			1	
				ncy Use
		MTR04		
			Date Rec'd:	
			Amount Rec'd	l:
Montana Department			Check No.:	
of Environmental Qua			Rec'd By:	
WATER PROTECTION B			·	
EODM	torm Water Sn			
Reporting	period is for the ca	•	•	
1V154-AK Check □2017	one. Annual Repo	$\Box 2019$	$\square 2020$	owing year. □2021
Instructions: This Annual Rep				_
authorized to discharge storm				
Associated with Small Munici	•		•	•
authorized permittees and co-	•	-	•	•
for each calendar year reporti authorization or for co-permit	O .	-		-
this form and submit separate	-		-	-
regulated Small MS4 area(s).				
submitted to the Montana Dep		_	• /	
Electronic submission is required through the web-based tool: NetDMR. Additional information is located on DEQ's website: http://deq.mt.gov/Water/WQINFO/ctss/netdmr.				
Small MS4 Authorization Nur		/ dequilities ov / / /		CESSO HECCHILI
Small MS4 Classification	□Traditional		□Non-Tradition	nal
Small MS4 Name:				
Small MS4 Mailing Address:				
City, State, and Zip Code:				
Small MS4 Contact Person (and Title):				
Mailing Address:				
City, State, and Zip Code:				
Phone Number: () E-mail addres		ess:		

Storm Water Management Team: Attach an organizational chart identifying a primary SWMP coordinator and the positions responsible for implementing each minimum measure.				
Requested above chart: ☐ Attached SWMP, Attach 2 ☐ Not Attached				
-	d executed a formalized mechanism storm water management team me		□ Yes	□ No
Permittee's SWMP Resources: How many FTEs does the permit explanation.	ttee designate to the MS4 permit?	If no	eeded, prov	vide an
If more space is needed, submit on an a	dditional page with corresponding referer	nce or on a da	ata storage de	vice.
If more space is needed, submit on an additional page with corresponding reference or on a data storage device. Answer the following five (5) questions on an additional page with corresponding reference or on a data storage device. See Attachment 1 (1) What are the source(s) of funding for implementation of the MS4 permit and the estimated percentage of the total budget allocated from each source listed? (2) Specific to the annual reporting calendar year, how did the permittee justify commitment of resources or budget allocations to the implementation of the MS4 permit to decision-makers and the public? Provide a summary of meetings and outcomes held with decision-makers and the public. (3) Has the permittee demonstrated program effectiveness to obtain budget allocations for this annual reporting calendar year or previous years? Why or why not? If so, what program effectiveness metrics were presented? (4) How was this annual reporting calendar year's approach to allocate resources different than the previous year's approach? (5) Was the permittee successful in their request for budget allocations? Describe the outcome and factors that affected or resulted in that outcome.				
Illicit Discharge Detection & Elimination: Per the IDDE MCM requirement (Part II (3)(c.i)), has the permittee reviewed, and updated if needed, the storm sewer map during the calendar year? □ Yes □ No				
Per the IDDE MCM requirement (Part II (3)(e.i)), has the permittee dry weather inspected and screened outfalls during the calendar year? \Box Yes				
Fill in the blanks with numbers. The permittee has inspected outfalls during this calendar year. Since authorization under the 2017 General Permit, the permittee has inspected total outfalls out of the total MS4 outfalls.				

Per the Illicit Discharge Detection & Elimination MCM (Part II (3)(e.i)), the permittee will complete the requirement to inspect and screen all outfalls during dry weather by the end of the permit cycle.		□ Yes	□ No
Construction Site Storm Water Management storm water management plan reviews were con	<u> </u>	-	
During the calendar year, how many construction management controls (Part II (4)(c))?	1 0	their storm	water
Pollution Prevention/Good Housekeeping for Has the permittee reviewed, and updated if need permittee-owned/operated facilities and activities	led, the inventory of	□ Yes	□ No
Has the permittee reviewed, and updated if need the locations of facilities and known locations of	•	□ Yes	□ No
Has the permittee conducted annual storm water pollution prevention training for permittee staff during the next permit year after development of each standard operating procedure (Part II (6)(a.v))?		□ Yes	□ No
Not applicable during calendar year 2017, 2018, and 2019. Check "No" during these years.			
Training: According to Part II (B) Training required applicable training during the 1 st and *Not required during calendar year 2018, 2019, and 2021. Check "	4 th calendar years?	□ Yes	□ No
According to Part II (B) Training requirements, has the permittee conducted applicable new employee training within 90 days of the hire date?			□ No
Special Conditions: Per Pre-TMDL Approval (Part III.A) requirements , attach the required information regarding identification of all outfalls that discharge to impaired waterbodies, the impaired waterbodies, and the associated pollutants of impairments. Summarize the BMPs implemented over the reporting period and a schedule of BMPs planned for the following year.			
□ Attached □ Not Attached □ Not Applicab		plicable	
Special Conditions: Approved TMDLs (Part III.B) requirements per calendar year below.			
Calendar Year 2017: The permittee has attached a Sampling Plan that includes strategy rationale, monitoring frequency, monitoring parameters, and monitoring locations.			
□Attached	☐ Not Attached	□ Not Ap	pplicable

