeeping



SECTION 6: PUBLIC EDUCATION12
6.1 Public Education and Outreach12
6.2 Public Involvement and Participation
SECTION 7: STAFF TRAINING
SECTION 8: IDDE CERTIFICATION
SECTION 9: IDDE EVALUATION AND MODIFICATIONS15
SECTION 10: REFERENCES



Appendices:

Appe	ndix A	General	Location	Мар

- Appendix B Site Map and Outfall Photo Log
- Appendix C USG Illicit Discharge and Connection Stormwater Ordinance
- Appendix D
 USG Illicit Discharge Incident Tracking Sheet
- Appendix E IDDE Outfall Inspection Form
- Appendix F IDDE Training Materials





SECTION 1: PURPOSE AND FACILITY DESCRIPTION

1.1 Purpose of Illicit Discharge Detection & Elimination Plan

The purpose of this program is to provide for the health, safety, and general welfare of the students, staff, and faculty of the Universities at Shady Grove (USG) through the regulation and elimination of non-stormwater discharges to the storm sewer system to the Maximum Extent Practicable (MEP) as required by federal and state law. This program establishes methods for controlling the introduction of pollutants into the storm sewer system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with the Municipal Separate Storm Sewer System (MS4) general permit (Permit No. 13-SF-5501).

This Illicit Discharge Detection and Elimination (IDDE) plan is designed to identify and effectively eliminate illicit discharges and connections to USG's MS4. The University's IDDE program also includes municipal storm sewer mapping, policies, public education, reporting, recordkeeping, and staff training elements.

Illicit discharges are defined as a measurable flow containing pollutants and/or pathogens to a MS4 during dry weather. A storm drain with measurable flow but containing no pollutants or pathogens is simply considered a discharge. NPDES regulates the discharge of stormwater under the authority of the Federal Clean Water Act. The United States Environmental Protection Agency (USEPA) designates authority to administer NPDES permits within the State of Maryland.

1.2 Background Information and Site Description

Discharges from MS4s often include waste and wastewater from non-stormwater sources. A significant portion of dry weather flows are likely from illicit and/or inappropriate discharges and connections to a MS4.

Illicit discharges can enter a system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or chemicals dumped directly into a drain). This results in untreated discharges which could contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, and pathogens to receiving water bodies. Pollutant levels from these illicit discharges have been shown in USEPA studies to be high enough at times to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health. Examples of illicit discharges include: sanitary wastewater, effluent from septic tanks, car wash wastewater, improper oil disposal, radiator flushing disposal, laundry wastewaters, spills from roadway accidents, and improper disposal of auto and house hold toxics. The USG's IDDE program, along with public outreach and reporting, helps combat these potential illicit discharges. USG treats some of its



stormwater discharges using various BMPs, including oil-grit separators, bioretention, retention pond, sand filters, and infiltration berms.

USG began in 1992 as part of the University of Maryland, University College. In 2000, it reformed under its present name. The campus is located in a suburban area, bounded by a mixture of commercial and institutional areas on all sides. USG is bordered by Darnestown Road to the north and east, Traville Gateway Drive to the west, and Gudelsky Drive to the south. The campus currently consists of 4 academic buildings and a parking garage on approximately 30 acres of land. A site vicinity map is included in Appendix A. It should be noted that the Shady Grove Campus consists of two distinct Universities -1) USG and 2) the University of Maryland Institute for Bioscience and Biotechnology Research (IBBR). USG and IBBR share a property, owned by the State of Maryland and work jointly together to share their property management responsibilities.

The stormwater drainage system at USG consists of intermittent surface flow and catch basins located throughout the campus. Approximately 14 acres (47%) of the campus is considered impervious. The campus maintains a MS4 that consists of one (1) outfall. The outfall discharges to the Piney Branch stream. Water the Piney Branch ultimately flows to the Potomac River, a tributary of the Chesapeake Bay. The campus receives all of its potable water from the Washington Suburban Sanitary Commission (WSSC). The distribution system includes periodic flushing of fire hydrants for maintenance purposes.

1.3 Definitions

For the purposes of this program, the following shall mean:

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act: The U.S. Water Pollution Control Act (33 US.C. §1251et seq.), and any subsequent amendments thereto.



Construction Activity: Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition. Additionally, projects resulting in 5,000 square feet or more and 100 cubic yards or more require an approved sediment and erosion control plan.

Conveyance: Any structural process for transferring stormwater between at least two (2) points, including piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadways.

Hazardous Materials : Any material, including any substance, waste, or combination threat which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illegal Discharge: Any direct or indirect non-stormwater discharge to the storm sewer system, except as exempted in section 4.1 Table 1.

Illicit Connections: An illicit connection is defined as either of the following:

- Any drain or conveyance, whether on the surface or subsurface that allows an illegal discharge to enter the storm drain system including, but not limited to, any conveyances that allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or:
- Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Municipal Separate Storm Sewer System (MS4): The system of conveyances (including sidewalks, roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned and/or operated by USG and designed or used for collecting or conveying stormwater, and that is not used for collecting or conveying sewage.

National Pollutant Discharge Elimination System (NPDES) Permit: a permit issued by USEPA (or by a State under authority delegated pursuant to 33 USC§ 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-Stormwater Discharge: Any discharge to the storm drain system that is not



composed entirely of stormwater.

Outfall: A point source where the MS4 discharges from a pipe, ditch or other discreet conveyance directly or indirectly to waters of the State of Maryland, or to another MS4.

Person: Any city utility, individual, contractor, student, staff, or faculty.

Pollutant: Anything that causes or contributes to pollution. Pollutants may include, but are not limited to, paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid, solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Premises: Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Spill Prevention Control & Countermeasure (SPCC) Plan: A document that describes procedures put in place to prevent and respond to oil and oil product spills.

Storm Sewer System: System of conveyances by which stormwater is collected and/or directed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

Stormwater: Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Pollution Prevention Plan (SWPPP): A document that describes the BMPs and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the Maximum Extent Practicable.

Wastewater: Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.



SECTION 2: STORMWATER MAPPING

The development of a storm sewer system map is used to demonstrate a basic awareness of the intake and discharge areas of the system. It is needed to help determine the extent of discharge of dry weather flows, the possible sources of dry weather flows, and the particular water bodies these flows may be affecting. The availability of this map clearly demonstrates such awareness.

USG will utilize AutoCAD, GPS, and GIS technologies to map all conveyance systems and outfalls. All outfall locations will then be incorporated into USG's mapping system and database. All outfalls will be photographed and numbered for reference purposes. Maps will be available to print for public review. A current site map and photo log is included in Appendix B. USG is in the process of updating and enhancing its existing maps; site maps will be updated as needed. The photo log in Appendix B will be completed as each outfall is inspected as described section 4.1.1. of this plan.



SECTION 3: ORDINANCES

3.1 State Ordinances

The Code of Maryland Regulations (COMAR) Title 26, Subtitle 4 identifies all the State's ordinances for water management, specifically water pollution control and abatement. The ordinances can be online found at:

http://www.dsd.state.md.us/COMAR/subtitle_chapters/26_Chapters.aspx#Subtitle04

3.2 County Ordinances

There are currently no county ordinances that apply to USG's IDDE. However, Montgomery County Code of Ordinances Part II, Chapter 19 encompasses its stormwater management ordinances. These ordinances can be found at:

http://montgomeryco-md.elaws.us/code/coor_ptii_ch19

3.3 City Ordinances

There are currently no city ordinances that apply to USG's IDDE. However, Rockville Code of Ordinances Chapter 19, Article IV encompasses its stormwater management ordinances. These ordinances can be found at:

https://library.municode.com/md/rockville/codes/code_of_ordinances?nodeId=CICO_CH19SECOST MA_ARTIVSTMA

3.4 University Policies

While the Universities at Shady Grove does not have a specific ordinance relating to illicit discharge detection and elimination. Furthermore, USG is subject to not just our own policies and procedures, but those of University Maryland, College Park (UMD) and University System of Maryland (USM) as well. Therefore, Section VI of the UMD Policies grants authority to the Department of Environmental Safety, Sustainability and Risk (ESSR) to ensure compliance with all environmental regulations. Therefore, USG facilities management will implement this IDDE Plan since it is required by its NPDES General Permit for Discharges from Small MS4s (State Permit No. 13-SF-5501; NPDES Permit No. MDR05501). More details regarding this University Policy are included in Appendix C of this plan. The complete directory of the University of Maryland's Policies can be found at:

https://www.president.umd.edu/administration/policies



SECTION 4: DETECTION PROCEDURES

4.1 Prohibition of Illicit Discharges

Illicit discharges, as defined by the USEPA, are defined as a storm drain that has measurable flow during dry weather containing pollutants and/or pathogens. This means any non-permitted discharge to a regulated MS4 or to waters of the State, that does not consist entirely of stormwater, except for naturally occurring floatables, such as leaves, tree limbs, or authorized non-stormwater discharges covered under a NPDES permit.

Illicit discharges can be categorized as either direct or indirect. Examples of direct illicit discharges include sanitary wastewater; piping directly connected from a home to the storm sewer; materials (e.g., used motor oil) that have been dumped illegally into a storm drain catch basin; or a cross-connection between the sanitary sewer and storm sewer systems. Examples of indirect illicit discharges include: a damaged sanitary sewer line leaking into a storm sewer line, or a failing septic system leaking into a storm sewer.

The MS4 general permit authorizes the following non-stormwater discharges provided the discharges have been determined unsubstantial contributors of pollutants, as stated in Part VI.C. USG will not consider items listed in Table 1 as illicit discharges. If USG determines any of these activities to be illicit discharges in the future, USG will update its IDDE Plan accordingly.

Irrigation water	Springs
Uncontaminated pumped groundwater	Water from crawl space pumps
Diverted stream flows	Footing / foundation drains
Rising ground waters	Lawn watering runoff
Uncontaminated groundwater infiltration	Flows from riparian habitats and wetlands
Discharges from firefighting activities	Residual street wash water

Table 1. Exempt Non-Stormwater Discharges

4.2 Prohibition of Illicit Connections

The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under laws or practices applicable or prevailing at the time of connection. A person is considered to be in violation of this program if the person connects a line conveying sewage to the MS4, or allows such a connection to continue. Improper connections in violation of this program must be disconnected and redirected, if necessary, to the sanitary sewer system.



4.3 Procedure to Report an Incident

4.3.1 Notification of Spills

Notwithstanding other requirements or laws, as soon as any person responsible for any known or suspected release of materials which are resulting or may result in an illicit discharge of pollutants into stormwater runoff, the storm sewer system, or water of the State, said person shall immediately take all necessary actions and measures to: stop, contain, and cleanup such release. In the event of such a release of an illicit discharge, said person shall immediately notify security at USG who then routes the call to facilities management. Reported spills will be tracked by facilities management in the Illicit Discharge Incident Tracking Sheet in Appendix D of this Plan.

Spill procedures regarding emergency actions, such as radiation, chemical, or biological, can be found at this link:

4.3.2 <u>Reporting</u>

If an illicit discharge is identified during a routine inspection or while responding to a notification, facilities management will write a report for each illicit discharge and its location. Facilities management will maintain a database that documents all activities associated with the USG's IDDE Plan ranging from mapping, outfall screening, source identification, and photographs. Records of all illicit discharges and activities associated with this plan will be documented and submitted to Maryland Department of the Environment (MDE) with USG's annual report.

Any illicit discharges in violation of USG's SPCC and/or SWPPP will be reported as outlined within their respective plan(s).

4.4 Inspection Procedures

4.4.1 <u>Outfall Inspections</u>

The Outfall Inspection Form will be completed for at least 50% of the outfalls each year, as required by MDE. The purpose of the inspections is to screen for any source of an illicit discharge and to eliminate any improper connection or illicit discharge to the storm drain system. The inspection sheets are used during dry weather to record descriptive and quantitative information about each outfall inspected in the field.

Field staff conducts an outfall inspection by photographing each outfall and characterizing its dimensions, shape and component material, and recording observations on basic sensory and physical indicators. Each outfall with a flow will have field measurements taken for temperature, pH, ammonia, and chlorine. Basic field equipment needed for the inspections include: waders, a measuring tape, watch, camera, pH probe, ammonia test strips, chlorine meter, and sterile gloves. The Outfall Inspection Form is located in Appendix E. Based on field screening results, additional sampling and/or investigation may be conducted, as warranted.



