



DEPARTMENT OF
ECOLOGY
State of Washington

Water Quality Program

Permit Submittal Electronic Certification

Permittee: DES MOINES CITY

Permit Number: WAR045511

Site Address: 21630 11TH AVE S
Des Moines, WA 98390

Submittal Name: MS4 Annual Report Phase II Western

Version: 2

Due Date: 3/31/2016

Questionnaire

Number	Permit Section	Question	Answer
1	S5.A.2	Attach updated annual Stormwater Management Program Plan (SWMP Plan). (S5.A.2)	2016 SWMP_1_03282016082 202
2	S9.D.5	Attach a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period per S9.D.5.	Not Applicable
3	S5.A.3	Implemented an ongoing program to gather, track, and maintain information per S5.A.3, including costs or estimated costs of implementing the SWMP.	Yes
4	S5.A.5.b	Coordinated among departments within the jurisdiction to eliminate barriers to permit compliance. (S5.A.5.b)	Yes
5	S5.C.1.a.i and ii	Attach description of public education and outreach efforts conducted per S5.C.1.a.i and ii.	2015S5C1ai- ii_5_03152016083320
6	S5.C.1.b	Created stewardship opportunities (or partnered with others) to encourage resident participation in activities such as those described in S5.C.1.b.	Yes
7	S5.C.1.b	Used results of measuring the understanding and adoption of targeted behaviors among at least one audience in at least one subject area to direct education and outreach resources and evaluate changes in adoption of targeted behaviors. (Required no later than February 2, 2016, S5.C.1.b)	Yes
7b	S5.C.1.b	Attach description of how this requirement was met.	2015S5C1c_7b_031520 16083320

8	S5.C.2.a	Describe the opportunities created for the public to participate in the decision making processes involving the development, implementation and updates of the Permittee's SWMP. (S5.C.2.a)	Through the City website, the public is invited to comment on the SWMP and provide comments in writing to City staff. Any comments are compiled and reviewed by a City Council Committee. Any changes to the SWMP by the Council Committee are incorporated into the SWMP and then implemented by City staff.
9	S5.C.2.b	Posted the updated SWMP Plan and latest annual report on your website no later than May 31. (S5.C.2.b)	Yes
9b	S5.C.2.b	List the website address.	http://www.desmoineswa.gov/
10	S5.C.3.a.i - vi	Maintained a map of the MS4 including the requirements listed in S5.C.3.a.i.-vi.	Yes
11	S5.C.3.b.v	Implemented a compliance strategy, including informal compliance actions as well as enforcement provisions of the regulatory mechanism described in S5.C.3.b. (S5.C.3.b.v)	Yes
12	S5.C.3.b.vi	Updated, if necessary, the regulatory mechanism to effectively prohibit illicit discharges into the MS4 per S5.C.3.b.vi. (Required no later than February 2, 2018)	Not Applicable
12b		Cite the Prohibited Discharges code reference	
13	S5.C.3.c.i	Implemented procedures for conducting illicit discharge investigations in accordance with S5.C.3.c.i.	Yes
13b	S5.C.3.c.i	Cite methodology	Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004
14	S5.C.3.c.i	Percentage of MS4 coverage area screened in reporting year per S5.C.3.c.i. (Required to screen 40% of MS4 no later than December 31, 2017 (except no later than June 30, 2018 for the City of Aberdeen) and 12% on average each year thereafter. (S5.C.3)	13
15	S5.C.3.c.ii	List the hotline telephone number for public reporting of spills and other illicit discharges. (S5.C.3.c.ii)	Business Hours: 206-870-6869; After-hours: 206-550-5612
15b	S5.C.3.c.ii	Number of hotline calls received.	16
16	S5.C.3.c.iii	Implemented an ongoing illicit discharge training program for all municipal field staff per S5.C.3.c.iii.	Yes

17	S5.C.3.c.iv	Informed public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste. (S5.C.3.c.iv)	Yes
17b	S5.C.3.c.iv	Describe the information sharing actions. (S5.C.3.c.iv)	<p>City Currents Newsletter – (Public Employees, Businesses, General Public) The City of Des Moines has a quarterly newsletter that is mailed to approximately 24,000 residents and businesses within the City of Des Moines. Below are the articles that were submitted to the newsletter that relate to the hazards associated with illicit discharges.</p> <ul style="list-style-type: none"> • Spring – Household Pollution • Summer – Car Washing • Fall –Pet Waste • Winter – Septic System Information <p>ECOSS Business Outreach – (Businesses) The City has partnered with Environmental Coalition of South Seattle (ECOSS) to help educate, train, and deliver free spill kits to thirteen Des Moines businesses in 2015. “ECOSS is a nonprofit organization that encourages urban redevelopment and a healthy environment by providing education, resources and technical assistance to diverse businesses and communities in the Puget Sound region” (www.ecoss.org). The training and education portion of this program focuses on spill prevention and cleanup.</p> <p>Chinook Book – (General Public, Public Employees) On May 4th, 2015 City of Des Moines purchased 800 subscription codes from Chinook Book for public distribution. Chinook book offers a host of local sustainable deals and coupons through a smart phone application.</p>

			Multiple jurisdictions have also partnered with Chinook Book to create in app advertising, including BMP related coupons and online public education links. BMP related coupons include natural yard care, reduce water use, pet waste, reduced car trips, car leaks, car washing, hazardous waste, non-toxic cleaners and reducing household water runoff. The online public education links included pet waste, vehicle leaks, car washing, pesticides, general stormwater education, salmon Seeson, fertilizer, save water, flood/leaves, trash/dumpster maintenance, first flush info, hazardous chemicals, and LID/buffers. In 2015, 92 chinook book access codes were distributed and 26 of those were activated, resulting in 522 sessions on the app. On-go
18	S5.C.3.d	Implemented an ongoing program to characterize, trace, and eliminate illicit discharges into the MS4 per S5.C.3.d.	Yes
19	S5.C.3.d.iv	Number of illicit discharges, including illicit connections, eliminated during the reporting year. (S5.C.3.d.iv)	20
20	S5.C.3.d.iv	Attach a summary of actions taken to characterize, trace and eliminate each illicit discharge found by or reported to the permittee. For each illicit discharge, include a description of actions according to required timeline per S5.C.3.d.iv	2015S5C3div_20_0315 2016093154
21	S5.C.3.e	Municipal illicit discharge detection staff are trained to conduct illicit discharge detection and elimination activities as described in S5.C.3.e.	Yes
22	S5.C.4.a	Implemented an ordinance or other enforceable mechanism to address runoff from new development, redevelopment and construction sites per the requirements of S5.C.4.a.	Yes
24	S5.C.4.a.i	Number of exceptions granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0
25	S5.C.4.a.i	Number of variances granted to the minimum requirements in Appendix 1. (S5.C.4.a.i., and Section 6 of Appendix 1)	0