Calendar Year 2017: The permittee has attache and the associated pollutants of impairment.	ed all outfalls that discharge to	impaired waterbodies
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2018: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2019: The permittee has attache and the associated pollutants of impairment.	ed all outfalls that discharge to	impaired waterbodies
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2020: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2020: The permittee has attached the TMDL section of the SWMP that identifies the measures and BMPs it plans to implement, describes the MS4's impairment priorities and long term strategy, and outlines interim milestones for controlling the discharge of the pollutants of concern and making progress towards meeting the TMDL.		
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2021: The permittee has attached all outfalls that discharge to impaired waterbodies and the associated pollutants of impairment.		
□Attached	☐ Not Attached	☐ Not Applicable
Calendar Year 2021: The permittee has evaluated the TMDL section of the SWMP based on monitoring results. The section has been revised, if needed, and is attached.		
□Attached	☐ Not Attached	☐ Not Applicable
Monitoring: Per requirements in Part IV (B), has the permittee attached monitoring results, calculations, and evaluations?		
□Attached See Attachment 2	☐ Not Attached	☐ Not Applicable

INSTRUCTIONS: The permittee will only fill out the Annual Report Attachments section below that corresponds to the calendar in which an Annual Report is being submitted for. Attach the requested documents/information.

2017 Annual Repor	rt Attachments (1 st Cal	endar Year)
Public Education and Outreach:	`	,
Per requirements a.i in the referenced Mo audiences and associated pollutants.	CM, attach the required infor	mation regarding key target
□Attached	☐ Not Attached	
Public Involvement and Participation:		
Per requirements a.i in the referenced Mo involvement approach and schedule of ea		mation regarding the public
□Attached	☐ Not Attached	
Illicit Discharge Detection & Eliminati	on:	
Per requirements a.i in the referenced Monon-storm water discharges or flows, ass		
□Attached	☐ Not Attached	
Per requirements b.i in the referenced Monon-storm water discharges or flows, ass		
□Attached	□ Not Attached	
Per requirements f.i in the referenced MC Corrective Action Plan and any associate		t Discharge Investigation and
□Attached	☐ Not Attached	
Construction Site Storm Water Manag	gement:	
Per requirements a.iii in the referenced M Plan and associated documents.	ICM, attach progress toward	s an Enforcement Response
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per req construction storm water management pl		ed MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and peconstruction storm water management pl		ferenced MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Traditional MS4s and per req construction storm water management in		ed MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and perconstruction storm water management in		erenced MCM, attach the
□Attached	☐ Not Attached	☐ Not applicable

Post-Construction Site Storm Water Manag	Post-Construction Site Storm Water Management in New and Redevelopment		
Specific to Traditional MS4s and per requirements b.i in the referenced MCM, attach the post-			
construction storm water management plan review checklist.			
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requ	uirements b.ii in the referen	ced MCM, attach the post-	
construction storm water management plan rev			
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements in b.iii in the referenced MC	M, attach the performance s	standards and associated	
documents.			
□Attached	☐ Not Attached		
Coc Att	a demonstration		
See All	achment 3		
2018 Annual Report At	tachments (2 nd Calend	ar Year)	
Public Education and Outreach:	`	,	
Per requirements b.i in the referenced MCM, a	attach the required informat	ion regarding outreach	
messages.			
□Attached	☐ Not Attached		
Per requirements c.i in the referenced MCM, attach the required information regarding a description			
of formats, distribution channels and schedule for key target audiences.			
□Attached	☐ Not Attached		
Public Involvement and Participation:	•		
Per requirements a.ii in the referenced MCM,	attach the required informat	tion regarding participation	
and key target audience feedback on approach	<u>=</u>		
□Attached	☐ Not Attached		
Illicit Discharge Detection & Elimination:			
Per requirements a.i in the referenced MCM, a	nttach the required informati	ion regarding categories of	
non-storm water discharges or flows, associate			
□Attached	☐ Not Attached		
Per requirements b.i in the referenced MCM, a	attach the required informat	ion regarding occasional	
non-storm water discharges or flows, associate	ed pollutants, and local cont	trols or conditions.	
□Attached	☐ Not Attached		
Specific to Traditional MS4s and per requirements d.i in the referenced MCM, attach the adopted			
ordinance or other regulatory mechanism to pr	ohibit illicit discharges.		
□Attached	☐ Not Attached	☐ Not applicable	
Specific to Non-Traditional MS4s and per requ		ced MCM, attach the	
summary of legal authority to prohibit illicit di	ischarges.		
□Attached	☐ Not Attached	☐ Not applicable	
Per requirements d.iii in the referenced MCM,	attach the required summar	ry of the cooperative	
agreements.			