4.4.2 Source Identification

When identifying any illicit discharges or the source of any violations for their NPDES permit, facilities management will locate the original discharge point by using a map of the storm sewer system and physically following a drainage ditch, or identifying the most up-pipe manhole with a junction. Facilities management may opt to collect additional field and laboratory samples as he or she makes their way upstream or up-pipe in order to compare the outfall sample results with the in-line results in hope of identifying similarities between the sites. If, from following the drainage ditch or inspecting the manhole, facilities management can determine the direction from which the discharge originates, facilities management will then continue upstream or to the next up-pipe manhole until he or she can pinpoint the source or the general vicinity from where the discharge is originating. If facilities management cannot identify the specific source through visual observation, a dye test, smoke test, or video inspection will be necessary to determine the source of the discharge.

4.5 Immediate Response Procedures

All illicit discharges should be reported to the USG's security desk who will then route the call to facilities management. The report should include: the location of the problem, time the problem was found, odor/color/turbidity/floatables, photo(s), and any other relevant information.

Any illicit discharges in violation of USG's SPCC and/or SWPPP will follow the reporting procedures as outlined within their respective documents.

Spill procedures regarding emergency actions for various materials, such as chemical, radiological, or biological, can be found at this link:

4.6 Investigation and Response Procedures

In the case of the identification of an illicit discharge, it is necessary to conduct an investigation to identify and eliminate the source of the discharge. An investigation may result from:

- A report to USG facilities management staff from the general public;
- A report from a USG staff member or student; or
- Results of outfall screening.

The determination of if an illicit discharge has occurred will be made by USG facilities management staff. In all cases of an illicit discharge, the USG Illicit Discharge Incident Tracking Form, found in Appendix D, must be completed for MS4 permit annual reporting documentation purposes. An investigation of an illicit discharge may result in the source being easily identified or may be complex and should utilize the methods outline in Section 4.4.2 of this plan.



4.6.1 Investigation Protocol

Based on the familiarity of the campus and its drainage areas, an initial field evaluation may easily identify the source of an illicit discharge. Once found, the source should be documented on the USG Illicit Discharge Tracking Form. The remainder of the form shall be completed as appropriate to indicate the source has been eliminated, if applicable, and provide an ending date for the investigation. It is critical that the USG Illicit Discharge Tracking Form is completed in order to demonstrate that illicit discharges have been addressed.

If the source of an illicit discharge is not easily identified, further investigation may be necessary and should be guided by the following procedures:

- 1. Track the illicit discharge to its point of entry into the storm sewer. Tracking can be supplemented with review of the USG outfall mapping to identify the drainage area of the illicit discharge. Cross reference the mapping with the USG SWPPP mapping that indicates areas most likely to be the source of pollutants.
- 2. Conduct field inspection of the drainage area near the point of entry to identify the potential pollutant source. Document potential sources with photos, ensuring the photos give the appropriate context to the location of the source.

USG staff will primarily rely upon visual inspections of the areas in the storm sewer system above the outfall at which an illicit discharge is detected. Sampling and analysis can be performed as necessary to determine the characteristics of the illicit discharge and to help identify the most likely source. Improper connections and unpermitted cross-connections to the storm sewer system can be detected by utilizing a combination of methods to investigate non-stormwater discharges, such as visual/video inspections, and dye or smoke tracer testing. Dry-weather testing at a discharge point assists in identification of abnormal conditions such as sporadic or continuous discharge, which can facilitate tracking of the source. Tracking techniques also include visual inspections of drainage structures and lines, dye testing, video inspection, indicator monitoring, smoke testing, and optical brightener monitoring traps. Other more elaborate approaches include using remote sensing tools to identify soil moisture, water temperature, and vegetation anomalies associated with illegal dumping activities.

4.7 Recordkeeping

The NPDES Phase II Permit requires USG to keep records of all stormwater program activities and IDDE records for a minimum of five (5) years. USG will maintain a database of illicit discharges and investigation reports, citizen complaints, outfall inspections, and corrective actions. All paper copies will be stored in a file designated for illicit discharges and located in the USG facilities management office. Electronic copies will be available on demand.



SECTION 5: CORRECTIVE ACTIONS & ENFORCEMENT

In order to maintain compliance with the permit, facilities management has the authority to notify entities within the USG MS4 of deficiencies and/or illicit discharges and to require corrective action to be performed. In the case of faculty, staff, or students under the control of USG, facilities management will work directly with the party/parties to address and correct any deficiencies and/or illicit discharges. In the event that tenants or other non-USG entities are involved in the deficiencies and/or illicit discharges, facilities management will notify the party/parties of the required corrective actions and establish a timeframe for compliance. In the event that the party/parties do not comply, the incident will be referred to MDE for enforcement action. USG's facilities management department will enforce compliance with the IDDE Plan and work with the party/parties to obtain compliance. Facilities management, however, is not an "enforcement" entity in the traditional sense and, as such, will not impose fines, penalties, etc. If situations arise where an illicit discharge is determined to be willful and criminal in nature, the matter may be referred to the local police department for further action, in conjunction with referral to MDE.

Deficiencies and/or illicit discharges at USG construction sites will be handled differently; those will be reported to the facilities management department. The facilities management department will then work with their construction contractors to undertake the necessary corrective action(s). If warranted, the facilities management department will refer the issue to the MDE for enforcement action.



SECTION 6: PUBLIC EDUCATION

6.1 Public Education and Outreach

USG shall implement and maintain a public education and outreach program to help reduce illicit discharges of pollutants. Public education and outreach can be coordinated with other portions of USG's stormwater management program, developed independent of other pollution control efforts, or implemented by an entity other than the permittee. At a minimum, the public education program shall contain information about the impacts of illicit discharges on receiving waters, why controlling these discharges is important, and what the public can do to reduce illicit discharge pollutants in stormwater runoff.

Examples of the information that should be considered by the permittee when developing a public education and outreach program include:

- 1. The types and causes of pollutants found in urban runoff;
- 2. The importance of reducing, reusing, and recycling;
- 3. The consequences of stormwater pollutants;
- 4. Proper disposal of vehicle and equipment fluids;
- 5. Outfall signage and storm drain stenciling;
- 6. Residential car washing;
- 7. Proper pet waste management;
- 8. Increasing proper disposal of hazardous waste and household hazardous waste (HHW); and
- 9. How staff can contribute to USG's stormwater management and IDDE program through the following:
 - a. Proper disposal of vehicle fluids;
 - b. Lawn care and landscaping;
 - c. Hazardous material storage, use, and disposal (e.g., herbicides, pesticides, and fertilizers);
 - d. Spill and illegal dumping hotline; and
 - e. Any other components deemed necessary to ensure adequate public outreach and education.

6.2 Public Involvement and Participation

USG shall implement and maintain a public involvement and participation program. USG shall, at a minimum, comply with all State public notice requirements in actions or decisions made having to do with stormwater management and the IDDE program. Additionally, USG will implement different programs to assist with prevention or and the identification of illicit discharges. This can include: stream cleanups, illicit discharge hotline, promoting educational programs in for faculty, staff, and students, and providing information sessions/material on request. USG requires stormwater training for staff involved in activities that are considered a high risk for potential stormwater pollution.



SECTION 7: STAFF TRAINING

The MS4 Permit requires USG to provide annual training to applicable field personnel in recognition and reporting of illicit discharges. USG requires stormwater training for staff involved in activities that are considered a high risk for potential stormwater pollution. USG facilities management will provide training for field staff and other employees on ways to identify and report non-stormwater discharges, spills, illicit connections, and illegal dumping. The field staff members will receive additional training in appropriate methods to identify, trace, and remove the source of an illicit discharge as well as effective methods to identify emergencies and contain spills. Additionally, USG facilities management will provide training to other staff members in other departments who may come into contact with illicit discharge through their field work on illicit discharge identification and reporting procedures. Any and all staff operating the IDDE hotline will be trained on how to respond to calls. Training will be provided annually to keep all staff members up-to-date. Training materials are available in Appendix F.



SECTION 8: IDDE CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Title:
Signature:	Date:



SECTION 9: IDDE EVALUATION AND MODIFICATIONS

Revision	Date	Details / Comments
Revision 00	April 2020	Original IDDE Plan
_		
<u></u>		
<u> </u>		
<u></u>		



SECTION 10: REFERENCES

The following references were used to prepare this plan and contain supplemental information that may be helpful to City staff.

IDDE Program Manuals:

Center for Watershed Protection and Robert Pitt. *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments.* October 2004. U.S Environmental Protection Agency. Washington, D.C. https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf

New England Interstate Water Pollution Control Commission. *Illicit Discharge and Elimination Manual: A Handbook for Municipalities*. January 2003. Lowell, MA. <u>http://www.neiwpcc.org/neiwpcc_docs/iddmanual.pdf</u>



Appendix I

USG SWPP Plan (Draft)

Stormwater Pollution Prevention Plan (SWPPP)

for:

Universities at Shady Grove (USG) 6930 Gudelsky Drive Rockville, MD, 20850

SWPPP Contact(s):

Jane Briggs 9636 Gudelsky Drive Rockville, MD, 20850 (301) 738-6111 Jbriggs1@umd.edu

SWPPP Preparation Date:

October 2020



Table of Contents

1. FACILITY DESCRIPTION AND CONTACT INFORMA	TION 1
1.1. Facility Information	1
1.2. Contact Information/Responsible Parties	2
1.3. Stormwater Pollution Prevention Team	3
1.4. Activities at the Facility	3
1.5. General Location Map	4
1.6. Site Map	4
2. POTENTIAL POLLUTANT SOURCES	5
2.1. Industrial Activity and Associated Pollutants	5
2.2. Spills and Leaks	6
2.3. Non-Stormwater Discharges Documentation	6
3. STORMWATER CONTROL MEASURES	8
3.1. Minimize Exposure	8
3.2. Good Housekeeping	9
3.3. Maintenance	9
3.3.1. Delivery Vehicles	10
3.3.2. Chemical Loading and Unloading	10
3.3.3. Miscellaneous Loading and Unloading	10
3.3.4. Liquid Storage Tanks	10
3.3.5. Fuel Storage Tanks	11
3.3.6. Spill Reduction Measures	11
3.3.7. Materials Storage Containers	11
3.4. Spill Prevention and Response	11
3.5. Erosion and Sediment Controls	12
3.6. Management of Runoff	13



3.7. Employee Training	13
3.8. Non-Stormwater Discharges	14
4. CORRECTIVE ACTIONS	15
5. SWPPP CERTIFICATION	16
6. SWPPP MODIFICATION TRACKING SHEET	17

Tables

Table 1.	Stormwater Pollution Prevention Team (P2 Team)	_3
Table 2.	Industrial Activity and Associated Pollutants	_5
Table 3.	Areas of Site Where Potential Spills/Leaks Could Occur	_6
Table 4.	Description of Past Spills/Leaks	_6





Appendices:

Appendix A	General Location Map
Appendix B	Site Map
Appendix C	General MS4 Permit (13-SF)
Appendix D	USG's Notice of Intent (NOI)
Appendix E	Exposed Materials
Appendix F	BMP Fact Sheet
Appendix G	Spill Response, Notification, and Reporting Procedures
Appendix H	Stormwater Pollution Prevention Training
Appendix I	Corrective Actions





1. FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1. Facility Information

Facility Information			
Name of Facility: <u>Universities at Shady Grove</u>	<u> </u>		
Street: 6930 Gudelsky Drive			
City: <u>Rockville</u>	State : <u>MD</u> ZIP Code : <u>20850</u>		
County: Montgomery			
Permit Registration Number: <u>13SF5501</u>			
Latitude/Lancitude (Use desimal formet)			
Latitude/Longitude (Use decimal format)			
Latitude:	Longitude:		
1. <u>39.092079 ° N (decimal)</u>	177.198766° W (decimal)		
Primary SIC Code or 2-letter Activity Code: 8221			
Name and 8-digit identifier of the receiving w	vater body:		
Potomac River – Montgomery County 0207000	8		
Are any of your discharges directly into any s	segment of an "impaired" water?		
\square Yes \square No			
Do you discharge into a high-quality receiving water designated as a Tier 2 water?			
\Box Yes \boxtimes No			
Do you discharge into a high-quality receiving water designated as Use III or Use IV?			
Yes No			



1.2. Contact Information/Responsible Parties

Facility Operator (s):

Name: Jane Briggs Address: 9636 Gudelsky Drive City, State, Zip Code: Rockville, MD, 20850 Telephone Number: (301) 738-6111 Email address: jbriggs1@umd.edu

Facility Owner (s):

Name: Ellen Herbst Address: 3300 Metzerott Road City, State, Zip Code: Adelphi, MD 20783-1690 Telephone Number: (301) 445-1923 Email address: <u>eherbst@usm.edu</u>

SWPPP Contact:

Name: Paul Jackson Jr. Telephone number: (301) 738-6314 Email address: <u>pjr@umd.edu</u>



1.3. Stormwater Pollution Prevention Team

Staff Names	Individual Responsibilities	Contact Info
Jane Briggs	Verify that the SWPP is up to date;	(301) 738-6111
	Ensure that all permit requirements and	Jbriggs1@umd.edu
	BMPs are being correctly	
	implemented.	
Paul Jackson Jr.	Insure that all permit requirements and	(301) 738-6314
	BMPs are being properly implemented;	pjr@umd.edu
	SWPPP updates and annual pollution	
	(P2) team training.	