26	S5.C.4.b.i	Reviewed Stormwater Site Plans for all proposed development activities that meet the thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.i)	Yes
26b	S5.C.4.b.i	Number of site plans reviewed during the reporting period.	51
27	S5.C.4.b.ii	Inspected, prior to clearing and construction, permitted development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 Determining Construction Site Sediment Damage Potential, or alternatively, inspected all construction sites meeting the minimum thresholds adopted pursuant to S5.C.4.a.i. (S5.C.4.b.ii)	Yes
27b	S5.C.4.b.ii	Number of construction sites inspected per S5.C.4.b.ii.	20
28	S5.C.4.b.iii	Inspected permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. (S5.C.4.b.iii)	Yes
28b	S5.C.4.b.iii	Number of construction sites inspected per S5.C.4.b.iii.	30
29	S5.C.4.b.ii, iii and v	Number of enforcement actions taken during the reporting period (based on construction phase inspections at new development and redevelopment projects). (S5.C.4.b.ii, iii and v)	53
30	S5.C.4.b.iv	Inspected all permitted development sites that meet the thresholds in S5.C.4.a.i upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. (S5.C.4.b.iv)	Yes
31	S5.C.4.b.ii-iv	Achieved at least 80% of scheduled construction-related inspections. (S5.C.4.b.ii-iv)	Yes
32	S5.C.4.b.iv	Verified a maintenance plan is completed and responsibility for maintenance is assigned for projects. (S5.C.4.b.iv)	Yes
33	S5.C.4.c	Implemented provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S5.C.4. a and b. (S5.C.4.c)	Yes
35	S5.C.4.c.iii	Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.4.c.iii.	Yes
35b	S5.C.4.c.iii	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.4.c.iii	Not Applicable
36	S5.C.4.c.iv	Inspected new residential stormwater treatment and flow control BMPs/facilities and catch basins every 6 months per S5.C.4.c.iv to identify maintenance needs and enforce compliance with maintenance standards.	No
37	S5.C.4.c.v	Achieved at least 80% of scheduled inspections to verify adequate long-term O&M. (S5.C.4.c.v)	Yes

38	S4.C.4.c.vi	Verified that maintenance was performed per the schedule in S5.C.4.c.vi when an inspection identified an exceedance of the maintenance standard.	Yes
38b	S5.C.4.c.vi	Attach documentation of any maintenance delays. (S5.C.4.c.vi)	Not Applicable
39	S5.C.4.d	Provided copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity to representatives of proposed new development and redevelopment. (S5.C.4.d)	Yes
40	S5.C.4.e	All staff responsible for implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement are trained to conduct these activities. (S5.C.4.e)	Yes
42	S5.C.4.g	Participated and cooperated with the watershed-scale stormwater planning process led by a Phase I county. (S5.C.4.g)	Not Applicable
43	S5.C.5.a	Implemented maintenance standards as protective, or more protective, of facility function as those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.	Yes
44	S5.C.5.a	Applied a maintenance standard that is not specified in the Stormwater Management Manual for Western Washington.	Not Applicable
44b	S5.C.5.a	Please note what kinds of facilities are covered by this alternative maintenance standard. (S5.C.5.a)	
45	S5.C.5.a.ii	Performed timely maintenance per S5.C.5.a.ii.	Yes
46	S5.C.5.b	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	No
46b	S5.C.5.b	Number of known municipally owned or operated stormwater treatment and flow control BMPs/facilities. (S5.C.5.b)	200
46c	S5.C.5.b	Number of facilities inspected during the reporting period. (S5.C.5.b)	195
46d	S5.C.5.b	Number of facilities for which maintenance was performed during the reporting period. (S5.C.5.b)	76
47	S5.C.5.b	If using reduced inspection frequency for the first time during this permit cycle, attach documentation per S5.C.5.b.	Not Applicable
48	S5.C.5.c	Conducted spot checks and inspections (if necessary) of potentially damaged stormwater facilities after major storms as per S5.C.5.c.	Not Applicable
49	S5.C.5.d	Inspected all municipally owned or operated catch basins and inlets as per S5.C.5.d, or used an alternative approach. (Required once no later than August 1, 2017 and every two years thereafter, except once no later than June 30, 2018 and every two years thereafter for the City of Aberdeen)	Not Applicable

49b	S5.C.5.d	Number of known catch basins.	4811
49c	S5.C.5.d	Number of catch basins inspected during the reporting period.	15
49d	S5.C.5.d	Number of catch basins cleaned during the reporting period.	631
50	S5.C.5.d.i-ii	Attach documentation of alternative catch basin cleaning approach, if used. (S5.C.5.d.i or ii)	Not Applicable
51	S5.C.5.f	Implemented practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. (S5.C.5.f)	Yes
52	S5.C.5.g	Implemented an ongoing training program for Permittee employees whose primary construction, operations or maintenance job functions may impact stormwater quality. (S5.C.5.g.)	Yes
53	S5.C.5.h	Implemented a Stormwater Pollution Prevention Plan for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under an NPDES permit that covers stormwater discharges associated with the activity. (S5.C.5.h)	No
54	S7.A	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Not Applicable
55	S7.A	For TMDLs listed in Appendix 2: Attach a summary of relevant SWMP and Appendix 2 activities to address the applicable TMDL parameter(s). (S7.A)	Not Applicable
56	S8.A	Attach a description of any stormwater monitoring or stormwater-related studies as described in S8.A.	Not Applicable
57	S8.B.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for status and trends monitoring. (S8.B.1)	Yes
57B	S8.B.2	If choosing to conduct individual status and trends monitoring, attach an annual stormwater monitoring report in accordance with S8.B.2. (Required to submit reports beginning March 31, 2016)	
58	S8.C.1	Participated in cost-sharing for the regional stormwater monitoring program (RSMP) for effectiveness studies. (S8.C.1) (Required to begin no later than August 15, 2014)	Yes
58b	S8.C.2	If choosing to conduct discharge monitoring, attach an annual stormwater monitoring report in accordance with S8.C.2 and Appendix 9. (Required to submit reports beginning March 31, 2016)	

59	S8.D.1	Contributed to the RSMP for source identification and diagnostic monitoring information repository in accordance with S8.D.1. (Required to begin no later than August 15, 2014)	Yes
60	G3	Notified Ecology in accordance with G3 of any discharge into or from the Permittees MS4 which could constitute a threat to human health, welfare or the environment. (G3)	Yes
61	G3	Number of G3 notifications provided to Ecology.	2
62	G3.A	Took appropriate action to correct or minimize the threat to human health, welfare, and/or the environment per G3.A.	Yes
63	S4.F.1	Notified Ecology within 30 days of becoming aware that a discharge from the Permittee's MS4 caused or contributed to a known or likely violation of water quality standards in the receiving water. (S4.F.1)	Not Applicable
64	S4.F.3.a	If requested, submitted an Adaptive Management Response report in accordance with S4.F.3.a.	Not Applicable
65	S4.F.3.d	Attach a summary of the status of implementation of any actions taken pursuant to S4.F.3 and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period. (S4.F.3.d)	Not Applicable
66	G20	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	Yes
67	G20	Number of non-compliance notifications (G20) provided in reporting year.	2

67b	G20	List the permit conditions described in non-compliance notification(s).	<p>During the 2014 year, City staff inspected 65 out of the 69 known facilities; this resulted in only 94.2% of the required inspections being achieved. This falls short of the requirement stated in S5.C.5.e. which require at least 95% of the public facilities be inspected to meet compliance. Through this review, several existing facilities were identified that were previously unaccounted for as public facilities requiring annual inspections. In some cases these facilities were known to the City, but believed to be private facilities. Other cases revealed facilities that were incorrectly or not mapped at all on the City's GIS database. During the 2014 permit period City staff failed to meet requirement for S5.C.4.c.v. which requires the presence and records of an established inspection program for inspection requirements in (iii) and (iv).</p>
-----	-----	---	---

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 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.

City of _____
Signature

3/30/2016 9:34:06 AM _____
Date

City of Des Moines 2015 – NPDES Permit Annual Report

Public Education and Outreach Efforts Conducted per S5.C.1.a.i and ii.

Over the course of 2015 the City of Des Moines has implemented new programs within education and outreach as well as continuing many existing programs. The City has continued to develop and expand on the ways that general public awareness can be reached and also how additional behavior changes can be effected. The following list describes the city’s efforts that were conducted throughout the 2015 year.