□Attached	☐ Not Attached	
Per requirements d.iv in referenced MCM, attach the Enforcement Response Plan and associated		
documents.		
□Attached	☐ Not Attached	
Per requirements e.ii in referenced MCM, attac	ch the list of high priority ou	ıtfalls.
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirem		
of investigations conducted and corrective acti	<u> </u>	licit Discharge
Investigation and Corrective Action Plan and a	any associated documents.	
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requ	irements f.iv in the reference	ced MCM, attach the
summary of investigations conducted and corre		required Illicit Discharge
Investigation and Corrective Action Plan and a	any associated documents.	
□Attached	☐ Not Attached	☐ Not applicable
Post-Construction Site Storm Water Management in New and Redevelopment		
Specific to Traditional MS4s and per requirements c.i in the referenced MCM, attach the post-		
construction storm water management inspection form or checklist.		
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requirements c.ii in the referenced MCM, attach the post-		
construction storm water management inspecti	on form or checklist.	
□Attached	☐ Not Attached	☐ Not applicable
Per requirements in c.iii in the referenced MCM, attach the inventory of all new permittee-owned		
and private post-construction storm water management controls.		
□Attached	☐ Not Attached	
Per requirements in c.vi in the referenced MCM, attach an inspection frequency protocol.		
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirements c.vii, attach the developed inspection program.		
□Attached	☐ Not Attached	☐ Not applicable
Pollution Prevention/Good Housekeeping for Permittee Operations		
Per requirements in a.iii in the referenced MCM, attach completed Standard Operating Procedures.		
□Attached	☐ Not Attached	

2019 Annual Report Att	achments (3 rd Calenda	ır Year)
Public Education and Outreach:		
Per requirements c.ii in the referenced MCM, a materials distributions.	attach the required informati	on regarding outreach
□Attached	☐ Not Attached	
Public Involvement and Participation:		
Per requirements a.ii in the referenced MCM, a	attach the required informati	on regarding participation
and key target audience feedback on approache		
□Attached	☐ Not Attached	
Illicit Discharge Detection & Elimination:		
Per requirements a.i in the referenced MCM, a non-storm water discharges or flows, associate	*	0 0
□Attached	□ Not Attached	ois of conditions.
Per requirements b.i in the referenced MCM, a		on regarding occasional
non-storm water discharges or flows, associate	-	-
□Attached		
Per requirements e.ii in referenced MCM, attac	ch the list of high priority ou	ıtfalls.
□ Attached □ Not Attached		
Per requirements e.iii in referenced MCM, attach the required summary of screening results.		
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirem of investigations conducted and corrective actions Investigation and Corrective Action Plan and a	ons taken per the required II	
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requirements f.iv in the referenced MCM, attach the summary of investigations conducted and corrective actions taken per the required Illicit Discharge Investigation and Corrective Action Plan and any associated documents.		
□Attached	☐ Not Attached	☐ Not applicable
Construction Site Storm Water Managemen	ıt:	
Specific to Traditional MS4s and per requirements a.i in the referenced MCM, attach the adopted ordinance or other regulatory mechanism to require construction storm water controls.		
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requauthority summary.	irements a.ii in the reference	ed MCM, attach the legal
□Attached	☐ Not Attached	☐ Not applicable
Per requirements a.iii in the referenced MCM, associated documents.	attach the adopted Enforcer	nent Response Plan and
□Attached	☐ Not Attached	
Post-Construction Site Storm Water Manag	ement in New and Redeve	lonment

Per requirements in c.viii in the reference inspections of high priority post-constructions.	ed MCM, attach findings and compliance actions regarding
Attached	□ Not Attached
	uirements c.ix, attach the findings and resulting actions
	vately-owned post-construction storm water management
□Attached	☐ Not Attached ☐ Not applicable
Pollution Prevention/Good Housekeep	ing for Permittee Operations
Per requirements in a.iii in the referenced Procedures.	d MCM, attach the completed Standard Operating
□Attached	□ Not Attached

2020 Annual Repor	rt Attachments (4 th Calendar Year)
Public Education and Outreach:	
Per requirements c.ii in the referenced M	ICM, attach the required information regarding outreach
materials distributions.	
□Attached	☐ Not Attached
Public Involvement and Participation:	
	ICM, attach the required information regarding participation
and key target audience feedback on app	
□Attached	☐ Not Attached
Illicit Discharge Detection & Eliminati	ion:
	CM, attach the required information regarding categories of
_	ociated pollutants, and local controls or conditions.
□Attached	☐ Not Attached
Per requirements b.i in the referenced M	CM, attach the required information regarding occasional
non-storm water discharges or flows, ass	ociated pollutants, and local controls or conditions.
□Attached	☐ Not Attached
Per requirements e.ii in referenced MCM	I, attach the list of high priority outfalls.
□Attached	☐ Not Attached
Per requirements e.iii in referenced MCN	M, attach the required summary of screening results.
□Attached	□ Not Attached
	uirements f.iii in the referenced MCM, attach the summary
	ve actions taken per the required Illicit Discharge
Investigation and Corrective Action Plan	1 1
□Attached	☐ Not Attached ☐ Not applicable
Specific to Non-Traditional MS4s and pe	er requirements f.iv in the referenced MCM, attach the
-	d corrective actions taken per the required Illicit Discharge