Table 1. Stormwater Pollution Prevention Team (P2 Team)

1.4. Activities at the Facility

The campus is located in a suburban area, bounded by a mixture of commercial and institutional areas on all sides. USG is bordered by Darnestown Road to the north and east, Traville Gateway Drive to the west, and Gudelsky Drive to the south. The campus currently consists of 4 academic buildings and a park garage on approximately 30 acres of land. It should be noted that the Shady Grove Campus consists of two distinct Universities – 1) USG and 2) the University of Maryland Institute for Bioscience and Biotechnology Research (IBBR). USG and IBBR share a property, owned by the State of Maryland and work jointly together to share their property management responsibilities.

The stormwater drainage system at USG consists of intermittent surface flow and catch basins located throughout the campus. Approximately 14 acres (47%) of the campus is considered impervious. The campus maintains a MS4 that consists of one (1) outfall. The outfall discharges



to the Piney Branch stream. Water the Piney Branch ultimately flows to the Potomac River, a tributary of the Chesapeake Bay. USG treats some of its stormwater discharges using various BMPs, including oil-grit separators, bioretention, retention pond, sand filters, and infiltration berms.

The site has one (1) drainage area covered by the 13-SF permit and contains one (1) outfall which discharges into a retention pond. Runoff from the drainage area is conveyed into stormwater inlets across campus and is discharged off site to the aforementioned waterways. USG's primary classification 8221 is Colleges, Universities, and Professional Schools.

1.5. General Location Map

A general location map for this facility is located in Appendix A.

1.6.Site Map

A site map for this facility is located in Appendix B.



2. POTENTIAL POLLUTANT SOURCES

Based on the site visit and discussions with facility personnel, USG has the potential to discharge pollutants from the following activities:

- Accidental Spills and Leaks
- Aboveground Storage Tanks (ASTs)
- Loading/Unloading of Materials
- Loading/Unloading of Hazardous Materials
- Storage of Hazardous Materials

2.1. Industrial Activity and Associated Pollutants

The United States Environmental Protection Agency (USEPA) SWPPP Guidance defines "significant materials" from 40 CFR 122.26(b)(12) as substances related to industrial activities such as process chemicals, raw materials, fuels, pesticides, and fertilizers. A copy of the 13-SF permit can be found in Appendix C and the USG's Notice of Intent (NOI) can be found in Appendix D. An inventory of significant materials exposed to weather (i.e., located outdoors) was developed and is included in Appendix E. This list is primarily based upon visual inspections conducted during the development of this plan.

Industrial Activity	Associated Pollutants	
Accidental Spill and Leaks	Diesel Fuel, Hydraulic Oil, Used Food Oil	
Loading and Unloading Materials	Sediments, Metal, Fuel (Diesel), Used Food	
Louding and Onlouding Matchais	Oil	
Loading, Unloading, and Storage of	Associated Hazardous Pollutants	
Hazardous Materials		

Table 2. Industrial Activ	ity and Associated Pollutants
---------------------------	-------------------------------



2.2. Spills and Leaks

Table 3. Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Building 1 (Hydraulic Oil)	001
Building 2 (Diesel Fuel)	001
Building 3 (Diesel Fuel & Used Food Oil)	001
Building 4 (Diesel Fuel)	001
Parking Garage 2 (Diesel Fuel)	001
Vehicle Traffic and Parking (Sediments, Metal, & Oil)	001

Table 4. Description of Past Spills/Leaks

Date	Description	Outfalls

2.3. Non-Stormwater Discharges Documentation

- Date of evaluation: February 4, 2020
- Description of the evaluation criteria used: Visual inspections of components of the stormwater conveyance system are performed during periods of no precipitation. These inspections are performed to ascertain the existence and possible sources of non-stormwater discharges. Areas of interest include possible sources of contamination.
- List of the outfalls or onsite drainage points that were directly observed during the evaluation: 001



- Different types of non-stormwater discharge(s) and source locations: None were observed.
- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge: Actions will be taken in accordance with USG's IDDE plan.



USG has developed and implemented a series of stormwater management controls. The purpose of the stormwater management controls is to minimize the potential for stormwater to become contaminated as a result of activities performed on-site.

The following set of stormwater management controls has been developed and implemented in regards to the activities at USG:

- Preventive Maintenance
- Good Housekeeping

The Universities

- Spill Prevention and Response Procedures
- Management of Stormwater Runoff
- Pollution Prevention Training
- Recordkeeping and Internal Reporting Procedures
- Implementation Program
- Loading and Unloading Areas
- Hazardous Material Storage Areas

3.1. Minimize Exposure

Structural BMPs and practices are utilized to minimize the exposure of industrial activities to rain, snowmelt, and runoff. All scrap metal, and hazardous materials should be covered during precipitation events to the greatest extent possible in order to minimize exposure. Appendix F contains a BMP fact sheet.

ASTs are listed within the Spill Prevention, Control, and Countermeasure (SPCC) Plan and are inspected on a regular basis per the USG SPCC Plan.


3.2. Good Housekeeping

Good housekeeping requires the maintenance of a clean, orderly facility. A clean work environment reduces the potential for pollution sources to contact stormwater. Good housekeeping practices include material management (such as storing materials indoors), limiting inventories kept in stock, storing materials according to manufacturers' directions and storing them away from heavy traffic areas. Good housekeeping also includes waste management measures such as sweeping, regular pickup and disposal of waste materials, and routine cleaning. Leak/spill prevention and response measures are also incorporated into a good housekeeping plan. Avoiding, controlling and cleaning a spill will reduce the opportunity of stormwater contamination. As part of spill prevention effort, good housekeeping measures also include awareness measures such as posting signs with instructions for facility practices such as loading/unloading or waste disposal.

The Universities at Shady Grove practices good housekeeping with respect to:

- Upkeep of facility roads and regular sweeping;
- Hazardous material storage areas;
- Loading/unloading;
- Training employees about good housekeeping practices;
- Regularly inspecting of all ASTs and drums per SPCC plan;
- Regularly picking up and disposing of waste materials throughout the campus.

3.3.Maintenance

A preventive maintenance program involves timely inspection and maintenance of stormwater management devices, in addition to inspecting facility equipment and systems to uncover conditions that could potentially cause breakdowns or failures resulting in discharges of pollutants to surface waters.

The facility's preventive maintenance program includes the following elements:

- Visual inspections of the stormwater management systems;
- Routine inspections of ASTs and other storage tanks per the SPCC Plan;
- Records documenting inspections; all inspection records are maintained at the USG.



Records documenting maintenance and repairs

3.3.1. Delivery Vehicles

USG strives to minimize contamination of stormwater runoff from delivery vehicles while on campus. This includes occasionally inspecting delivery vehicles arriving at the site and ensuring overall integrity of the body or container and maintaining response procedures to deal with leaks or spills from vehicles or containers (such as those contained within the USG SPCC plan).

3.3.2. Chemical Loading and Unloading

USG minimizes contamination of precipitation or surface runoff at chemical loading and unloading areas by one or more of the following strategies: (a) using containment curbs and/or spill kits at chemical loading and unloading areas to contain spills; (b) having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up; (c) loading and unloading in covered areas and storing chemicals indoors; and (d) using vehicles stocked with spill kits to transport chemicals onsite.

3.3.3. Miscellaneous Loading and Unloading

USG minimizes contamination of precipitation or surface runoff at loading and unloading areas by one or more of the following strategies: (a) covering the loading area; grading, berming, or curbing around the loading area to divert run-on; (b) locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or (c) loading and unloading in covered areas.

3.3.4. Liquid Storage Tanks

USG minimizes contamination of surface runoff from aboveground liquid storage tanks by one or more of the following options: (a) protective guards around tanks, containment curbs, secondary containment, spill and overflow protection; (b) access to dry cleanup methods, and (c) regular inspections and maintenance following the schedule within USG's SWPPP and SPCC plan.



3.3.5. Fuel Storage Tanks

USG minimizes contamination of surface runoff from fuel storage tanks by the use of secondary containment, and by complying with applicable State and Federal laws, including the USG SPCC plan requirements.

3.3.6. Spill Reduction Measures

USG minimizes the potential for an oil or chemical spill by following the USG SPCC plan and scheduled inspections. The scheduled inspections include visually inspecting the structural integrity of all aboveground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater. Necessary repairs identified during the inspection are initiated immediately.

3.3.7. Materials Storage Containers

USG maintains all material storage containers (e.g., for used oil/oil filters, spent solvents, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., "Used Oil," "Spent Solvents," etc.). One or more of the following strategies are used: (a) storing the materials indoors; (b) installing berms/dikes around the areas; (c) minimizing runoff of stormwater to the areas; (d) using dry cleanup methods; and (e) treating and/or recycling collected stormwater runoff.

3.4. Spill Prevention and Response

Spill prevention and response measures focus both on spill prevention and on providing adequate measures to respond to leaks or spills to prevent surface water contamination. Areas most at risk for leaks and spills include loading and unloading areas and areas where equipment is stored.

Spill prevention measures include:

- Proper storage practices;
- Routine inspections of potential pollutant sources;
- Regular inspections and maintenance of spill response kits, materials, and devices;



• Routine maintenance of equipment containing oil or hazardous materials; and

Spill containment and cleanup measures include:

- Identification and training of a Spill Response Team
- Maintaining spill cleanup materials in designated areas for immediate treatment;
- Using absorbent to control spills and promptly removing and properly disposing used absorbent;
- Blocking access to stormwater drainage systems;
- Contacting a licensed spill response contractor, if the spill cannot be immediately contained; the fire department may also provide containment response in emergencies;
- Contacting state, federal, and appropriate local agencies;
- Repairing equipment or tanks which caused a leak or spill to occur; and
- Maintaining records of spill occurrences for three years.

Specific spill response, notification and reporting procedures are provided in Appendix G and in the facility's SPCC Plan.

3.5. Erosion and Sediment Controls

Erosion concerns can be divided into two broad categories: (1) Erosion due to active construction projects and (2) chronic or nuisance eroding areas due to inadequate conveyance, steep slopes, or insufficient vegetative stabilization.

The first category of erosion potential is associated with various development projects being actively constructed or planned on campus areas. For construction projects disturbing more than 5,000 square feet, the Maryland Department of the Environment (MDE) will be contacted to establish an approved sediment and erosion control plan. These plans will be developed by a professional engineer and identify the specific control measures that will be in place during



construction to minimize erosion and sedimentation. USG is also responsible for obtaining a General Discharge Permit for Stormwater Associated with Construction Activity from MDE for projects that will disturb one or more acres of earth.

The second category of erosion or sedimentation problems involves areas that may experience nuisance erosion due to inadequate conveyance, steep slopes, or insufficient vegetative stabilization. Maintenance will be conducted on an as needed basis.

3.6. Management of Runoff

USG maintains a system of devices to manage stormwater runoff. This system includes, but is not limited to a retention pond, bioretention areas, sand filters, stormwater inlets and conveyances, oil/grit separators, direct connections to sanitary sewer systems, and outfall. A considerable number of the stormwater inlets at USG have inlet protection to minimize particulates or materials from being discharged. The stormwater management system is designated on the Site Map in Appendix B.

In conjunction with USG's system of stormwater management, USG implements the following: a NPDES Phase II MS4 general permit which covers the discharge of stormwater run-off from land, pavement, building rooftops and construction sites on campus (Permit No. 13-SF-5501), a SPCC Plan; an IDDE Plan; and, as required, site-specific Sediment & Erosion Control Plans.