Public Outreach Events

- *Waste-Free Earth Day Event – 4/18/15*

On April 18th, the Recology Cleanscapes store in Burien held an event called “Waste-Free Earth Day”. The City of Des Moines partnered with King County and Recology by providing materials that would be given out to anyone who attended. The City of Des Moines provided flash drives, BMP information, and advertised for volunteers for the upcoming citywide cleanup and storm drain marking program.



- *Citywide Clean up event 5/9/15*

A Community Clean-Up Event was held on May 9th. 35 volunteers including community members, City staff, and Recology CleanScapes staff were in attendance. Four flash drives were handed out during the event that contained information on natural yard care, vehicle pollution prevention, household BMPs, general importance of stormwater, stewardship opportunities, septic tank care, and pet waste.



- *Famers Market 8/8/15*

On August 8th the surface water department visited the Des Moines farmers market. The farmers market is a popular event that is held throughout the year that attracts the general public both locally and regionally. The Stormwater Management (SWM) Department setup up their own booth and provided information (chinook book subscriptions, brochures, flyers, flash drives, note cards) to the public. Information on the general impacts of stormwater, impacts of IDDE and how to report, opportunities to become involved in stewardship opportunities, westnile virus info, household and yard care BMPs, pet waste information, and septic tank BMPs were handed out. The SWM department hosted a children's game, "Pirate Ring Toss", where participants had a chance to win a storm drain ranger badge and learn about ways to save the sound.

Chinook Book

On May 4th, 2015 City of Des Moines purchased 800 subscription codes from Chinook Book for public distribution. Chinook book offers a host of local sustainable deals and coupons through a smart phone application. Multiple jurisdictions have also partnered with Chinook Book to create in app advertising, including BMP related coupons and online public education links. BMP related coupons include natural yard care, reduce water use, pet waste, reduced car trips, car leaks, car washing, hazardous waste, non-toxic cleaners and reducing household water runoff. The online public education links included pet waste, vehicle leaks, car washing, pesticides, general stormwater education, salmon Seeson, fertilizer, save water, flood/leaves, trash/dumpster maintenance, first flush info, hazardous chemicals, and LID/buffers. In 2015, 92 chinook book access codes were distributed and 26 of those were activated, resulting in 522 sessions on the app.



Website Articles

The City of Des Moines website receives approximately 235 visits per day. In 2015 one article (see below) was posted to the Des Moines website under the City news tab which is featured on the home page.

- Storm Drain Marker Volunteer Program –Local Program

City Currents Newsletter

The City of Des Moines has a quarterly newsletter that is mailed to approximately 24,000 residents and businesses within the City of Des Moines. Below are the articles that were submitted to the article that were intended to create general awareness and behavior change.

- Spring – Household Pollution, Storm Drain Volunteer
- Summer – Car Washing, Storm Drain Volunteer
- Fall – Chinook Book Offer, Pet Waste, Storm Drain Volunteer
- Winter – Septic System Information, Chinook Book Offer

Storm Drain Marker Program

During the 2015 year 7 stormdrain marker kits were checked that included 350 markers as well as 5 kits that were still in use from the 2014 year. The highlight of this program during 2015 came from the Boy Scout Pack 975. They had 9 scouts and 7 adults participate in the program and they marked over a hundred basins. This program allows volunteers to learn more about the importance of stormwater and also provides an informational marker located next to stormdrains which also adds to general awareness. These markers can also lead to behavior change in the prevention of illicit discharges.



Car Wash Kit Usage

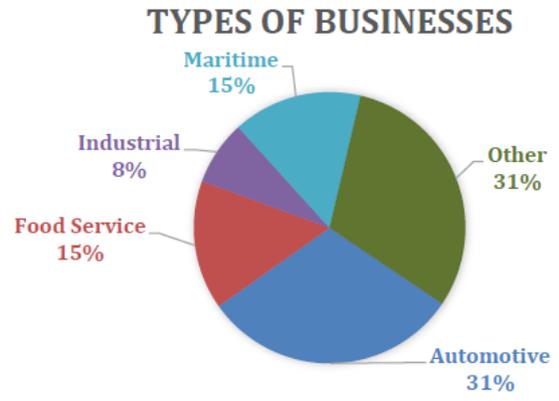
The City has continued its carwash kit program in 2015 and witnessed another great year of fundraising and continued education on the environmental impact and benefit of using car wash kits on the city's waterways and the Puget Sound. The City's Car Wash Kit Program has been a huge success in supporting local organizations with their fundraising activities, a total of 6 kits were checked out during the 2015 calendar year. The program has also been instrumental in educating organizations outside of the City of Des Moines, that all car wash activities within the City require a car wash kit. There are currently six kits available for organizations wanting to conduct fundraising activities. The Car Wash Kit helps to prevent pollutants such as petroleum products, pesticides and animal waste, from being discharged into Puget Sound.



ECOSS Business Outreach

The City has partnered with Environmental Coalition of South Seattle (ECOSS) to help educate, train, and deliver free spill kits to thirteen Des Moines businesses in 2015. "ECOSS is a nonprofit organization that encourages urban redevelopment and a healthy environment by providing education, resources and technical assistance to diverse businesses and communities in the Puget Sound region" (www.ecoss.org). ECOSS asked participating businesses to respond to a follow-up survey. The purpose was to assess the level of understanding and awareness of the issue retained since the initial interaction. Here is a list of the key results from this program.

- 36% of participating businesses responded to the follow up survey
- 46% of businesses served spoke ESL.
- Prior to the service, 31% of the businesses that took part in the program were aware of the where polluted runoff went. After participating in the program, 74% of the businesses surveyed had this awareness of polluted runoff.
- Prior to the service, 26% of the businesses that took part in the program trained staff on spill response. After participating in the program, 49% of the businesses surveyed had trained staff as a result of the ECOSS visit.



City of Des Moines 2015 – NPDES Permit Annual Report

Used results of measuring the understanding and adoption of targeted behaviors among at least one audience in at least one subject area to direct education and outreach resources and evaluate changes in adoption of targeted behaviors per S5.C.1.c.

Target Audience: General Public – Businesses

Subject Area BMP: Prevention of illicit discharges

Measurement of the Understanding and Adoption of Targeted Behaviors: 2014/2015 ECOSS Partnership

At the start of 2014 the City of Des Moines partnered with the Environmental Coalition of South Seattle (ECOSS) to provide education, training, resources, and surveys to businesses throughout the City. “ECOSS is a nonprofit organization that encourages urban redevelopment and a healthy environment by providing education, resources and technical assistance to diverse businesses and communities in the Puget Sound region”. ECOSS is both a local and regional program.