Investigation and Corrective Action Plan and a	any associated documents.	
□Attached	☐ Not Attached	☐ Not applicable
Post-Construction Site Storm Water Manag	gement in New and Redeve	· · · · · ·
Specific to Traditional MS4s and per requirem ordinance or other regulatory mechanism to re	ents a.i in the referenced M	CM, attach the adopted
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requauthority summary.	airements a.ii in the reference	ced MCM, attach the legal
□Attached	☐ Not Attached	☐ Not applicable
Per requirements in a.iii in the referenced MCl associated documents.	M, attach the Enforcement F	Response Plan and
□Attached	☐ Not Attached	
Per requirements in c.viii in the referenced MO inspections of high priority post-construction s		
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirements c.ix, attach the findings and resulting actions regarding inspections of high priority privately-owned post-construction storm water management controls.		
□Attached	☐ Not Attached	☐ Not applicable
Per requirements in d.i in the referenced MCM	I, attach a summary of the d	iscussion outcomes.
□Attached	☐ Not Attached	
Pollution Prevention/Good Housekeeping for	or Permittee Operations	
Per requirements in a.iii in the referenced MC Procedures.	M, attach the completed Sta	ndard Operating
□Attached	☐ Not Attached	
2021 Annual Report At	tachments (5 th Calenda	ar Year)
Public Education and Outreach:		
Per requirements c.ii in the referenced MCM, materials distributions.	attach the required informat	ion regarding outreach
□Attached	☐ Not Attached	
Public Involvement and Participation:		
Per requirements a.ii in the referenced MCM, and key target audience feedback on approach		ion regarding participation
□Attached	☐ Not Attached	
Illicit Discharge Detection & Elimination:		
Per requirements a.i in the referenced MCM, a non-storm water discharges or flows, associated		

□Attached	☐ Not Attached	
Per requirements b.i in the referenced MCM, attach the required information regarding occasional		
non-storm water discharges or flows, associate	-	ols or conditions.
□Attached	☐ Not Attached	
Per requirements e.ii in referenced MCM, attac	ch the list of high priority ou	tfalls.
□Attached	☐ Not Attached	
Per requirements e.iii in referenced MCM, atta	ch the required summary of	screening results.
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirem		
of investigations conducted and corrective acti		licit Discharge
Investigation and Corrective Action Plan and a		
□Attached	☐ Not Attached	☐ Not applicable
Specific to Non-Traditional MS4s and per requ		
summary of investigations conducted and corre	-	equired Illicit Discharge
Investigation and Corrective Action Plan and a	ny associated documents.	
□Attached	☐ Not Attached	☐ Not applicable
Post-Construction Site Storm Water Management in New and Redevelopment		
Per requirements in c.viii in the referenced MCM, attach findings and compliance actions regarding		
inspections of high priority post-construction storm water management controls.		
□Attached	☐ Not Attached	
Specific to Traditional MS4s and per requirem	ents c.ix, attach the findings	and resulting actions
regarding inspections of high priority privately-owned post-construction storm water management		
controls.		
□Attached	☐ Not Attached	☐ Not applicable
Pollution Prevention/Good Housekeeping fo	or Permittee Operations	
Per requirements in a.iii in the referenced MCM, attach completed Standard Operating Procedures.		
□Attached	☐ Not Attached	
Attach any updates, changes, or improvements to the Small MS4 Storm Water Management Program per requirements in Part IV (E).		
□Attached	☐ Not Attached	☐ Not applicable

Annual Report Form Signature

This Annual Report Form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following 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 gather and evaluate the information submitted. Based on my inquiry of the 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. [75-5-633, MCA].

Certification of this form indicates conformance with the 2017 General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer Systems and the required Annual Reporting upon receipt of permit coverage.

Annuai Keporung upon receipi oj permu cov	eruge.
Name (Type or Print)	
Title (Type or Print)	Phone Number
Signature	Date Signed

Attachment 1: Additional Questions

The following questions/answers are from the MS4 Annual Report Form regarding budget and resources.

(1) What are the source(s) of funding for implementation of the MS4 permit and the estimated percentage of the total budget allocated from each source listed?

Answer: Funded through U.S. Congress; 100%

(2) Specific to the annual reporting calendar year, how did the permittee justify commitment of resources or budget allocations to the implementation of the MS4 permit to decision-makers and the public? Provide a summary of meetings and outcomes held with decision-makers and the public.

Answer: The program funding is justified through specific permit requirements and projected workload. If the storm water program needs support, the storm water manager can request funds through the Air Force Civil Engineer Center. No additional personnel or funds were added to the MS4 Program in 2018.

(3) Has the permittee demonstrated program effectiveness to obtain budget allocations for this annual reporting calendar year or previous years? Why or why not? If so, what program effectiveness metrics were presented?

Answer: Funding is based on requirements of the permit, not program effectiveness.

(4) How was this annual reporting calendar year's approach to allocate resources different than the previous year's approach?