3.7. Employee Training

Pollution prevention training is necessary to ensure that employees are aware of their impact to stormwater, their responsibilities to prevent pollution, and methods for controlling pollution releases. Training sessions are held annually or as needed for USG's P2 team members.

Training topics include the following:

- Spill response
- Good housekeeping practices
- Material management practices.



All training is organized and coordinated by the USG Facilities and Planning unit. SPCC training will be performed as outline in the USG SPCC Plan. Other training sessions will be held as needed to address specific topics of interest.

The training materials for USG stormwater pollution prevention training sessions are included in Appendix H.

3.8. Non-Stormwater Discharges

Non-stormwater discharges are strictly prohibited under sector specific regulations unless covered by an additional NPDES/ State discharge permit. The Universities of Shady Grove is covered by a Phase II MS4 NPDES Permit (Permit No. 13-SF-5501). Please reference the non-stormwater inspection report for further information located in Section 2.3.



4. CORRECTIVE ACTIONS

Corrective Actions are modifications that are made to stormwater controls and BMPs to improve stormwater management. Corrective Actions should be performed and reported when any of the following triggering conditions occurs:

If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:

- an unauthorized release or discharge (e.g., spill, leak, or discharge of nonstormwater not authorized by this or another NPDES permit) occurs at your facility;
- 2. for the discharge to meet applicable water quality standards;
- **3.** an inspection or evaluation of your facility by an MDE official determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or

For Corrective Action overview, deadlines, and reporting see Appendix I.



5. SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Title:
Signature:	Date:



6. SWPPP MODIFICATION TRACKING SHEET

Revision	Date	Details/Comments
00	October 2020	Original SWPPP



Appendix J

USG SPCC Plan (Draft)

University of Maryland

UNIVERSITIES AT SHADY GROVE (USG)

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN (SPCC)

APRIL 2020

EXECUTIVE SUMMARY

A Spill Prevention Control and Countermeasure (SPCC) Plan is required to be prepared and implemented to comply with U.S. Environmental Protection Agency (USEPA) regulations of Title 40, Code of Federal Regulations, Part 112 (40 CFR 112) as well as the Code of Maryland Regulations (COMAR) 26.10.01. Facilities are subject to SPCC regulations if: the total aboveground storage tank (AST) capacity exceeds 1,320 gallons; or the underground storage tank (UST) capacity exceeds 42,000 gallons AND the facility can be reasonably expected to discharge oil into or upon the navigable waters of the United States [40 CFR 112.1].

This SPCC Plan for the University of Maryland (UMD) Universities at Shady Grove (USG) was created using the USEPA's "Tier I Qualified Facility SPCC Plan Template" in order to meet the applicable federal requirements. In addition to the procedures outlined in this plan, the State of Maryland also requires that any volume of oil spilled, regardless of whether or not it reaches navigable waters, must be reported within two (2) hours by phone to 1-866-633-4686, and a spill report (included as Attachment 5 of this plan) must be submitted within ten (10) working days via email to mdeerd.mema@maryland.gov.

USG staff will be responsible for implementing all aspects of this SPCC plan including, reporting, recordkeeping, spill prevention, spill cleanup and ensuring that all of its information is accurate and up-to-date. The UMD Environmental Affairs Unit will assist with the plan implementation as needed.

UNIVERSITIES AT SHADY GROVE Spill Prevention Control and Countermeasures Plan Table of Contents & Attachments

Contents

- Section I Self-Certification Statement
- Section II Record of Plan Review and Amendments
- Section III Plan Requirements
 - III.1 Oil Storage Containers
 - III.2 Secondary Containment and Oil Spill Control
 - III.3 Inspections, Testing, Recordkeeping and Personnel Training
 - III.4 Security
 - III.5 Emergency Procedures and Notifications
 - III.6 Contact List
 - III.7 NRC Notification Procedure
 - III.8 Federal SPCC Spill Reporting Requirements
- Section A Onshore Facilities Requirements Checklist

Attachments

- 1 Five Year Review and Technical Amendment Logs
- 2 Oil Spill Contingency Plan & Checklist
- 3 Inspections, Dike Drainage and Personnel Training Logs
- 4 Federal Discharge Notification Form and State of Maryland Spill Report Form
- 5 Oil/Water Separator (OWS) Inspections
- 6 Site Map
- 7 Response Action Flowchart



U.S. ENVIRONMENTAL PROTECTION AGENCY TIER I QUALIFIED FACILITY SPCC PLAN TEMPLATE

Instructions to Complete this Template

This template is intended to help the owner or operator of a Tier I qualified facility develop a self-certified Spill Prevention, Control, and Countermeasure (SPCC) Plan. To use this template, your facility must meet all of the applicability criteria of a Tier I qualified facility listed under §112.3(g)(1) of the SPCC rule. This template provides every SPCC rule requirement necessary for a Tier I qualified facility, which you must address and implement.

You may use this template to comply with the SPCC regulation or use it as a model and modify it as necessary to meet your facility-specific needs. If you modify the template, your Plan must include a section cross-referencing the location of each applicable requirement of the SPCC rule and you must ensure that your Plan is an equivalent Plan that meets all applicable rule requirements of 40 CFR 112.6(a)(3).

You may complete this template either electronically or by hand on a printed copy. This document is a reformatted version of the template found in Appendix G of 40 CFR part 112.^a No substantive changes have been made. Please note that a "Not Applicable" ("N/A") column has been added to both Table G-10 (General Rule Requirements for Onshore Facilities) and Table G-11 (General Rule Requirements for Onshore Oil Production Facilities). The "N/A" column should help you complete your self-certification when a required rule element does not apply to your facility. Use of the "N/A" column is optional and is not required by rule.

All Tier I qualified facility self-certifiers must complete Sections I, II, and III. Additionally, the owner or operator of an:

- Onshore facility (excluding production) must complete Section A.
- Onshore oil production facility (excluding drilling and workover facilities) must complete Section B.
- Onshore oil drilling and workover facility must complete Section C.

Complete and include with your Plan the appropriate attachments. You should consider printing copies of the attachments for use in implementing the SPCC Plan (e.g. Attachment 3.1 - Inspection Log & Schedule; Attachment 4 - Discharge Notification Form).

To complete the template, check the box next to the requirement to indicate that it has been adequately addressed. Either write "N/A" in the column or check the box under the "N/A" column to indicate those requirements that are not applicable to the facility. Where a section requires a description or listing, write in the spaces provided (or attach additional descriptions if more space is needed).

Below is a key for the colors used in the section headers:

Sections I, II, and III: Required for all Tier I qualified facilities
Section A: Onshore facilities (excluding production)
Section B: Onshore oil production facilities (excluding drilling and workover facilities)
Section C: Onshore oil drilling and workover facilities
Attachments: 1 - Five Year Review and Technical Amendment Logs2 - Oil Spill Contingency Plan and Checklist3 - Inspections, Dike Drainage and Personnel Training Logs4 - Discharge Notification Form

After you have completed all appropriate sections, certify and date your Plan, and then implement it by the compliance date. If your facility was in operation before August 16, 2002, and you do not already have a Plan, then implement this template immediately. Conduct inspections and tests in accordance with the written procedures that you have developed for your facility. You must keep with the SPCC Plan a record of these inspections and tests, signed by the appropriate supervisor or inspector, for a period of three years.

Do not forget to periodically review your Plan (at least once every five years) or to update it when you make changes to your facility. You must prepare amendments within six months of the facility change, and implement them as soon as possible, but not later than six months following preparation of any amendment.

In the event that your facility releases oil to navigable waters or adjoining shorelines, immediately call the National Response Center (NRC) at 1-800-424-8802. The NRC is the federal government's centralized reporting center, which is staffed 24 hours per day by U.S. Coast Guard personnel.

^a Please note that the use of this template is not mandatory for a Tier I qualified facility. You may also meet the SPCC Plan requirement by preparing a satisfactory Tier II qualified facility Plan, preparing a satisfactory Plan that is certified by a Professional Engineer, or by developing an equivalent Plan for a Tier I qualified facility. Further information on the requirements of these methods can be found in 40 CFR part 112.6(a)(1). If you use any of these alternative methods you must include a cross reference in your Plan that shows how the equivalent Plan meets all applicable 40 CFR part 112 requirements.

Tier I Qualified Facility SPCC Plan

This template constitutes the SPCC Plan for the facility, when completed and signed by the owner or operator of a facility that meets the applicability criteria in §112.3(g)(1). This template addresses the requirements of 40 CFR part 112. Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or for a facility attended fewer than four hours per day, at the nearest field office. When making operational changes at a facility that are necessary to comply with the rule requirements, the owner/operator should follow state and local requirements (such as for permitting, design and construction) and obtain professional assistance, as appropriate.

Facility Description

Facility Name			
Facility Address			
City	Sta	.te	ZIP
County	Tel. Numb	er () -	
Owner or Operator Name			
Owner or Operator Address			
City	Sta	.te	ZIP
County	Tel. Numb	er_() -	

I. Self-Certification Statement (§112.6(a)(1))

The owner or operator of a facility certifies that each of the following is true in order to utilize this template to comply with the SPCC requirements:

Т

certify that the following is accurate:

- 1. I am familiar with the applicable requirements of 40 CFR part 112;
- 2. I have visited and examined the facility;
- 3. This Plan was prepared in accordance with accepted and sound industry practices and standards;
- 4. Procedures for required inspections and testing have been established in accordance with industry inspection and testing standards or recommended practices;
- 5. I will fully implement the Plan;
- 6. This facility meets the following qualification criteria (under §112.3(g)(1)):
 - a. The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less; and
 - b. The facility has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons and no two discharges as described in §112.1(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war, or terrorism); and
 - c. There is no individual oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.
- This Plan does not deviate from any requirement of 40 CFR part 112 as allowed by §112.7(a)(2) (environmental equivalence) and §112.7(d) (impracticability of secondary containment) or include any measures pursuant to §112.9(c)(6) for produced water containers and any associated piping;
- 8. This Plan and individual(s) responsible for implementing this Plan have the full approval of management and I have committed the necessary resources to fully implement this Plan.

I also understand my other obligations relating to the storage of oil at this facility, including, among others:

- 1. To report any oil discharge to navigable waters or adjoining shorelines to the appropriate authorities. Notification information is included in this Plan.
- 2. To review and amend this Plan whenever there is a material change at the facility that affects the potential for an oil discharge, and at least once every five years. Reviews and amendments are recorded in an attached log [See Five Year Review Log and Technical Amendment Log in Attachments 1.1 and 1.2.]
- 3. Optional use of a contingency plan. A contingency plan:
 - a. May be used in lieu of secondary containment for qualified oil-filled operational equipment, in accordance with the requirements under §112.7(k), and;
 - b. Must be prepared for flowlines and/or intra-facility gathering lines which do not have secondary containment at an oil production facility, and;
 - c. Must include an established and documented inspection or monitoring program; must follow the provisions of 40 CFR part 109; and must include a written commitment of manpower, equipment and materials to expeditiously remove any quantity of oil discharged that may be harmful. If applicable, a copy of the contingency plan and any additional documentation will be attached to this Plan as Attachment 2.

I certify that I have satisfied the requirement to prepare and implement a Plan under §112.3 and all of the requirements under §112.6(a). I certify that the information contained in this Plan is true.

Signature	Title:		
Name	Date:	/	/ 20

II. Record of Plan Review and Amendments

Five Year Review (§112.5(b)):

Complete a review and evaluation of this SPCC Plan at least once every five years. As a result of the review, amend this Plan within six months to include more effective prevention and control measures for the facility, if applicable. Implement any SPCC Plan amendment as soon as possible, but no later than six months following Plan amendment. Document completion of the review and evaluation, and complete the Five Year Review Log in Attachment 1.1. If the facility no longer meets Tier I qualified facility eligibility, the owner or operator must revise the Plan to meet Tier II qualified facility requirements, or complete a full PE certified Plan.

Table G-1 Technical Amendments (§§112.5(a), (c) and 112.6(a)(2))	
This SPCC Plan will be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures.	
Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template.	
maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures. Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template. [§112.6(a)(2)] [See Technical Amendment Log in Attachment 1.2]	

III. Plan Requirements

1. Oil Storage Containers (§112.7(a)(3)(i)):

Table G-2 Oil S	torage Containers and Capacities		
This table includes a complete list of all oil storage tanks ^b) with capacity of 55 U.S. gallons or more, up	containers (aboveground containers ^a a nless otherwise exempt from the rule. F	nd completely buried or mobile/portable	
Containers, an estimated number of containers, typ	Jes of oil, and anticipated capacities are	provided.	
aboveground (A) or completely buried (B))	Type of Oil	Shell Capacity (ga	llons)
*All transformers at USG are owned by and the responsibility Tot	tal Aboveground Storage Capacity ^c	gal	lons
of the Potomac Electric Power Company (Pepco) Total C	Completely Buried Storage Capacity	gal	lons
	Facility Total Oil Storage Capacity	gal	lons

^a Aboveground storage containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

^b Although the criteria to determine eligibility for qualified facilities focuses on the aboveground oil storage containers at the facility, the completely buried tanks at a qualified facility are still subject to the rule requirements and must be addressed in the template; however, they are not counted toward the qualified facility applicability threshold.