Results (Local 2014 Summary):

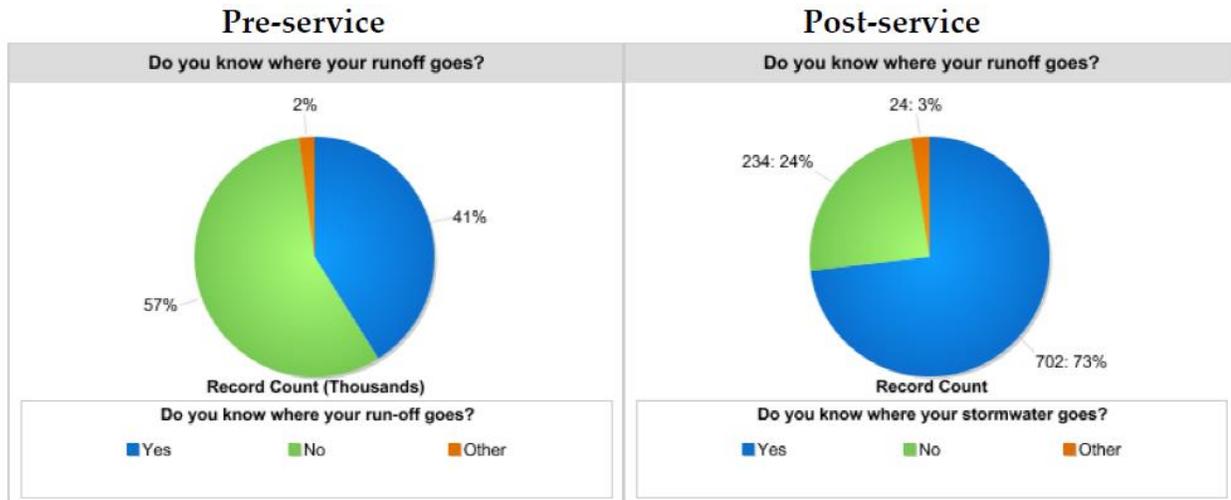
Businesses Visited: 56

Deliverables:

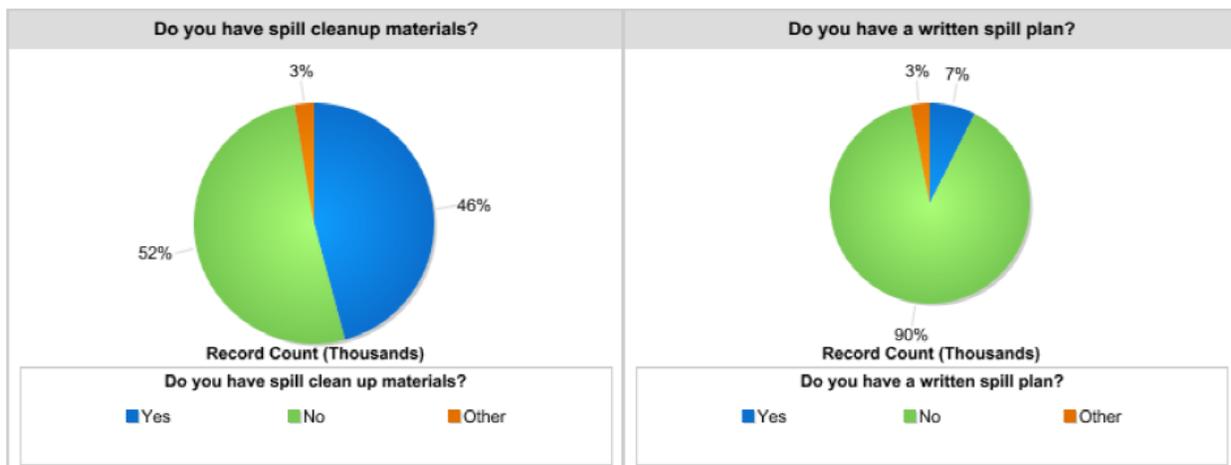
- ECOSS will provide targeted and specialized stormwater pollution prevention assistance to businesses in Des Moines
- ECOSS will provide spill kit, customized spill plan, and spill response training for managers and employees
- ECOSS will collect information during service delivery to gauge basic knowledge and awareness of stormwater issues, BMP's, spill response readiness, etc.
- ECOSS will perform brief follow up surveys to determine post-service awareness and behaviors, including kit use, training, etc.

Survey Results: A survey was conducted during each visit to understand the level of awareness of the issues on the part of each business, and a follow up survey was conducted with 35% of those businesses to gauge retention and behavior change.

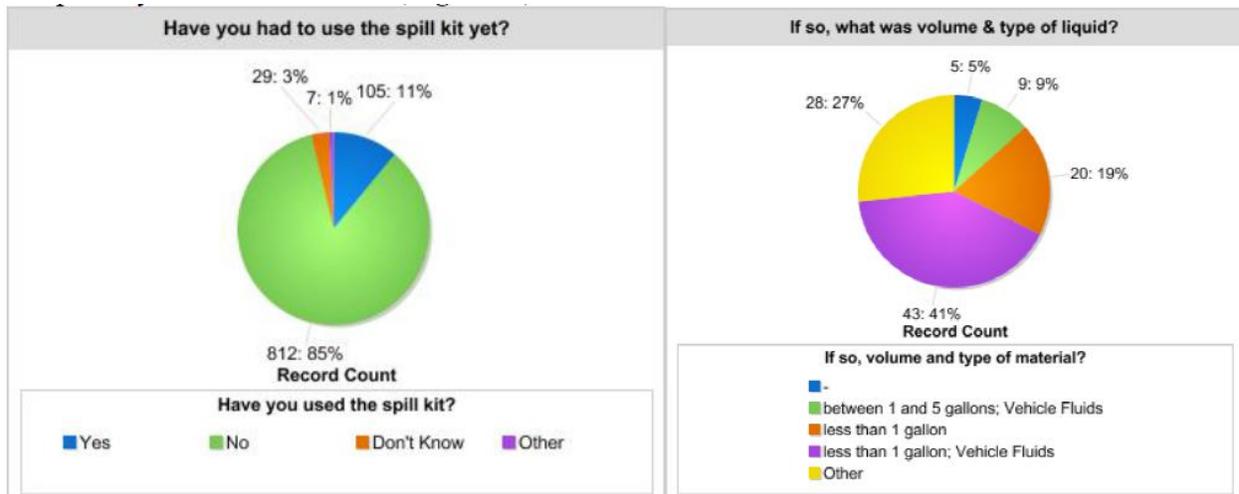
After participating in the program 73% of the businesses reported knowing where their stormwater runoff went. This is a large improvement as only 41% of the businesses reported having this information before participating in the program.



Businesses were asked if they had spill cleanup materials and a Spill Plan onsite prior to the service. As seen below, only 46% of businesses had materials, and only 7% had a Spill Plan. These percentages went up to 100% after program participation.



Since receiving the spill kit and training, 11% of the businesses surveyed report that they have used the material and information to clean up spills, which consisted most frequently of vehicle fluids.