Answer: The focus in 2018 was to include additional requirements into the Storm Water Management Plan and to implement sampling protocols.

(5) Was the permittee successful in their request for budget allocations? Describe the outcome and factors that affected or resulted in that outcome.

Answer: Yes. Malmstrom AFB successfully obtained funds for the new sampling requirement in 2018. Additional money is requested for Fiscal Year 2020 to include additional sampling. The program is fully funded.

Attachment 2: 2018 Sampling Results

Date	Outfall #	TSS (mg/L)	COD (mg/L)	Nitrogen, Nitrates (mg/L)	Nitrogen, Kjeldahl (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Oil/Grease (mg/L)	Flow Estimate (gpm)	Average pH	Water Temp (deg C)
11-May-18	2	11	33	0.16	0.5	0.7	0.095	0.004	0.0007	0.019	ND	2334	8.00	9.2
11-May-18	4	72	38	0.24	0.8	1.0	0.185	0.005	0.0022	0.014	ND	390	7.87	9.3
20-Aug-18	1	12	89	1.3	1.8	3.1	0.12	0.008	0.0007	0.075	ND	892	8.12	16.0
20-Aug-18	3	103	146	1.05	3.0	4.0	0.36	0.016	0.0068	0.110	ND	620	8.09	14.4

^{**}Note: Only 4 samples were taken in 2018 due to a misinterpretation of the MS4 sampling requirements by Malmstrom AFB. This was identified by the DEQ inspection in December 2018. In 2019, each location will be sampled twice for a total of 8 samples.

Attachment 3: Requested Information

Table 1: 2018 Annual Report Form Responses

MS4 Section	Dogwinsmont	Discussion
Part	Requirement Develop and utilize the	Malmstrom utilizes the website for articles, basic
HA.1.b.i	permittee's website for public outreach and involvement	information, and a phone number for questions regarding storm water. Website: https://www.malmstrom.af.mil/About-Us/Environmental-Resources/ . Article: https://www.malmstrom.af.mil/News/Article-Display/Article/1647131/storm-water-at-malmstrom/
Part II.A.1.c.i	Develop a tailored outreach strategy for each target audience and specific storm water polluting behavior	Our primary target audience is housing residents. We publish articles, informational brochures, and mark inlets to raise storm water awareness. The brochures are given to each housing resident before they move in. For base activities, we use the training requirements set forth in the Industrial SWPPP to control pollutant runoff. Malmstrom monitors storm water pollution concerns throughout the year. If a shop or person causes or has potential to cause a storm water issue, that shop/person is trained on the importance of water quality and the proper procedures for preventing pollution. See SWMP, Table 2-2 for more details.
Part II.A.2.a.ii	Identify approaches for involving key target audiences in SWMP development and implementation	The Malmstrom Environmental Office marked storm water inlets in 2018. Malmstrom also participated in the annual MApril Clean-up event with the City of Great Falls. As for base shops, CEIE has seen improvement implementing the BMPs required by the Industrial SWPPP over the past year. Engagement from the shops appears to be improving as well. See SWMP, Table 2-2 for more details on outreach strategies.
Part II.A.3.a.i	Address more frequent categories of non-storm water discharge flows if they are determined to be significant contributors of pollutants	See SWMP, Table 4-2 for frequent and significant non-storm water discharges.
Part II.A.3.b.i	Evaluate and include a list of occasional incidental non-storm water discharges that the permittee has determined will not be addressed as illicit discharges.	See SWMP, Table 4-3 for occasional incidental non- storm water discharge
Part II.A.3.d.ii	Effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges	Malmstrom does not have the ability to adopt an ordinance or regulatory mechanism to prevent non-storm water discharges. The base uses its authority to regulate anyone who enters the installation through contract specification enforcement and disciplinary action. Balfour-Beatty Communities (BBC) is the

		housing contractor at Malmstrom. They patrol the housing areas and enforce illicit discharges by talking to residents and reporting any problems to the base.
Part II.A.3.d.iii	Solicit assistance from neighboring MS4 to detect illicit discharges and formalize cooperative agreements	Malmstrom does not receive or discharge storm water to a neighboring MS4 entity.
Part II.A.3.d.iv	Develop a formal Enforcement Response Plan (ERP)	See SWMP, Attachment 5 for the ERP
Part II.A.3.e.ii	List high priority outfalls	Malmstrom has 6 outfalls total. The base has determined that Outfalls 1-4 are the highest priority because most of the housing, industrial, and other buildings are in these areas. Outfalls 5 and 6 drain flows from unlined swales and ditches. See SWMP, Section 1.
Part II.A.3.f.iv	Summarize investigations conducted and corrective actions taken per the Illicit Discharge Investigation and Corrective Action Plan	Summary include in Table 2 below.
Part II.A.5.c.ii	Develop and implement an inspection form or checklist to ensure consistent and thorough inspection of post-construction storm water management controls	See SWMP, Attachment 4, Form SW-105
Part II.A.5.c.iii	Develop and maintain/update an inventory of all new permittee-owned and private post-construction storm water management controls	See SWMP, Table 6-2
Part II.A.5.c.vi	Develop an inspection frequency determination protocol based upon the priority of the post- construction storm water management controls	Malmstrom will inspect all post-construction storm water controls annually. This language is included in Section 6.0 of the SWMP.
Part II.A.6.a.iii	Develop standard operating procedures (SOPs) for similar facilities and activities	Malmstrom operates under an Industrial Storm Water Discharge Permit from DEQ as well. This permit requires the base to create SOPs, assign inspectors, and perform corrective actions for certain activities and facilities. A copy of the SOPs/BMPs from the Industrial SWPPP are included in Figures 1 & 2.