^c Counts toward qualified facility applicability threshold.

2. Secondary Containment and Oil Spill Control (§§112.6(a)(3)(i) and (ii), 112.7(c) and 112.9(c)(2)):

Table G-3 Secondary Containment and Oil Spill Control

Appropriate secondary containment and/or diversionary structures or equipment^a is provided for all oil handling containers, equipment, and transfer areas to prevent a discharge to navigable waters or adjoining shorelines. The entire secondary containment system, including walls and floor, is capable of containing oil and is constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs.

^a Use one of the following methods of secondary containment or its equivalent: (1) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) Curbing; (3) Culverting, gutters, or other drainage systems; (4) Weirs, booms, or other barriers; (5) Spill diversion ponds; (6) Retention ponds; or (7) Sorbent materials.

Table G-4 below identifies the tanks and containers at the facility with the potential for an oil discharge; the mode of failure; the flow direction and potential quantity of the discharge; and the secondary containment method and containment capacity that is provided.

	Table G-4 Containers with Pot	ential for an Oil	Discharge		
Area	Type of failure (discharge scenario)	Potential discharge volume (gallons)	Direction of flow for uncontained discharge	Secondary containment method ^a	Secondary containment capacity (gallons)
Bulk Storage Containers and Mobile/Portable	le Containers ^b			•	
Oil-filled Operational Equipment (e.g., hydra	ulic equipment, transformers) ^c		-	-	
Piping, Valves, etc.					
Product Transfer Areas (location where oil is	s loaded to or from a container, pipe or	other piece of e	quipment.)		-
Other Oil-Handling Areas or Oil-Filled Equip	ment (e.g. flow-through process vesse	ls at an oil produ	ction facility)		

^a Use one of the following methods of secondary containment or its equivalent: (1) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) Curbing; (3) Culverting, gutters, or other drainage systems; (4) Weirs, booms, or other barriers; (5) Spill diversion ponds; (6) Retention ponds; or (7) Sorbent materials.

^b For storage tanks and bulk storage containers, the secondary containment capacity must be at least the capacity of the largest container plus additional capacity to contain rainfall or other precipitation.

^c For oil-filled operational equipment: Document in the table above if alternative measures to secondary containment (as described in §112.7(k)) are implemented at the facility.

Inspections, Testing, Recordkeeping and Personnel Training (§§112.7(e) and (f), 112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)):

Table G-5 Inspections, Testing, Recordkeeping and Personnel Training		
An inspection and/or testing program is implemented for all above ground bulk storage containers and piping at this facility. [$\$12.8(c)(6)$ and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)]		
The following is a description of the inspection and/or testing program (e.g. reference to industry standard utilized scope, frequency, method of inspection or test, and person conducting the inspection) for all aboveground bulk s containers and piping at this facility:	d, torage	
Inspections, tests, and records are conducted in accordance with written procedures developed for the facility. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph. [§112.7(e)]		
A record of the inspections and tests are kept at the facility or with the SPCC Plan for a period of three years. [§112.7(e)] [See Inspection Log and Schedule in Attachment 3.1]		
Inspections and tests are signed by the appropriate supervisor or inspector. [§112.7(e)]		
Personnel, training, and discharge prevention procedures [§112.7(f)]		
Oil-handling personnel are trained in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan. [§112.7(f)]		
A person who reports to facility management is designated and accountable for discharge prevention. [§112.7(f)]		
Name/Title:		
Discharge prevention briefings are conducted for oil-handling personnel annually to assure adequate understanding of the SPCC Plan for that facility. Such briefings highlight and describe past reportable discharges or failures, malfunctioning components, and any recently developed precautionary measures. <i>[§112.7(f)]</i> [See Oil-handling Personnel Training and Briefing Log in Attachment 3.4]		

4. Security (excluding oil production facilities) §112.7(g):

5. Emergency Procedures and Notifications (§112.7(a)(3)(iv) and 112.7(a)(5)):

Table G-7 Description of Emergency Procedures and Notifications

The following is a description of the immediate actions to be taken by facility personnel in the event of a discharge to navigable waters or adjoining shorelines [§112.7(a)(3)(iv) and 112.7(a)(5)]:

6. Contact List (§112.7(a)(3)(vi)):

Table G-8 Contact List				
Contact Organization / Person	Telephone Number			
National Response Center (NRC)	1-800-424-8802			
Cleanup Contractor(s)				
Key Facility Personnel				
Designated Person Accountable for Discharge Prevention:	Office:			
	Emergency:			
	Office:			
	Emergency:			
	Office:			
	Emergency:			
	Office:			
	Emergency:			
State Oil Pollution Control Agencies				
Other State, Federal, and Local Agencies				
Local Fire Department				
Local Police Department				
Hospital				
Other Contact References (e.g., downstream water intakes or neighboring facilities)				

7. NRC Notification Procedure (§112.7(a)(4) and (a)(5)):

Table G-9 NRC Notification Procedure			
In the event of a discharge of oil to navigable waters or adjoin Attachment 4 will be provided to MDE immediately follow following identification of a discharge to navigable waters o Form in Attachment 41 : [§112.7(a)(4)]	oining shorelines, the following information identified ving identification of a discharge and to the NRC or adjoining shorelines [See Discharge Notification]	
 The exact address or location and phone number of the facility; Date and time of the discharge; Type of material discharged; Estimate of the total quantity discharged; Estimate of the quantity discharged to navigable waters; Source of the discharge; 	 Description of all affected media; Cause of the discharge; Any damages or injuries caused by the discharge; Actions being used to stop, remove, and mitigate the effects of the discharge; Whether an evacuation may be needed; and Names of individuals and/or organizations who have also been contacted. 		

8. SPCC Spill Reporting Requirements (Report within 60 days) (§112.4):

Submit information to the EPA Regional Administrator (RA) and the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located within 60 days from one of the following discharge events:

A single discharge of more than 1,000 U.S. gallons of oil to navigable waters or adjoining shorelines or Two discharges to navigable waters or adjoining shorelines each more than 42 U.S. gallons of oil occurring within any twelve month period

You must submit the following information to the RA:

- (1) Name of the facility;
- (2) Your name;
- (3) Location of the facility;
- (4) Maximum storage or handling capacity of the facility and normal daily throughput;
- (5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;
- (6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- (7) The cause of the reportable discharge, including a failure analysis of the system or subsystem in which the failure occurred; and
- (8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence
- (9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge

A. Onshore Facilities (excluding production) (§§112.8(b) through (d), 112.12(b) through (d)):

The owner or operator must meet the general rule requirements as well as requirements under this section. Note that not all provisions may be applicable to all owners/operators. For example, a facility may not maintain completely buried metallic storage tanks installed after January 10, 1974, and thus would not have to abide by requirements in §§112.8(c)(4) and 112.12(c)(4), listed below. In cases where a provision is not applicable, write "N/A".

Table G-10 General Rule Requirements for Onshore Facilities		N/A		
Drainage from diked storage areas is restrained by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. Diked areas may be emptied by pumps or ejectors that must be manually activated after inspecting the condition of the accumulation to ensure no oil will be discharged. [§§112.8(b)(1) and				
112.12(b)(1)]				
values of manual, open-and-closed design are used for the drainage of diked areas. [§§ $112.6(b)(2)$ and $112.12(b)(2)$]				
The containers at the facility are compatible with materials stored and conditions of storage such as				
pressure and temperature. [§§112.8(c)(1) and 112.12(c)(1)]				
holds the capacity of the largest container plus additional capacity to contain precipitation. Mobile or portable oil storage containers are positioned to prevent a discharge as described in §112.1(b). [§112.6(a)(3)(ii)]				
If uncontaminated rainwater from diked areas drains into a storm drain or open watercourse the following procedures will be implemented at the facility: $[\$\$12.8(c)(3) \text{ and } 112.12(c)(3)]$				
Bypass valve is normally sealed closed				
 Retained rainwater is inspected to ensure that its presence will not cause a discharge to navigable waters or adjoining shorelines 				
Bypass valve is opened and resealed under responsible supervision				
Adequate records of drainage are kept [See Dike Drainage Log in Attachment 3.3]				
 For completely buried metallic tanks installed on or after January 10, 1974 at this facility [§§112.8(c)(4) and 112.12(c)(4)]: Tanks have corrosion protection with coatings or cathodic protection compatible with local soil conditions 				
Regular leak testing is conducted				
For partially buried or bunkered metallic tanks [§112.8(c)(5) and §112.12(c)(5)]:				
 Tanks have corrosion protection with coatings or cathodic protection compatible with local soil conditions. 				
Each aboveground bulk container is tested or inspected for integrity on a regular schedule and whenever material repairs are made. Scope and frequency of the inspections and inspector qualifications are in				
accordance with industry standards. Container supports and foundations are regularly inspected.				
[See Inspection Log and Schedule and Bulk Storage Container Inspection Schedule In Attachments 3.1 and 3.2] [8112.8(c)(6) and 8112.12(c)(6)(i)]				
Outsides of bulk storage containers are frequently inspected for signs of deterioration, discharges, or				
accumulation of oil inside diked areas. [See Inspection Log and Schedule in Attachment 3.1]				
For bulk storage containers that are subject to 21 CFR part 110 which are shop-fabricated, constructed of				
austenitic stainless steel, elevated and have no external insulation, formal visual inspection is conducted				
on a regular schedule. Appropriate qualifications for personnel performing tests and inspections are				
accumented. [See Inspection Log and Schedule and Bulk Storage Container Inspection Schedule in Attachments 3.1 and 3.21 /§112.12(c)(6)(ii)]				

Table G-10 General Rule Requirements for Onshore Facilities	1	N/A
Each container is provided with a system or documented procedure to prevent overfills for the container. Describe:		
Liquid level sensing devices are regularly tested to ensure proper operation [See Inspection Log and Schedule in Attachment 3.1]. [§112.6(a)(3)(iii)]		
Visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts are promptly corrected and oil in diked areas is promptly removed. [§§112.8(c)(10) and 112.12(c)(10)]		
Aboveground valves, piping, and appurtenances such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are inspected regularly. [See Inspection Log and Schedule in Attachment 3.1] [§12.8(d)(4) and 112.12(d)(4)]		
Integrity and leak testing are conducted on buried piping at the time of installation, modification, construction, relocation, or replacement. [See Inspection Log and Schedule in Attachment 3.1] [§§112.8(d)(4) and 112.12(d)(4)]		

ATTACHMENT 1.1 – Five Year Review Log

I have completed a review and evaluation of the SPCC Plan for this facility, and will/will not amend this Plan as a result.

Table G-13 Review and Evaluation of SPCC Plan for Facility			
Review Date	Plan Ar Will Amend	nendment Will Not Amend	Name and signature of person authorized to review this Plan

ATTACHMENT 1.2 – Technical Amendment Log

Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template.

Table G-15 Description and Certification of Technical Amendments				
Review	Description of Technical Amendment	Name and signature of person certifying this		
Date		technical amendment		

Not Applicable

ATTACHMENT 2 – Oil Spill Contingency Plan and Checklist

An oil spill contingency plan and written commitment of resources is required for:

- Flowlines and intra-facility gathering lines at oil production facilities and
- Qualified oil-filled operational equipment which has no secondary containment.

An oil spill contingency plan meeting the provisions of 40 CFR part 109, as described below, and a written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful is attached to this Plan.

Complete the checklist below to verify that the necessary operations outlined in 40 CFR part 109 - Criteria for State, Local and Regional Oil Removal Contingency Plans - have been included.