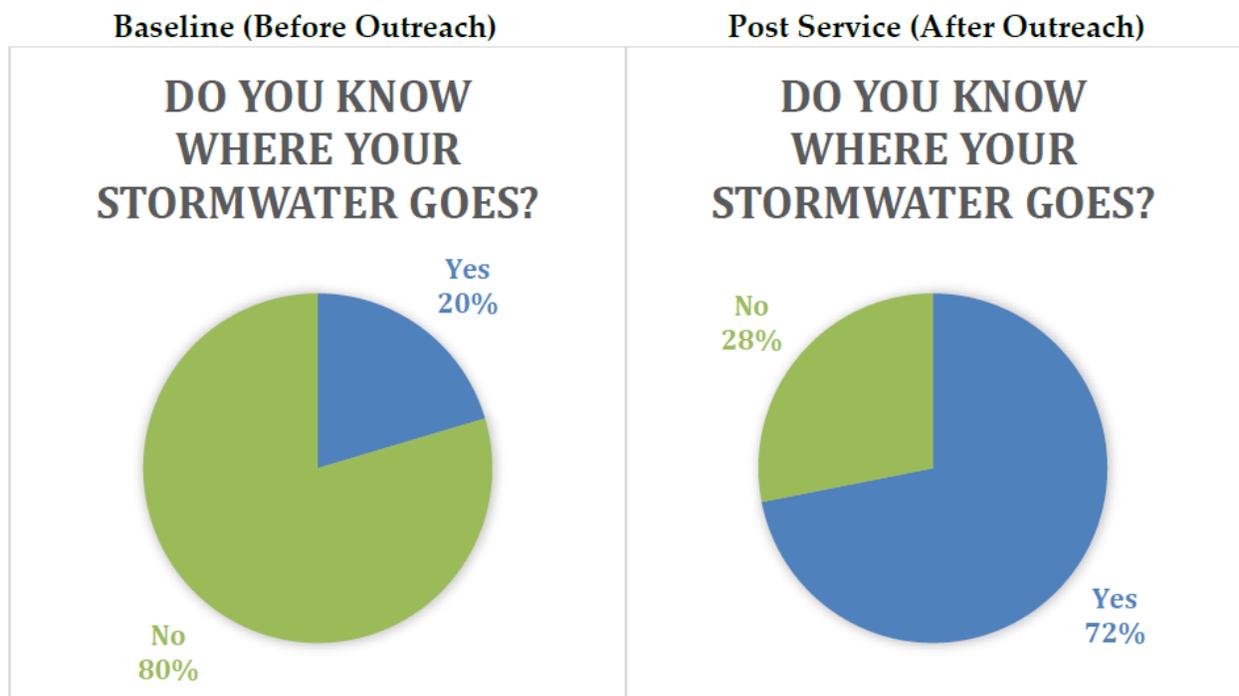


Results (Regional 2013-2015 Summary):

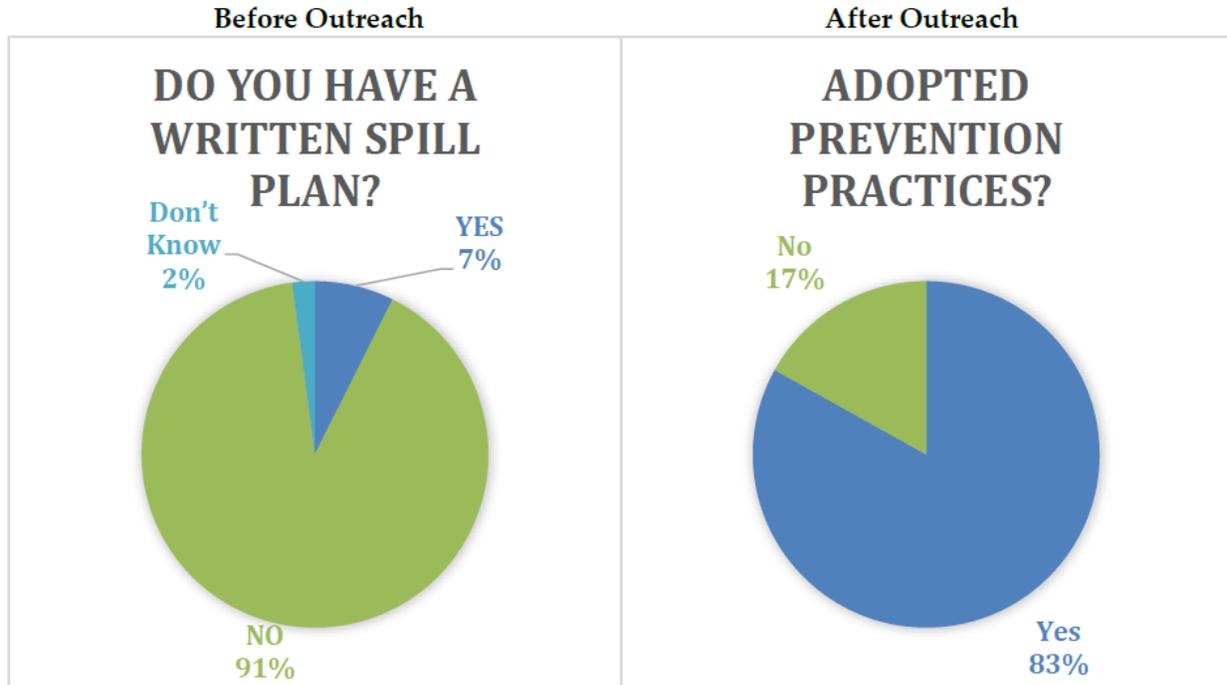
Businesses Visited: 2,477

Survey Results: A survey was conducted during each visit to understand the level of awareness of the issues on the part of each business, and a follow up survey was conducted with 36% (1021) of those businesses to gauge retention and behavior change.

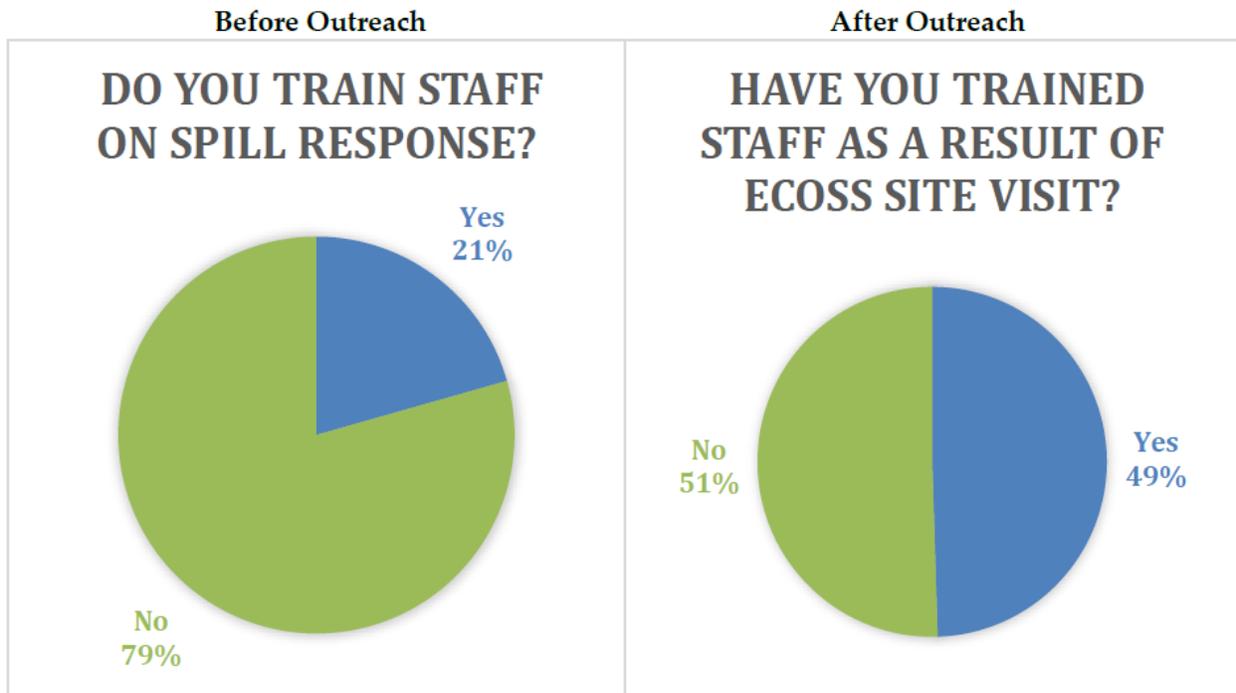
Business managers and owners showed significant improvement on understanding where the stormwater runoff goes from their sites after the outreach, as 72% reported to know where their stormwater goes after the outreach, compared to 20% before the outreach. This can be attributed to onsite training and site-specified GIS maps provided by the outreach staff.



The spill plans provided by the program establish the foundation of standard spill procedures for many businesses. The team found that only **7%** of the businesses served had written spill clean-up procedures developed before the initial outreach. All the businesses received spill plans through this project, bringing that to 100%. Furthermore, approximately **83%** of the businesses adopted spill prevention practices recommended through the program, such as bringing operations indoors, replacing leaky containers and conducting spill training after our visit.