Table 2: 2018 Summary of Illicit Discharges and Corrective Actions

Date of Incident	Location	Incident Type	Pollutant(s)	Corrective Action	Impacted Storm Water?
1/26/2018	Bldg 761	Vehicle Incident	Gasoline	Fire Department responded with absorbent and collected the spent material for disposal	No
2/5/2018	Perimeter Rd and 70th Street	Vehicle Accident	Coolant	Fire Department responded with absorbent and collected the spent material for disposal.	No
2/8/2018	2/8/2018 Fitness Center SSO		Raw Sewage	Closed outfall slide gate. Jetted the line to clear the blockage. Applied hydrated lime to affect area and water backed up at the outfall. Reported to DEQ.	Yes
4/17/2018	Bldg 500	Vehicle Incident	icle Gasoline Fire Department responded w		No
5/8/2018	WSA Vehicle Diesel Accident		Fire Department responded with absorbent and collected the spent material for disposal.	No	
5/10/2018	5/10/2018 Bldg 882 Vehicle Incident Engine		Engine Oil	Fire Department and environmental personnel responded with absorbent and collected the spent material for disposal	No
5/24/2018	10th Ave N Gate	Equipment Failure	Mineral Oil	Environmental personnel responded and supplied the contractor with absorbents. Spent material collected and disposed of.	No
6/4/2018	Recycling Yard	Vehicle Incident	Transmission Fluid	Montana Waste placed absorbent on the spill and disposed of the material	No
7/26/2018	Bldg 82110	Equipment Failure	Engine Oil	PowerPro and Environmental personnel responded with absorbents. The spent material was collected and disposed of.	No
8/23/2018	Bldg 1248	Human Error	Car Wax/Soap Concentrate	Informed the individual to stop rinsing car soap/wax concentrate onto the pavement. Environmental personnel cleaned up the spill with assistance from the spiller. Environmental personnel trained the individual in the correct procedures.	Yes

Date of Incident	Location	Incident Type	Pollutant(s)	Corrective Action	Impacted Storm Water?
8/29/2018	Bldg 1460	Vehicle	Diesel	Environmental personnel responded with	No
		Incident		absorbents and assisted the shop with clean	
				up and disposal.	
12/4/2018	2/4/2018 74th Street and 4th Vehicle Coolant,		Fire Department and environmental	No	
	Ave N	Accident	Transmission	personnel responded with absorbent and	
			Fluid	collected the spent material for disposal	
12/17/2018	12/17/2018 10th Ave N Gate Vehicle Engine Oil,		Fire Department and environmental	No	
		Accident	Coolant	personnel responded with absorbent and	
				collected the spent material for disposal	

Figure 1: Standard Operating Procedure/Best Management Practices Master List

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APPENDIX D BEST MANAGEMENT PRACTICES

Table D-1 lists the Best Management Practices (BMPs) which apply to MAFB industrial facilities. See the Appendix E inspection forms for individual BMPs at each facility.