Table G-15 Checklist of Development and Implementation Criteria for State, Local and Regional Oil Ren Contingency Plans (§109.5) ^a	noval
(a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved in planning or directing oil removal operations.	
(b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:	
 (1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges. (2) A current list of names, telephone numbers and addresses of the responsible persons (with alternates) and organizations to be notified when an oil discharge is discovered. 	
(3) Provisions for access to a reliable communications system for timely notification of an oil discharge, and the capability of interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans (e.g., NCP).	
(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.	
(c) Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:	
(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.	
(2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.	
(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.	
(d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:	
(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.	
(2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.	
(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.	
(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.	
(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.	
(6) Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.	

^a The contingency plan must be consistent with all applicable state and local plans, Area Contingency Plans, and the National Contingency Plan (NCP)

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

This log is inte	Table G-16 Inspection Log and Schedule This log is intended to document compliance with §§112.6(a)(3)(iii), 112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1), 112.9(d)(4), 112.12.(c)(6), and 112.12(d)(4), as applicable.				
Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production):

To comply with integrity inspection requirement for bulk storage containers, inspect/test each shop-built aboveground bulk storage container on a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table.

Table G-17 Bulk Storage Container Inspection Schedule			
Container Size and Design Specification	Inspection requirement		
Portable containers (including drums, totes, and intermodal bulk containers (IBC))	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas		
55 to 1,100 gallons with sized secondary containment 1,101 to 5,000 gallons with sized secondary containment and a means of leak detection ^a	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas plus any annual inspection elements per industry inspection standards		
1,101 to 5,000 gallons with sized secondary containment and no method of leak detection ^a	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas, plus any annual inspection elements and other specific integrity tests that may be required per industry inspection standards		

^a Examples of leak detection include, but are not limited to, double-walled tanks and elevated containers where a leak can be visually identified.

Site: Universities at Shady Grove			Notes:	
Map Number: 1 Building: Building 2 Containment: Double Walled Type: AST for Genera		enerator	Tank ID: DF-1 Contents: Diesel Fuel Capacity: 250 gallons	
Additional Inform	nation:			
(check all that app	oly)			
□ In Contact wi	ith $\overline{\text{Ground}}$ \Box Not in Conta	act with Gro	und Cathodic Protection Installed	
\Box Equipped with	th Manway 🛛 🗆 Not Equipp	ed with Mai	ıway	
	I	nspection Re	equirements	
Status	Item to check	Comments		
Month 1 - Month Inspector:	ly Inspection	D	ate:	
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 2 - Month	ly Inspection			
Inspector:		D	ate:	
	Tank Condition			
	Secondary containment			
	Pipe/nose connections			
Month 3 - Quart Inspector:	erly Inspection	D	ate:	
	Tank Condition			
Secondary containment				
Pipe/hose connections				
Exterior Coating				
Primary and emergency vents				
Month 4 - Month	nly Inspection	ח	ate	
mspector.	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 5 - Month	ly Inspection	I		
Inspector:		D	ate:	
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 6 - Quarterly Inspection Inspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
	Exterior Coating			
	Primary and emergency vents			

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove			Notes:	
Map Number: 1 Building: Building 3 Containment: Double Walled Type: AST for Genera		enerator	Tank ID: DF-2 Contents: Diesel Fuel Capacity: 500 gallons	
Additional Inform	nation:			
(check all that app	ply)			
□ In Contact with	ith Ground 🛛 🗆 Not in Conta	act with Gro	ound Cathodic Protection Installed	
\Box Equipped with	th Manway 🛛 🗆 Not Equipp	ed with Mar	away	
	T	nanastian De		
Status	Item to check	Comments	quirements	
Status	item to eneck	Comments		
Month 1 - Month Inspector:	ly Inspection	D	ate:	
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Manth 2 March				
Inspector:	ny inspection	D	ate	
mspector.	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 3 - Quart Inspector:	erly Inspection	Da	ate:	
	Tank Condition			
Secondary containment				
Pipe/hose connections				
Exterior Coating				
Primary and emergency vents				
Month 4 - Month	nly Inspection	D	ate	
inspector.	Tank Condition		atc	
	Secondary containment			
	Pipe/hose connections			
	Å			
Month 5 - Month	nly Inspection	D	ata	
	Tank Condition		utc	
	Secondary containment			
	Pipe/hose connections			
Month 6 - Quarterly Inspection Inspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
	Exterior Coating			
	Primary and emergency vents			

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove			Notes:	
Map Number: 1 Building: Building 4 Containment: Double Walled Type: AST for Gene		enerator	Tank ID: DF-3 Contents: Diesel Fuel Capacity: 1300 gallons	
Additional Inform	nation:			
(check all that app	oly)			
□ In Contact with	ith Ground 🛛 🗆 Not in Conta	act with Gro	ound Cathodic Protection Installed	
\Box Equipped with	th Manway 🛛 🗆 Not Equipp	ed with Mar	away	
	T	nanation De		
Status	Item to check	Comments	quirements	
Status	item to encek	Comments		
Month 1 - Month Inspector:	nly Inspection	D	ate:	
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Ivionth 2 - Month	ny inspection	Л	ate	
Inspector.	Tank Condition		atc	
	Secondary containment			
	Pipe/hose connections			
Month 3 - Quart Inspector:	erly Inspection	D	ate:	
	Tank Condition			
Secondary containment				
Pipe/hose connections				
Exterior Coating				
Primary and emergency vents				
Month 4 - Month	nly Inspection	ח	ate	
hispector.	Tank Condition		atc	
	Secondary containment			
	Pipe/hose connections			
Month 5 - Month	nly Inspection	Л	ata	
mspeciol.	Tank Condition	U.	att	
	Secondary containment			
	Pipe/hose connections			
Month 6 - Quarterly Inspection Inspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
	Exterior Coating			
	Prinary and emergency vents			

Month 7 - Monthly Inspection Inspector:	Date:	
Tank Condition		
Secondary containment		
Pipe/hose connections		
Month 8 - Monthly Inspection Inspector:	Date:	
Tank Condition		
Secondary containment		
Pipe/hose connections		
Month 9 - Quarterly Inspection Inspector:	Date:	
Tank Condition		
Secondary containment		
Pipe/hose connections		
Exterior Coating		
Primary and emergency vents		
Month 10 - Monthly Inspection Inspector:	Date:	
Tank Condition		
Secondary containment		
Pipe/hose connections		
Month 11 - Monthly Inspection Inspector:	Date:	
Tank Condition		
Secondary containment		
Pipe/hose connections		
Month 12 - Annual Inspection/Annual Photo Date: Inspector:		
Tank Condition		
Secondary containment		
Pipe/hose connections		
Exterior Coating		
Primary and emergency vents		
Test Level Gauges		
Emergency vents, O-rings, and gaskets		
Tank supports		
Tank foundation		
Inspector:	Date:	
Comments:		

Notes:

Site: Universities at Shady Grove		Notes:		
Map Number: 1Building: Parking Garage 1Containment: Double WalledType: AST for Generator		enerator	Tank ID: DF-4 Contents: Diesel Fuel Capacity: 175 gallons	
Additional Information:				
(check all that app	bly)			
\Box In Contact with	ith Ground \Box Not in Conta	act with Gro	ound Cathodic Protection Installed	
\Box Equipped with Manway \Box Not Equipped with Manway				
Inspection Requirements				
Status	Item to check	Comments		
Month 1 - Monthly Inspection Inspector: Date:				
•	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 2 - Monthly Inspection				
inspector:	Tank Condition	D	ale:	
	Secondary containment			
	Pipe/hose connections			
Month 3 - Quarterly Inspection Inspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
	Exterior Coating			
	Primary and emergency vents			
Month 4 - Monthly Inspection				
inspector.	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
		I		
Month 5 - Monthly Inspection Unspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
Month 6 - Quarterly Inspection Inspector: Date:				
	Tank Condition			
	Secondary containment			
	Pipe/hose connections			
	Exterior Coating			
	Primary and emergency vents			
Month 7 - Monthly Inspection Inspector:	Date:			
---	-------			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Month 8 - Monthly Inspection Inspector:	Date:			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Month 9 - Quarterly Inspection Inspector:	Date:			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Exterior Coating				
Primary and emergency vents				
Month 10 - Monthly Inspection Inspector:	Date:			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Month 11 - Monthly Inspection Inspector:	Date:			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:			
Tank Condition				
Secondary containment				
Pipe/hose connections				
Exterior Coating				
Primary and emergency vents				
Test Level Gauges				
Emergency vents, O-rings, and gaskets				
Tank supports				
Tank foundation				
Inspector:	Date:			
Comments:				

Notes:

Site: Universit	ies at Shady Grove		Notes:
Map Number: 1 Building: Building 1 Containment: Sealed Room Type: AST for Elevator		vator	Tank ID: HO-1 Contents: Hydraulic Oil Capacity: 200 gallons
Additional Inform	nation:		
(check all that app	ply)		
\Box In Contact with	ith Ground \Box Not in Conta	act with Gro	und Cathodic Protection Installed
Equipped with	th Manway 🗆 Not Equipp	ed with Mai	ıway
	Ι	nspection Re	equirements
Status	Item to check	Comments	
Month 1 - Month Inspector:	Month 1 - Monthly Inspection		
•	Tank Condition		
	Secondary containment		
	Pipe/hose connections		
Month 2 - Monthly Inspection			
Inspector:	Tank Condition		ate:
	Secondary containment		
	Pipe/hose connections		
Month 3 - Quarterly Inspection Inspector: Date:			
	Tank Condition		
	Secondary containment		
	Pipe/hose connections		
	Exterior Coating		
Primary and emergency vents			
Month 4 - Monthly Inspection			
mspectori	Tank Condition		
	Secondary containment		
	Pipe/hose connections		
Month 5 - Monthly Inspection			
mspector.	Tank Condition		ato
	Secondary containment		
	Pipe/hose connections		
Month 6 - Quarterly Inspection Inspector: Date:			
	Tank Condition		
	Secondary containment		
	Pipe/hose connections		
	Exterior Coating		
	Frimary and emergency vents		

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove		Notes: Not Owned by USG
Map Number: 1 Building: Building 1		Tank ID: TX-1
Containment: Si	ngle Walled/Locked	Contents: Mineral Oil Capacity: 700 gallons
Type: Transform	er*	
Additional Inform	nation:	
(check all that ap	ply)	
□ In Contactw	The formula \Box Not in Contact with Grad	ound Cathodic Protection Installed
Equipped wi	th Manway \Box Not Equipped with Ma	anway
	Inspection I	lequirements
Status	Item to check Commen	ts
Month 1 - Mont	hly Inspection	Data
Пізрескої.	Tank Condition	Jate
	Secondary containment	
	Pipe/hose connections	
Month 2 - Mont	hly Inspection	
Inspector:		Date:
	Tank Condition	
	Dipe/hose connections	
	ripe/hose connections	
Month 3 - Quart	terly Inspection	
Inspector:]	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	
Month 1 Mont	hl. Transation	
Inspector:		Date
mspecter.	Tank Condition	<u> </u>
	Secondary containment	
	Pipe/hose connections	
Month 5 - Mont	hly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 6 - Quart Inspector:	terly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove		Notes: Not Owned by USG
Map Number: 1 Building: Building 3		Tank ID: TX-2
Containment: Si	ngle Walled/Locked	Contents: Mineral Oil Capacity: 700 gallons
Type: Transform	er*	
Additional Inform	nation:	
(check all that ap	ply)	
\Box In Contact w	The Ground \Box Not in Contact with Groups \Box Not Equipped with Ma	ound Cathodic Protection Installed
🗆 Equipped wi	th Manway \Box Not Equipped with Ma	nway
	Inspection R	equirements
Status	Item to check Comment	S
Month 1 - Month	hly Inspection	Noto.
Inspector.	Tank Condition	<i>Jale:</i>
	Secondary containment	
	Pipe/hose connections	
Month 2 - Month Inspector:	hly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 3 - Quart	terly Inspection	Date:
mspoorer.	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	
Month 4 - Mont	hly Inspection	
Inspector:	L Tarl Condition	Date:
	Tank Condition	
	Pipe/hose connections	
	ripe/hose connections	
Month 5 - Month Inspector:	hly Inspection E	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 6 - Quart Inspe <u>ctor:</u>	terly Inspection E	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove		Notes: Not Owned by USG
Map Number: 1 Building: Parking Garage 2		Tank ID: TX-3
Containment: Si	ngle Walled/Locked	Contents: Mineral Oil Capacity: 700 gallons
Type: Transform	er*	
Additional Inform	nation:	
(check all that app	$\frac{1}{1} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^$	
□ In Contactw	1th Ground	Dund Cathodic Protection Installed
🗆 Equipped wi	th Manway 🗆 Not Equipped with Ma	nway
	Inspection R	equirements
Status	Item to check Comments	
Month 1 - Montl	hly Inspection	ate.
Inspector.	Tank Condition	atc
	Secondary containment	
	Pipe/hose connections	
Month 2 - Montl	hly Inspection	
Inspector:	D D D D D D D D D D D D D D D D D D D	ate:
	Tank Condition	
	Dipo/hose connections	
	Pipe/nose connections	
Month 3 - Quart Inspector:	terly Inspection	ate:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	
No. 41-4 Mon41	· · · · ·	
Month 4 - Monti	hly Inspection	lata.
Inspector.	Tank Condition	ate:
	Secondary containment	
	Pipe/hose connections	
Month 5 - Montl	hly Inspection	
Inspector:	Tank Condition	ate:
	Secondary containment	
	Pipe/hose connections	
Month 6 - Quart Inspector:	terly Inspection D	ate:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove		Notes: Not Owned by USG
Map Number: 1 Building: Building 4		Tank ID: TX-4
Containment: Si	ngle Walled/Locked	Contents: Mineral Oil Capacity: 700 gallons
Type: Transform	er*	
Additional Inform	nation:	
(check all that app	ply)	
\Box In Contactw	ith Ground \Box Not in Contact with Gro	ound Cathodic Protection Installed
□ Equipped wi	th Manway \Box Not Equipped with Mai	away
	Inspection Ro	equirements
Status	Item to check Comments	
Month 1 - Montl	hly Inspection	ata
Inspector.	Tank Condition	atc
	Secondary containment	
	Pipe/hose connections	
Month 2 - Montl Inspector:	hly Inspection D	ate:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 3 - Quart Inspector:	Month 3 - Quarterly Inspection	
T	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	
Month 4 - Montl	hly Inspection	
Inspector:	D The Constitution	ate:
	Tank Condition	
	Dipe/hose connections	
	ripe/liose connections	
Month 5 - Montl Inspector:	hly Inspection	ate:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 6 - Quart	erly Inspection	ate.
Inspector.	Tank Condition	atc
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