Only **21%** of the businesses trained their staff on spill response prior to the outreach, whereas **49%** of the businesses conducted trainings for their staff as a result of the visit. While apparently automotive businesses were more likely to train their staff after the visit, food service businesses were least likely to do it.



Results (Local 2015 Summary):

Businesses Visited: 13

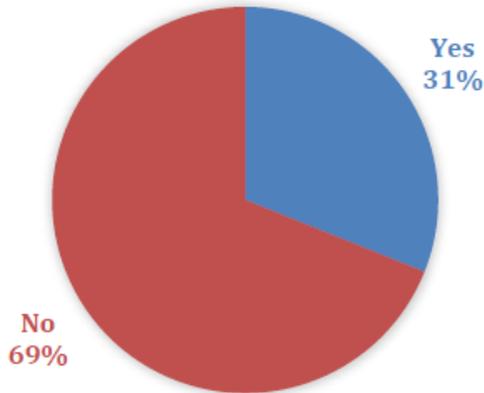
Deliverables:

- ECOSS will provide targeted and specialized stormwater pollution prevention assistance to businesses in Des Moines
- ECOSS will provide spill kit, customized spill plan, and spill response training for managers and employees
- ECOSS will collect information during service delivery to gauge basic knowledge and awareness of stormwater issues, BMP's, spill response readiness, etc.
- ECOSS will perform brief follow up surveys to determine post-service awareness and behaviors, including kit use, training, etc.

Survey Results: A survey was conducted during each visit to understand the level of awareness of the issues on the part of each business, and a follow up survey was conducted with 36% of those businesses to gauge retention and behavior change.

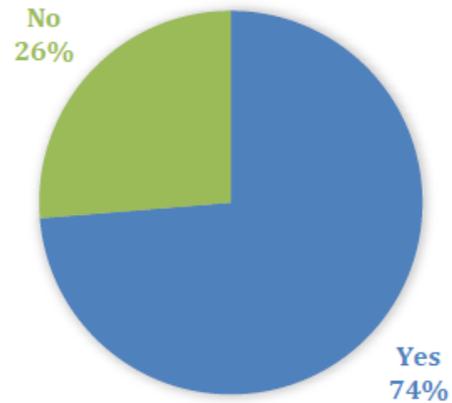
Baseline (Before Outreach)

DO YOU KNOW WHERE YOUR STORMWATER GOES?



Post Service (After Outreach)

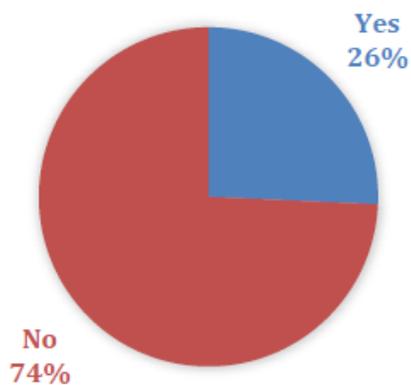
DO YOU KNOW WHERE YOUR STORMWATER GOES?



Business managers and owners showed significant improvement on understanding where the stormwater runoff goes from their sites after the outreach, as 74% reported to know where their stormwater goes after the outreach, compared to 31% before the outreach. This can be attributed to onsite training and site-specified GIS maps provided by the outreach staff.

Before Outreach

DO YOU TRAIN STAFF ON SPILL RESPONSE?



After Outreach

HAVE YOU TRAINED STAFF AS A RESULT OF ECOSS SITE VISIT?



Only **26%** of the businesses trained their staff on spill response prior to the outreach, whereas **49%** of the businesses conducted trainings for their staff as a result of the visit. While apparently

automotive businesses were more likely to train their staff after the visit, food service businesses were least likely to do it. When ECOSS identified the issue of low training rate among business sectors in 2014, we started revisiting some of the served businesses to remind them the importance of spill response training to their employees.

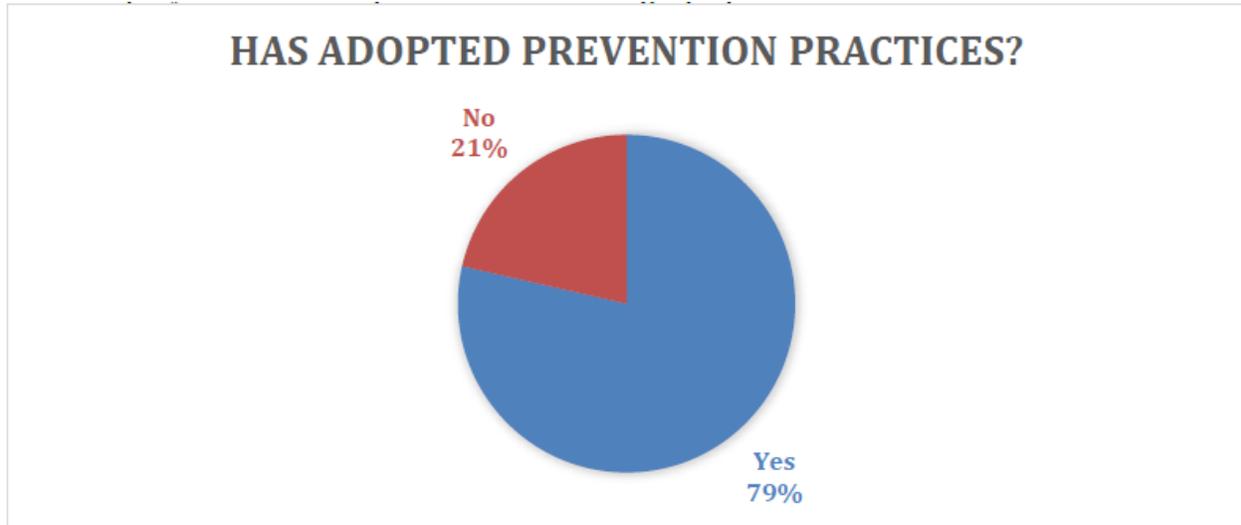


Figure 10. Have the businesses adopted spill prevention practices?

Since our visits, 79% of the businesses have adopted new spill prevention practices for their businesses. (Figure 10) As part of the initial training, ECOSS staff encouraged businesses to utilize the Spill Prevention Plan as a training tool and guideline to educate their employees on the importance of cleaning up spill.

How evaluation of survey results has directed education and outreach resources:

The ECOSS program has been to be a big success in both creating a change in behaviors and measuring the behavior changes. Because the ECOSS program has proven to be effective in creating these behavior changes, the City has directed education and outreach resources into further continuation with this program. Businesses have responded positively to the IDDE education program both locally and regionally.

2015 - NPDES Annual Report

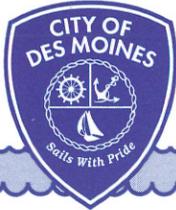
Summary of Actions Taken to Characterize, Trace, and Eliminate Each Illicit Discharge Found by or Reported to the City in 2015.