	Tal	ble D-1. Industrial Facility BMP List
BMP_ID	Description	Detailed Procedure
F1	Inspect dumpsters, fencelines	Inspect dumpsters and shop boundary fencelines at least quarterly for over-filling, blowing trash, general housekeeping.
F2	Cover Dumpsters, Secure Trash	Install lids or covers on all dumpsters or waste containers where possible. Ensure all dumpster and waste container lids or covers are kept closed.
F3	Seal dumpster bungs, Prevent or control liquid discharge	Ensure dumpster drain plugs are in place and in good condition. Report any evidence of lea chant or other discharges to the SWPPPP Administrator.
F4	Petroleum, oil, lubricant (POL) spills, sediment, etc. cleaned from pavement	Inspect and sweep paved surfaces to remove sediment and prevent discharge. Ensure that wet or dry pavement, sidewalk, floor, and deck cleaning procedures include proper waste pickup and disposal. For wet cleanup procedures, use vacuum truck, street sweeper, or similar.
F5	Perform Wet Weather Inspections	Perform at least one routine inspection per year during wet-weather to observe MS4 curbs, gutters, pipelines, inlets, flow across paved areas, etc.
F6	Ensure personnel are trained	Verify that shop supervisor has received initial SWPPP implementation training. 341 CES/CEIEC will maintain training records.
F7	Perform timely quarterly and storm event inspections	Perform timely storm event and quarterly routine inspections.
01	Control pollution during fueling, oiling, or other fluids management. Maintain SPCC training, spill prevention, timely reporting. Ensure no evidence of spills.	Follow procedures in the MAFB SPCC Plan during all fueling, fluid addition, or other equipment maintenance operations.
O2	Ensure no contamination from bulk fuels receipt, transfers, terminal operations	Follow procedures in the MAFB SPCC Plan during all bulk fuel receipts from vendors, fuel transfers between storage tanks, fuel truck operations, etc. Use active pollution prevention controls (multiple personnel, deadman switches, ullage measurements, storm sewer inlet covers, etc.) where required. Implement Technical Orders or checklists such as "South Storage (Jet-A System) LCL-01", "Service Station Transferred / Receipt SSTA LCL-03", etc.
О3	Perform monthly, annual bulk storage tank inspections	Ensure timely performance of monthly and annual bulk fuel storage tank inspections per SPCC Tables A-5 and A-6, respectively
04	Outdoor materials storage on pallets, blocks, etc. only, not directly on the ground Minimal evidence of weather damage	Do not store palletized bulk materials outdoors unless the materials are weatherproof. Monitor loading and unloading processes for leakage, burst bags, etc. Clean up all spills, damaged goods, sawdust, swarf, etc. with wet or dry methods as needed.
O5	Implement effective construction storm water BMPs for all projects regardless of size	Implement construction storm water Best Management Practices for all outdoor projects, regardless of size. Implement permit coverage and maintain Storm Water Pollution Prevention Plans for all projects 1 acre or larger.
O6	No evidence of sawdust, paint chips, overspray, cuttings, or other discharges	Monitor all construction projects, repair sites, renovation projects, materials storage areas, facility grounds, etc. and remove sawdust, trash, spilled bulk materials, or other contaminants.
S1	Outdoor clean scrap storage on pallets, blocks, etc. only, not directly on the ground	Outside storage of scrap metal or other materials directly on the ground is prohibited. Store all uncontaminated material storage on pallets, blocking, in containers, etc. if outdoors.
S2	Contaminated scrap storage under cover or in containment. No signs of POL, other spills	Store all contaminated material (machine shop cuttings, lubricated metal, etc.) indoors where possible. Outdoors, store such material in a dumpster or container with a closed lid or within secondary containment. Monitor all outdoor storage containers for leakage, oil slicks, leachate, etc.
V1	All repairs, maintenance performed indoors	Perform all equipment maintenance or repair indoors or under cover.

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	Tal	ble D-1. Industrial Facility BMP List
BMP_ID	Description	Detailed Procedure
V2	Maintain SPCC training, reporting.	Verify that the SPCC Plan is on site and employees are trained in its use. Implement the SPCC plan. Notify CES/CEIE (731-6155, 731-7148) (or call Malmstrom 911 if after hours) immediately regarding any POL spills. See §2.2.2 for more information.
V3	Implement effective SPCC procedures: drip pans, rags, spill kits. No signs of spills allowed	Use cleanup rags, drip mats, drip pans under portable or stationary engine-powered equipment (operable or inoperable) stored outdoors to control POL, antifreeze, fluid, or other leaks. Inspect drip pans at least quarterly and dispose of collected rainwater or snow melt according to the SPCC Plan.
V4	Install containment under leaking operable or inoperable machines, equipment stored outdoors	Install and maintain portable Petroleum, Oil, or Lubricant (POL) containment under generators or similar skid- or wheel-mounted engine-powered equipment stored outdoors.
V5	Ensure proper recordkeeping for drip pan or containment discharges	Maintain drip pan or portable secondary containment inspection and discharge logs for the current and previous 3 calendar years. Use the procedures outlined in the SPCC Plan.
V6	Follow detailed procedures to prevent hydraulic oil leaks	Use these procedures to prevent oil leaks while connecting, disconnecting, or storing hydraulic equipment outdoors: 1. For tractor implements, cylinders, motors, etc. equipped with male and female quick-connect fittings: • Disconnect the implement from the tractor and connect the male and female fittings to each other. • If the fittings to each other. • If the fittings don't match, install a positive-seal, leak-proof cap or plug onto the quick-connect fitting. Momitor the fitting for drips or leakage. 2. For hydraulic equipment, cylinders, motors, hoses, etc. without quick-connect fittings: • Disconnect the fitting and drain the equipment, hose, etc. into a portable waste container. Dispose of the waste oil per the SPCC Plan. • Install a leak-proof cap, plug, etc. onto the equipment port(s), hose end(s), or other potential leakage points. Temporary measures such as duct tape are not acceptable. • Use rags, towels, floor dry, or other controls to pick up all drips and spills. Monitor all fittings for leaks or drips. 3. For hydraulic equipment with broken fittings or hoses: • Outdoor storage is prohibited. • Remove and dispose of the broken component or store it indoors. • Install leak-proof caps, plugs, etc. on the remaining parts, cylinder ports, etc. Monitor for leaks or drips.
V7	Control equipment washdown water, sediment on pavements, etc.	All vehicle washing will occur at designated wash racks. The SWPPP Administrator may designate special equipment cleaning areas if effective pollution prevention and control measures are in place. Suggestions for cleaning muddy earth-moving or other equipment: Prevent track-off from job sites. Manually remove mud or other debris from tractor treads, buckets, implements, etc. prior to leaving the site if possible. Immediately perform street sweeping or other cleaning operations if trackoff occurs Park the implement on pavement until the mud dries enough to remove it with spades, spud bars, etc. Move the equipment and clean the pavement with power sweepers or other means.
V8	Zero evidence of new or aged leaks from junk vehicles or equipment	Inspect junk equipment stored outdoors at least quarterly and remove leaking components. Store leaking or contaminated components indoors. Promptly clean up all spills or contamination. Document all corrective actions on the Routine Facility Inspection form and maintain these records for 3 CY.