Site: Universities at Shady Grove		Notes: Not Owned by USG
Map Number: 1 Building: Building 4		Tank ID: TX-5
Containment: Si	ngle Walled/Locked	Contents: Mineral Oil Capacity: 700 gallons
Type: Transform	ler*	
Additional Inform	nation:	
(check all that ap	ply)	
□ In Contact w	The Ground \Box Not in Contact with $Groups d$	ound Cathodic Protection Installed
🗆 Equipped wi	th Manway \Box Not Equipped with Ma	inway
	Inspection R	equirements
Status	Item to check Comment	S
Month 1 - Mont	hly Inspection	Data.
Inspector.	Tank Condition	Jate
	Secondary containment	
	Pipe/hose connections	
Month 2 - Mont	hly Inspection	N-4
Inspector:	Tank Condition	Jate:
	Secondary containment	
	Pipe/hose connections	
Month 3 - Quart Inspector:	terly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	
	· · · /•	
Month 4 - Mont	hly Inspection	Jata:
Inspector.	Tank Condition	Jate:
	Secondary containment	
	Pipe/hose connections	
Month 5 - Mont Inspector:	hly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
Month 6 - Quart Inspector:	terly Inspection	Date:
	Tank Condition	
	Secondary containment	
	Pipe/hose connections	
	Exterior Coating	
	Primary and emergency vents	

Month 7 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 8 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 9 - Quarterly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Month 10 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 11 - Monthly Inspection Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Month 12 - Annual Inspection/Annual Pho Inspector:	Date:
Tank Condition	
Secondary containment	
Pipe/hose connections	
Exterior Coating	
Primary and emergency vents	
Test Level Gauges	
Emergency vents, O-rings, and gaskets	
Tank supports	
Tank foundation	
Inspector:	Date:
Comments:	

Notes:

ATTACHMENT 3.3 – Oil-handling Personnel Training and Briefing Log

	Table G-19 Oil-Handling Persor	nnel Training and Briefing Log
Date	Description / Scope	Attendees



Environmental Safety, Sustainability & Risk

Spill Prevention, Control, and Countermeasures (SPCC) for USG





The Purpose of an SPCC Plan is to prevent the discharge of oil into navigable waters of the United States or adjoining shorelines as opposed to response and cleanup after a spill occurs.







The Law

Oil Pollution Prevention Rule

- Became effective January, 1974 (revised many time with the most recent in 2011).
- Authority Section 311 (j) (1) (c) of the Clean Water Act
- Promulgated under Title 40, CFR, Part 112



Oil Definitions

Oil means oil of any kind or in any form, including, but not limited to:

- fats, oils, or greases of animal, fish, or marine mammal origin
- vegetable oils, including oils from seeds, nuts, fruits, or kernels;
- other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.



Applicability: How Much Oil?

SPCC rule applies to facilities with:

- >42,000 gallons buried
- >1,320 gallons aboveground

Containers to include:

- Bulk storage
- Oil-Filled Operational Equipment (OFOE)
- Mobile/Portable Containers
- 55 gallons or greater

Containers not included in capacity:

- Permanently Closed containers
- UST Subject to 40 CFR 280 & 281





Spill Reporting

Facilities that discharge oil to navigable waters are subject to certain federal reporting requirements.

- 40 CFR 110, Discharge of Oil Regulation
- 40 CFR 112, Oil Pollution Prevention regulation
- State laws/regulations may differ or be more restrictive



National Response Center (NRC)

- The Discharge of Oil regulation provides the framework for determining whether an oil discharge to inland and coastal waters or adjoining shorelines should be reported to the National Response Center at 1-800-424-8802
- Any person in charge of a vessel, onshore or offshore facility must notify NRC once there is knowledge of a discharge
- NRC will relay discharge information to EPA or USCG





SPCC Reporting Requirements

- Report to the EPA Regional Administrator (RA) when there is a discharge to navigable waters or adjoining shores of:
 - >1,000 Gal of oil in a single discharge
 - >42 Gal of oil in each of two discharges occurring within a 12 month period
- An owner / operator must report the discharge(s) to the EPA RA within 60 days
- All requirements found in 40 CFR112.4



USG Spill Reporting Procedure





MDE Reporting Requirements

- Report to MDE Emergency Response Division (1-866-633-4686) if an oil spill or discharge of <u>ANY</u> quantity occurs
 - Within <u>two</u> hours after the detection of a spill
- Verbal report must include:
 - Time and location of discharge
 - Type of facility involved
 - Type and quantity of oil spilled
 - Assistance required
 - Name, address, telephone number of person making report
 - Other pertinent info as requested by MDE
- Within ten working days after completion of spill cleanup, a written report of the discharge must be submitted to MDE

		Theological Institution		Computer of campaignees of the
	1.1.1			1990 1991 1990 1990 1990
de the	_	Gimener Tare	1	5.6×
a	_	THE REPORT OF THE REPORT OF	eners.	timeter Amad later later
Transference Stream		Distantation		Longer Tay Income and Taxes
real test is her to the sector	-	Climeter Lavier, Sour	12	SUT and U. M. Namer
Construction of the second		Trentscher Laters	-8	Bull Numbers and Impro-
and the second se	-	Contractor Party Party	-	State of the second second
- group		Index Serve		
AAAber			-	1
Civitaer	10	Cont Sector	-	
Creve		- 15 here	·	21.201
			internet in	
And and an and an and an	Terretori	- Bar I the s	arganet a	
Constanting in a series	soring a	Toronto the distance of	states a	n operat ge finis in container som an in bester men
Contract from the second	200 A	and Britsheet	Market a	n serer av frage for Constanting August av Sales Sales August av Sales Nation Sales August av Sales
Design of fault Directory of the balance Directory of Frank Assessment Directory of Frank Street Directory of Frank Directory of Frank		and Britshind	Martine Contents Contents Contents Contents	t met by the contain term on the later term of the term of
Case of task Characteristics in the second Transformation of the second Case of the second second second Case of the second second second Case of the second s		and Britstein Co	Mannin Salasin Solari Solari Solari Solari	no opera <u>provi</u> to consister provi op op lost data data Pole data data data Scarto data data data data Scarto data data data data Scarto data data data data data Scarto data data data data data data Scarto data data data data data data data Scarto data data data data data data data da
Contract of the contract of th		n an	damin Sales Solar Solar Solar Solar Solar	The second secon
Local Alter Construction of the second Provide and the second methods are the second methods are the second the second second second the second second second second the second s			damin Galeri Goleri Goleri Gleri	100 6 and 100 (2016) 10 (and 100 (2016) 10 (and 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016) 100 100 (2016) 100 (2016) 100 (2016)
Load at tall.	and a second		damin dates doubt doubt doubt doubt doubt	ten sepert tag zigs to constant yours are no loss. Mage Pare source basis Source source basis Source source basis Source of the source of the Source of the source from
Land of Sec. Service Annual Sciences Differences Front Annual Differences Front Annual Differences and Annual Differences		an a	Annua Salahi Column Column Column Column	International State of the State of Sta
Long of the second seco			donare Source So	In an and Europe in an and the second
Loss of balls Products from support Products from a support Resource		1	dan en Banen Banen Banen Banen Banen Banen Banen Banen Banen Banen	en e
Long of bill When the location Decoders of the Long of Decoders of the Long of the Decoders of the			den en la den en	In a set of the Data of the set of the set of the Data of the set
Long of ball Strand Test Long (Discussion for Long and Discussion for Long and Discussion for Long (Discussion for Long (Discuss		an far yana da saya ana ana ana ana ana ana ana ana ana	Annual Solution Solut	In Control Lange to control or you are not you are not to control or you are not you are



Secondary Containment

- All areas and equipment with the potential for a discharge are subject to general secondary containment provision, 112.7(c).
 - Oil-filled operational equipment
 - Loading/unloading areas
 - Piping
 - Mobile refuelers/ non-transportation related tank trucks
- Purpose is to contain or divert to prevent discharge: dikes, berms, retaining walls, curbing, drip pans, sumps, culverting, gutters, weirs, booms, spill diversion ponds, retention ponds, sorbent



Secondary Containment

Active secondary containment is when an employee personally contains a spill,

- Deploying drain covers before a spill happens.
- Deploying drain covers after a spill has occurred, but before the spill reaches a drain
- Using a spill kit in the event of an oil discharge
- Closing a gate valve prior to a discharge

Passive secondary containment does not require deployment or the action of an employee or employees to contain a spill.

- Placing containment pallets or decks under drums and other containers
- Surrounding machines and containers with berms
- Erecting retaining walls around machines and containers
- Placing drip trays under leaky machines and containers







Specific (Sized) Provision

- To address the potential of oil discharges from areas of a facility where oil is stored or handled, containment specified by SPCC rule
- 40 CFR112.8, requirements are intended to address a major container failure
 - Bulk storage containers, mobile/portable containers, treatment
 - Minimum containment capacity
 - Largest single compartment
 - Sufficient freeboard for precipitation, if outdoors



Mobile/Portable Containers

- Drums placed on spill pallets
- Mobile re-fuelers mounted in a truck with a spray liner
- Fuel trucks parked within bermed area





Loading/Unloading Area Containment

- Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- Curbing or drip pans;
- Sumps and collection systems (OWS);
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds;
- Retention ponds; or
- Sorbent materials.





Oil – Filled Operational Equipment

- Equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device.
 - Does not include oil-filled manufacturing equipment (flowthrough process)
 - Examples: lube oil reservoirs, hydraulic elevators, transformers
- Piping is considered a component if it is solely used to facilitate operation of the equipment device.



Inspection & Testing 112.8(c)(6)

- Prevent discharge of oil caused by leaks, corrosion, brittle fracture, overfill, other forms of container/equipment failure
- AST are tested or inspected in accordance with industry standards
 - Integrity tests include visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of nondestructive testing.



Visual inspection:





Visual Inspection:





Remember!

- All actions (visual inspection or testing) must be documented & maintained
 - Some standards require records to be maintained for over 3 years for comparison reasons
 - Records are kept on the shared U drive in addition to the hard copies maintained at Seneca.
- Know objective: the tank IS or IS NOT suitable for continued use



SPCC Plan Requirements

Each Plan Must Include:

- 1. Description of physical layout and a facility diagram.
- 2. Key personnel contact list and phone numbers for the facility response coordinator, cleanup contractors, all appropriate federal, state, local agencies to contact.
- 3. Prediction of direction, rate of flow, and total quantity of oil that COULD be discharged if the potential for equipment discharge exists.
- 4. Description of <u>containment and/or</u> <u>diversionary structures</u> to prevent discharge from reaching navigable waters.
- 5. Description of site specific spill prevention and control measures in place.