For each illicit discharge, include a description of actions according to required timeline per S5.C.3.d.iv

Date Reported	Address/Location	Illicit Discharge Characterized	Illicit Discharge Traced	Illicit Discharge Eliminated	Required Timeline Met? (S5.C.3.d.iv)
01/05/2015	S 251st Ave S - Between 16th Ave S and Marine View Dr	Hydraulic Fluid	Hydraulic line malfunction on a dump truck. Estimated 1 gallon spilled onto the roadway, dispersed over a 4 blocks of roadway.	Contractor acted quickly to place absorbent booms around inlets and outfalls. Absorbent pads were placed in the locations of high concentration. Also roughly 600lbs of cat litter was spread across the roadway. A street sweeper then was dispatched to cleanup all of the absorbing materials.	Yes, date investigation/elimination 1/6/2015.
02/09/2015	Property on S 206th St	Oil spill	Oil residue from the vehicles in driveway	City crews visited site and confirmed the site is contained and property owner had placed kitty litter to absorb oil.	Yes, date investigated/eliminated 2/10/2015.
02/10/2015	24th Ave S/S 208th St	Turbid sediment laden water	Construction site was pumping a stormwater vault to have a slab installed. The discharge was entering a stormwater ditchline.	The contractor was told to remove the pump and relocate in to a contained system which has more than 100' of vegetation.	Yes, date investigated/eliminated 2/10/2015.
02/25/2015	24135 22nd Ave S	Yard Waste (Vegetation)	Evidence of yard waste being dumped into ditch line from over a fence of the adjacent property.	City crews removed the yard waste from the ditch line and a letter was sent to the resident educating them on illicit discharges and notifying them of their illicit activity.	Yes, date investigated 2/25/2015. Letter sent on 3/5/2015.
02/25/2015	24132 21st Ave S	Yard Waste (Vegetation)	Evidence of yard waste being dumped into ditch line from over a fence of the adjacent property.	City crews removed the yard waste from the ditch line and a letter was sent to the resident educating them on illicit discharges and notifying them of their illicit activity.	Yes, date investigated 2/25/2015. Letter sent on 3/5/2015.
02/25/2015	2916 S 220th St	Car leaking pollutants	Upon inspection no pollutants were observed leaving the residents property.	No spill observed.	Yes, date investigated 2/25/2015.
02/25/2015	20473 8th Ave S	Vehicle pollutants: Anti-freeze, etc.	Driveway automotive repair	The resident was educated on the adverse effects of pollutants entering the storm system and how to prevent them from leaving his property.	Yes, date investigated/eliminated 2/27/2015.
02/25/2015	20104 4th Pl S	Motor oil and anti-freeze.	Car maintenance was the source.	No pollutants entered the storm system and the resident was educated on the adverse effects as well as cleaning up the initial pollutants by shop vac.	Yes, date investigated/eliminated 2/27/2015.
03/02/2015	21926 18th Pl S	Sediment laden water	Contractor working at this address was pumping sediment laden water and discharging portions into the roadway.	Contractor was notified to immediately stop pumping and to redirect flows into the grassy yard to be infiltrated. Also he was notified to sweep and clean up any sediment that is on the roadway or near the catchbasin.	Yes, date investigated/eliminated 3/2/2015.
03/02/2015	21650 11th Ave S	Gasoline spill	From maintenance activities, 1/4th gallons of gas was spilled near a catchbasin but did not enter the CB.	Absorbent pillow and granular absorbent was used to contain and clean up the spill.	Yes, date investigated/eliminated 3/2/2015.
03/27/2015	25121 8th Pl S	Landslide - sediment	Landslide occurred on the bank adjacent to the Puget Sound. Sediment was discharged from the bank and during hightide could be deposited into the Sound.	Contacted Department of Ecology and they were only concerned if there was any risk of chemical discharge into the Puget Sound. No action required.	Yes, date investigated 3/30/2015.
04/07/2015	Throughout City	Diesel fuel	Vehicle belonging to Cascade Concrete and Drilling had a leaking fuel tank.	City crews were dispatched to protect catchbasins were oil sheen has concentrated could likely enter the drain. Absorbent pads and throw-n-go were both used to absorb the fuel. Site checks of streams showed no signs of diesels fuel.	Yes, date investigated/eliminated 4/7/2015.
04/09/2015	Near S 216th St and 20th Ave S	Anti-freeze	4 gallons of anti-freeze leaked from metro bus after traffic accident.	Metro used floor dry on roadway to cover spill area. Swept and disposed of absorbed material. City crews used absorbent pads used to protect the catchbasins. Then sediment in the basin was cleaned out.	Yes, date investigation/referred 4/9/2015.
04/30/2015	McSorely Creek - Puget Sound Downstream	Suspended sediment	Source was tracked for approximately one hour and was not found. Sediment disappeared once the search for source began.	Source eliminated and no source found.	Yes, date investigated/eliminated 4/30/2015.
05/05/2015	21834 12th Ave S	Chlorinated swimming pool drainage	Resident reported neighbor draining chlorinated pool water into his property.	Repeat violation. Second letter sent to resident stating that it is unlawful as well as a list of BMPs. Met with homeowner to establish BMPs.	Yes, date investigated 5/5/2015. Letter sent on 5/5/2015.

06/02/2015	21815 Marine View Dr S	White suds	Minimal suds were observed and illicit discharge tracking was used to try and find the source but the trail was lost very close upstream, and an area search did not turn up any sources.	The location will be reinspected again to see if this is a repeated action.	Yes, date investigation 6/2/2015.
06/18/2015	21831 13th Ave S	Vehicle pollutants	Initial complaint of car maintenance leading to pollutants entering the storm system, upon inspection no pollutants were observed	No pollutants were observed.	No, date investigated 6/30/2015. Meets the requirement because of the average response time is less than 7 days.
07/31/2015	1423 S 223rd St	Oil leak	Broken down vehicle on the shoulder of the roadway leaking oil very slowly. No oil has been transported into the storm system.	City crews have placed an absorbent pad beneath the vehicle until it was removed from the location.	Yes, date investigation/elimination 8/4/2015.
08/13/2015	1603 S 255th Pl	Reported dangerous chemicals from car leaks	Inspection found that no pollutants were found in or around the storm system.	Homeowner was told of the complaint and educated on the impact of pollutants on the MS4.	Yes, date investigated 8/17/2015.
09/11/2015	26810 17th Pl S	Fuel Spills	Upon inspection evidence of previous spill was found beneath kitty litter and also open drain pans were found. Transmission was also sitting on the lawn.	Homeowner was educated and told to clean up kitty litter and properly store drain pan and also to relocate the transmission. Owner was very willing to take action.	Yes, date investigated/eliminated 9/16/2015.
09/11/2015	19905 9th Ave S	Failing septic field	Inspector Ken Thomas visited the site to confirm the failure	The inspector referred the homeowner to King County Public Health in regards to failing septic systems.	Yes, date investigated/referred 9/16/2015.
09/27/2015	1369 279th St	Trash and debris	A large amount of trash and debris was dumped over the back fence of property nearby a wetland sensitive area.	On 11/2/15 after various attempts to make contact with the owner, the investigation was passed on to PD who made contact and corrective actions possible.	Yes, date investigated 10/2/15. Confirmation of elimination on 1/12/16.
10/08/2015	22001 Pacific Highway S	Servicing boats with oil, solvent, and detergents	Inspector visited the site on 10/29. They did not observe any of these actions.	The business owner was educated on BMPs for washing boats.	No, date investigated 10/29/2015. Meets the requirement because of the average response time is less than 7 days.
10/29/2015	23110 30th Ave S	Pressure washing, trash overflowing	CSO's from the PD visited the property to discuss the issues of auto repair and correct their actions	Inspector visited on 11/6/2015 and did not witness any immediate concerns related to water quality. Concerns were eliminated.	Yes, date investigated/eliminated 11/6/2015.
11/13/2015	Midway Sewer District Plant	Digester sewer foam	100 gallons of sewer foam overflowed from a digester and entered a storm drain.	Midway WWTP submitted ERTS through their permit and responded the discharge by using a flush truck to clean up the spill.	Yes, date investigated/referred 11/13/2015.
11/16/2015	Marine View Dr from Des Moines Memorial Dr to S 223rd St	Oil Sheen or diesel gas	Sheen on roadway shoulder, most likely from vehicle failure. Estimated 2-gallons of diesel gas. Source not found.	Fire department and city crews were dispatched to put down absorbent pads on the catch basins and to place absorbent granular down on the most concentrated locations of diesel.	Yes, date investigated/eliminated 11/16/2015.
12/09/2015	Cold Creek - Downstream of Lakehaven Utility District Plant	Chlorinated effluent overflow	Overflows generated from the effluent building of the sewer plant.	Lakehaven WWTP submitted ERTS through their permit and responded the discharge.	Yes, date investigated/referred 12/10/2015.
12/21/2015	13th Pl S and S 256th Pl	Combined sewer overflow	Sewer district overflow from a manhole. Nearby homes are connected to sewer line with sump pumps which overloaded the system.	Midway WWTP submitted ERTS through their permit and responded the discharge.	Yes, date investigated/referred 12/22/2015.