Figure 2: Standard Operating Procedures/ Best Management Practices Facility Inspection Form
Example

			τ	JNCLA	SSIFIED			
MAFB I	ndustri	al Storm Water I	Pollution Prev	vention l	Plan			341
Quarte		cility Inspecti		rial Sto	rm Wat	er Permit A	uthorizatio	on MTR000
Facility	2 %	Master List	Office Symbol	341 C	ES/CEIE	Location(s)	В	Basewide
 IMPO Estima Evalua Provide d 	RTANT ate curre ate the p lates and ne SWP	st one routine insp Perform at least ent weather condit performance and end descriptions for a PP, Appendix D.	ection during 1 quarterly in ions and enter ffectiveness of	each cale spection them in t EACH E e actions,	per year di he table be Best Manaş BMP mod	er. Fill out th uring wet wea clow. gement Practic	ther while stor se (BMP) for y	m water is flow your facility.
		Inspection Date (YY-MMM-DD):			tion Time (24-hour):		Dry	Weather
	(01 Jan		2 nd Qtr 1 Apr - 30 Jun)	3rd C (01 Jul - 3		4 th Qtr (01 Oct - 31 De	c) We	t Weather
Inspec	tor Name (printed)				Signature			
			Current We	ather Co	onditions (
Tempera Degrees			Wind Speed, MPH			Recent I inches	recipitation,	
Clear, pa	rtly		Wind Direction, N /			Snow m	alto (V / NI)	
cloudy, c	vercast		SE / NW / etc.					
		m newspaper, sma her.gov/climate/in				ather Service	[(406) 453-20	081;
Process ID	BMP ID	D	escription		Effe Yes	ective? (√)	Notes. Describe ALL correct actions. Include dates.	
ID	F1	Inspect du	mpsters, fenceli	nes	108	110	actions	. meluue uate.
	F2	Cover Durr	`rash					
	F3	Seal dumpster b	r control					
Facilities1	F4	liquid discharge Petroleum, oil, lubricant (POL) spills,						
	F5	sediment, etc. cleaned from pavement Perform Wet Weather Inspections						
	F6	Ensure pe	rsonnel are train	ned				
	F7	Perform timely	quarterly and sto					
Ops1	01	Control pollution other fluids man training, spill pre	inspections Control pollution during fueling, oiling, or other fluids management. Maintain SPCC training, spill prevention, timely reporting.					
	02	Ensure no evidence of spills. Ensure no contamination from bulk fuels						
Ops2	Perform monthly, annual bulk storage tank							
Ops3	04	inspections Outdoor materials storage on pallets, blocks,						
- Post	etc. Minimal evidence of weather damage Implement effective construction storm wate							
Ops4			ojects regardles of sawdust, pain		+			
	O6	overspray, cutt	overspray, cuttings, or other discharges Outdoor clean scrap storage on pallets.					
Scrap1	S1	Outdoor clean	1	1	1			

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Process	BMP	Description	Effective? (√)		Notes. Describe ALL corrective	
ID	ID	Description	Yes	No	actions. Include dates.	
	S2	Contaminated scrap storage under cover or in containment. No signs of POL, other spills				
	V1	All repairs, maintenance performed indoors				
	V2	Maintain SPCC training, reporting.				
	V3	Implement effective SPCC procedures: drip pans, rags, spill kits. No signs of spills allowed				
VehEq1	V4	Install containment under leaking operable or inoperable machines, equipment stored outdoors				
	V5	Ensure proper recordkeeping for drip pan or containment discharges				
	V6	Follow detailed procedures to prevent hydraulic oil leaks				
	V7	Control equipment washdown water, sediment on pavements, etc.				
	V8	Zero evidence of new or aged leaks from junk vehicles or equipment				

Wet Weather Inspection,	Additional Information
1. Flow volume (check one):	☐ MEDIUM ☐ HIGH
2. Water quality (check one):	R MILKY MUDDY
3. Garbage, cigarette butts, etc. (check one)	☐ PRESENT ☐ ABSENT
4. Petroleum sheen (check one)	☐ PRESENT ☐ ABSENT
5. Any contact between storm water and pote	ntial pollutants? YES NO
6. Describe location(s) problems, responses, of	corrective actions, etc.
Notes:	

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