Additional Requirements

- Plan must have MANAGEMENT APPROVAL (signature)
- Plan must be prepared under the direct supervision of a P.E. (stamped)
- Plan must be maintained on-site <u>AVAILABLE AT ALL TIMES</u> for review by EPA/MDE.
 - Plan is maintained at the Seneca Building
- Key Facility Personnel must be trained annually. FOLLOW SOPs for any response actions!!!
- Plan must include periodic INSPECTIONS.
- Plan must be <u>revised/updated</u> to reflect facility changes.
- Plan required to be reviewed/revised at least every 5 YEARS.


ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge					
Discharge/Discovery Date		Time			
Facility Name					
Facility Location (Address/Lat-					
Long/Section Township Range)					
Name of reporting individual		Telephone #			
Type of material discharged		Estimated total quantity	Gallons/Barrels		
		discharged			
Source of the discharge		Media affected	☐ Soil		
			Water (specify)		
			Other (specify)		
Actions taken					
		1	· <u> </u>		
Damage or injuries	No Yes (specify)	Evacuation needed?	☐ No ☐ Yes (specify)		
Organizations and individuals					
contacted	National Response Center 800-424-8802 Time				
	Cleanup contractor (Specify) Time				
	Facility personnel (Specify) Time				
		, , , , , , , , , , , , , , , , , , ,			
	State Agency (Specify) Time				
	Other (Specify) Time				

EMERGENCY RESPONSE PROCEDURES FOR OIL SPILLS

ATTEMPT TO STOP THE FLOW OF OIL FROM SPEADING AND FURTHER IMPACTING THE ENVIRONMENT.

ALWAYS USE REQUIRED PPE.

- <u>Control</u>: close any valves or plug or patch any leaks.
- <u>Contain</u>: use spill containment equipment including absorbent pads and protective booms to prevent further spreading of the oil.
- <u>Notify</u>: UMD's Environmental Affairs Unit <u>ASAP</u> by phone at 301-405-3990 with the following information:
 - Time & location of spill
 - Type & quantity of oil spilled
 - Source & cause of spill
 - Description of containment, removal & cleanup operations

Environmental Affairs will then report to MDE 24-Hour Emergency Response Hotline <u>within 2 Hours</u> of recognizing the oil spill. MDE: 1-866-633-4686

If the spill reaches navigable waters, then the Environmental Affairs Unit will also notify the National Response Center at 800-424-8802.

ALWAYS REPORT INCIDENT TO YOUR SUPERVISOR!

MARYLAND DEPARTMENT of the ENVIRONMENT 1800 WASHINGTON BOULEVARD BALTIMORE , MARYLAND. 21230 (410) 537-3000 1-800-633-6101 (within Maryland) http://www.mde.state.md.us PURSUANT TO THE PROVISIONS OF STATE LAW AND REC PASSIVELY PARTICIPATES IN THE DISCHARGE OR SPILLING KIND, SHALL REPORT THE INCIDENT IMMEDIATELY TO THE A	State of Maryland Department of the Environm Emergency Response Divis 1800 Washington Blvd. Suite <u>Baltimore</u> , <u>Maryland. 21230-</u> ULATION; (COMAR 26.10.01.03) "A PERSON DISCHARG 50 CIL, ETHER FROM A LAND BASED INSTALLATION, I DMINISTRATION." "THE REPORT OF AN OIL SPILL OR	nent ion #105 1721 bing or permitti nscluding vehici discharge shal	24 HOUR SPILL REPORTING (Toll Free) 1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932 NG THE DISCHARGE OF OIL, OR WHO EITHER ACTIVELY OR LES IN TRANSIT, OR FROM ANY VESSEL SHIP OR BOAT OF ANY LL BE MADE TO THE ADMINISTRATION IMMEDIATELY, BUT NOT	
ADC Map Coord Data of apilly Ma	N OF THE SPILL." ****_	<u>FIRE DEPARTN</u>	MENT PERSONNEL . SEE REVERSE ***	
Eiro Dopartmont Ro	/ Day / 11.20 1	nne or spin. Polico Dopar		
Location of spill - Stroot address:	Product Name:		Capacity of Voscel Vehicle or Tank:	
City / Town MD County	Product Name: (Indicate Gasoline, Diesel, Heating Oil, Chemical Name or UN ID etc.) Container Type:		<u>Gallons</u> <u>Amount</u> <u>IN</u> Vessel, Vehicle of Tank: <u>Gallons</u> Gallons Estimated <u>Amount Spilled:</u>	
Zip	(Indicate AST, UST, Transformer, Saddle etc.)	Tank, Drum	Gallons	
Transportation Incident:	 Contained on Land Entered Storm Drain or Dito Entered Sociation, Social 	ch	Vehicle Tag Number and State:	
Fixed Facility Incident:	☐ Is Below Ground	aterwa) Name		
(Indicate Type of Industrial, Commercial, Residential etc.)	Entered surface waters:		Hull Numbers and Name:	
Person(s) Responsible for Spill: (Driver if Vehicle) Be Sure to Company Responsible for Spill: (N/A if private citizen.) Name:				
City/State: Zip:			te: Zip:	
Phone:	Don't Forget Phone:	:2;p:		
Drivers Lic.No	State: Fed. Er	nployer ID N	lo	
Cause of Spill:IdentifyMotor Vehicle AccidentSpill MPersonnel Error/VandalismMDETank/Container/Pipe LeakFedeMechanical FailureStateTransfer AccidentLocatContainerContainer	All Groups that <u>Participated</u> in tigation :	Materials u Sorbent Du Sorbent Pa Sorbent Bo Sorbent Sw Overpack E	used by You to contain/clean-up spill: st:	
Responsible Party : Describe circumstances contributing	to the spill. (Additional space on back)		[Optional for FD or Gov't Personnel	
Responsible Party : Describe Containment , Removal and Clean-up operations , including disposal. (Additional space on back) [Optional for FD or Gov't Personnel]				
Responsible Party : Procedures, Methods and Precautions instituted to prevent recurrance of the spill. (Additional space on back) [Optional for FD or Gov't Personnel]				
THE UNDERSIGNED CERTIFIES THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED. Print Name: Company or Fire Department: Address : City / State / Zip				
Telephone	Signature			

MARYLAND DEPARTMENT of the ENVIRONMENT
1800 WASHINGTON BOULEVARD
BALTIMORE, MARYLAND. 21230
(410) 537-3000
(410) 557-5000

1-800-633-6101 (within Maryland) http://www.mde.state.md.us



State of Maryland Department of the Environment Emergency Response Division 1800 Washington Blvd. Suite #105 Baltimore, Maryland. 21230-1721



24 HOUR SPILL REPORTING (Toll Free)1-866-633-4686 EMERGENCY RESPONSE OFFICE (410) 537-3975 RESPONSE OFFICE FACSIMILE (410) 537-3932

PURSUANT TO THE PROVISIONS OF STATE LAW AND REGULATION; (Environmental Article 4-401 (i) ; the "Person Responsible for the discharge includes , The owner of the discharged oil , The owner , operator and / or the person in charge of the oil storage facility, vessel , barge , or vehicle involved at the time of or immediately before the discharge ; and Any person who through act or ommission , causes the discharge."

*** <u>Fire Department</u> * * * and <u>Local</u> or <u>State Government Agencies</u> : Unless you are the responsible party as defined above , Please indicate ' Unknown " in any box reuesting information that is unknown or unavailable to you at the time of report.

This Space for continuation and additional information.

THE UNDERSIGNED CERTIFIES THAT THE IN	FORMATION PROVIDED IS TRUE AND CORRECT TO THE BEST OF HIS OR HER KNOWLEDGE AT THE TIME THE REPORT WAS COMPLETED.
Print Name:	Company or Fire Department:
Address :	City / State / Zip
Telephone	Signature
-	

ATTACHMENT 5

OWS Inspections

SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

Oil/water separators (OWS) are structural devices intended to allow oils (and substances lighter than water) to be intercepted and be removed for disposal. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

General OWS Maintenance Requirements

- 1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
- 2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
- 3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
- 4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
- 5. Separator compartment covers should be tightly sealed to ensure drainage only enters the first compartment of the OWS.
- 6. Drains should be kept free of debris and sediment to the maximum extent practicable.
- 7. Spill cleanup materials should be maintained in the area served by the OWS.

OWS Inspection Procedures

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Monthly inspections of an OWS should include the following:

- 1. Visually examine the area served by the OWS for evidence of spills or leaks.
- 2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
- 3. Inspect drains for any signs of unauthorized substances entering the OWS.
- 4. Examine the OWS for signs of leaks or any malfunction.
- 5. Complete the Monthly OWS Inspection Checklist, attached, during the inspection.
- 6. Take the following measurements to benchmark function of the OWS:
 - A. Distance from rim of access cover to bottom of structure
 - B. Distance from rim of access cover to top of sludge layer
 - C. Depth of sludge layer (C = A B)



- D. Distance from rim of access cover to the oil/water interface
- E. Distance from rim of access cover to the top of the liquid surface
- F. Depth of oil layer (F = D E)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

- 1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
- 2. When oil accumulates to 5% of the wetted height of the separator compartment; or
- 3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with applicable state and federal regulations.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of five years.

Attachments

1. Monthly OWS Inspection Checklist



Oil-Water Separator Inspection and Maintenance Checklist

Facility:					
Location/Address:					
Date:	Time:	Weather Conditions:		Date of Last Inspection:	
Inspector: Title:					
Rain in Last 48 Hours 🗆 Yes 🗆 No 🛛 If yes, list amount and timing:					
Pretreatment:	egetated filter stri	$p \square$ swale \square turf grass	🗆 forebay	□ other, specify:	□ none
Site Plan or As-Built Plan Available: 🗆 Yes 🗆 No					

*Do not enter underground detention chambers to inspect system unless Occupational Safety & Health Administration (OSHA) regulations for confined space entry are followed.

*Follow inspection and maintenance instructions and schedules provided by system manufacturer and installer.

* Properly dispose of all wastes.

Inspection Item		Comment	Action Needed		
1. PRETREATMENT					
Sediment has accumulated.	□Yes □No □N/A		□Yes □No		
Trash and debris have accumulated.	□Yes □No □N/A		□Yes □No		
2. INLETS	1		T		
Inlets are in poor structural condition.	□Yes □No □N/A		UYes No		
Sediment, trash, or debris has accumulated and/or is blocking the inlets.	□Yes □No □N/A		□Yes □No		
3. OIL CONTAINMENT CHAMBER	1		1		
Oil volume threshold has been reached.	□Yes □No □N/A		□Yes □No		
Oil-absorbing pads are saturated.	Yes No N/A		Yes No		
4. SEDIMENT COLLECTION CHAM	BER		Γ		
Sediment accumulation threshold has been reached.	□Yes □No □N/A		UYes UNo		
Sludge accumulation threshold at bottom of chamber has been reached.	□Yes □No □N/A		Yes No		
4. OTHER SYSTEM COMPONENTS	1		1		
Structural deterioration is evident.	□Yes □No □N/A		Yes No		
Spills or leaks are evident.	□Yes □No □N/A				
5. OUTLETS	1				
Outlets in poor structural condition.	□Yes □No □N/A		Yes No		
Sediment, trash or debris is blocking outlets.	□Yes □No □N/A		Yes No		
Erosion is occurring around outlets.	□Yes □No □N/A		Yes No		
6. OTHER	1				
Evidence of ponding water on area draining to system.	□Yes □No □N/A		UYes UNo		
Evidence that water is not being conveyed through the system.	□Yes □No □N/A		UYes UNo		
Additional Notes					
Wet weather inspection needed	□ No				

Measurements	А	Distance from rim of access cover to bottom of structure	
	В	Distance from rim of access cover to top of sludge layer	
	$\mathbf{C} = \mathbf{A} - \mathbf{B}$	Depth of sludge layer	
	D	Distance from rim of access cover to the oil/water interface	
	Е	Distance from rim of access cover to the top of the liquid surface	
	F = D - E	Depth of oil layer	

If the values for "C" and/or "F" are greater than those in the manufacturer's recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

ATTACHMENT 6

Site Map

ATTACHMENT 7

Response Action Flowchart



ATTACHMENT 7: RESPONSE ACTION FLOWCHART