City of Des Moines



PLANNING, BUILDING AND PUBLIC WORKS
www.desmoineswa.gov
21650 11TH AVENUE SOUTH
DES MOINES, WASHINGTON 98198-6317
(206) 870-6522 FAX (206) 870-6596



February 16th, 2016

Rachel McCrea
Washington Department of Ecology
Northwest Regional Office
3190 160th AVE SE
Bellevue, WA 98008-5452

G20 Non-Compliance Notification

To whom it may concern,

This is a notification letter for Ecology in regards to the City of Des Moines' non compliance status with a portion of its NPDES Phase II permit. The intent of this letter is to describe the state of non-compliance and to explain what has been done to rectify the issue and prevent further instances of non-compliance.

On January 15th, 2016 it was discovered that the City of Des Moines is currently in a state of non-compliance with permit requirement S5.C.5.h. The current draft for the City's "SWPPP for all heavy equipment or storage yards, and material storage facilities owned or operated by the Permittee" was last updated in January 2010. After taking time to investigate this document it was found that it was missing key components required by the permit and also requirements established in the SWPPP were not being followed by staff adequately. Specifically, many commercial BMPs that have been adopted by the King County Surface Water Design Manual are currently not in effect, inspections of the outfalls and BMPS have not occurred/recorded, appropriate staff have not been trained on the SWPPP, and many portions of the SWPPP need updating.

In order to rectify this current status of non-compliance City staff is drafting a new updated SWPPP for these facilities. These updates will remedy the issues mentioned above, staff will be trained on the updated manual, and records will be created to track inspections and trainings. These actions will prevent reoccurrence of the non-compliance. March 31st, 2016 is the anticipated date in which all of the above corrections will be completed.

Sincerely,

Loren Reinhold, P.E.
Surface Water & Environmental Engineering Manager
206-870-6524; lreinhold@desmoineswa.gov

CC: Tyler Beekley

City of Des Moines



PLANNING, BUILDING AND PUBLIC WORKS
www.desmoineswa.gov
21650 11TH AVENUE SOUTH
DES MOINES, WASHINGTON 98198-6317
(206) 870-6522 FAX (206) 870-6596



February 25, 2016

Rachel McCrea
Washington Department of Ecology
Northwest Regional Office
3190 160th AVE SE
Bellevue WA 98008-5452

Re: G20 Non-Compliance Notification

To Whom It May Concern,

This is a notification letter for Ecology in regards to the City of Des Moines' non compliance status with a portion of its NPDES Phase II permit. The intent of this letter is to describe the state of non-compliance and to explain what has been done to rectify the issue and prevent further instances of non-compliance.

On January 28, 2016 it was discovered that the City of Des Moines is currently in a state of non-compliance with permit requirement S5.C.4.c.iii. At the beginning of 2016 the Surface Water Department added .4 FTE towards the staff working under the NPDES permit. After this FTE was gained it freed up more time to focus on self-auditing our NPDES permit. During this self-audit it was found that our inspector in charge of inspecting and managing the private facilities under S5.C.4.c.iii was not inspecting these facilities correctly, based on the requirements established in the King County Surface Water Design Manual. All the facilities were inspected but the inspection criteria on the forms was not inspected to the maximum extent feasible. This non-compliance issue was caused by poor communication between the inspector and the NPDES permit coordinator.

In order to rectify this current status of non-compliance City staff will be inspecting these private facilities in 2016 with the correct inspections criteria and proper procedures. All staff involved in the inspection of stormwater facilities will have updated training on the correct methods for inspecting. These actions will prevent reoccurrence of the non-compliance. All of the above corrections are anticipated to be completed during the 2016 permit cycle.

Sincerely,

Loren Reinhold, P.E.

Surface Water & Environmental Engineering Manager
206.870.6524; lreinhold@desmoineswa.gov

cc: Tyler Beekley, Water Quality specialist/Civil Engineer I
Ken Thomas, SWM Technician/ESC Inspector

City of Des Moines



PLANNING, BUILDING AND PUBLIC WORKS
www.desmoineswa.gov
21650 11TH AVENUE SOUTH
DES MOINES, WASHINGTON 98198-6317
(206) 870-6522 FAX (206) 870-6596



February 11, 2016

Rachel McCrea
Washington Department of Ecology
Northwest Regional Office
3190 160th AVE SE
Bellevue WA 98008-5452

Regarding: G20 Non-Compliance Notification

To Whom it May Concern,

This is a notification letter for Ecology in regards to the City of Des Moines' non-compliance status with a portion of its NPDES Phase II permit. The intent of this letter is to describe the state of non-compliance and to explain what has been done to rectify the issue and prevent further instances of non-compliance.

The issue involves three cases of City-owned stormwater facilities not being inspected in 2015. The City first became aware of one facility that was not inspected on January 14, 2016. This facility was an unclear facility on our GIS database that needed further investigating but was deemed inaccessible because of a broken locking mechanism. On January 14th the stormwater crews notified the SWM department that the basin was accessed and that it was confirmed to be a control structure.

The second finding of City-owned stormwater facilities not being inspected in 2015 came to the department's knowledge on January 26, 2016. After reviewing the complete list of stormwater facilities and their related inspections it was determined that a total of sixteen additional facilities were not inspected in 2015. City staff inspected 202 out of the 219 known facilities; this resulted in only 93.1% of the required inspections being achieved. This falls short of the requirement stated in S5.C.5.e. which require at least 95% of the public facilities be inspected to meet compliance.

The third finding of City-owned stormwater facilities not being inspected in 2015 came to the department's knowledge on February 4, 2016. After revisiting the King County Surface Water Design Manual to review are design standards, it was determined that many facilities were not being inspected according to their specific inspection standards. For example, two infiltration ponds where inspected under the "Detention Pond" requirement instead of the "Infiltration Facility" requirement. It was also determined that other types of infiltration facilities needed to be added to the list of facilities annually inspected, including trenches and dry wells.

In order to rectify these occurrences of non-compliance, City staff are currently working on an internal audit to review each public facility. The audit will help determine if the facility is mapped correctly, currently meets the requirements for inspection, and if it is in need of an inspection. Once all these facilities have been updated and categorized correctly, inspections of all the facilities that were missed in 2015 will be inspected with a high priority and work orders will be created for the necessary maintenance. Also, the City's Cityworks database for tracking these inspections will be updated as well to include inspection ID's for each facility and will assign each facility with its appropriate inspection criteria based on the King County Surface Water Manual.

The steps being taken above will ensure that these facilities do not reach a condition of non-compliance again. March 31st is the anticipated date in which all of the above corrections will be completed.

Sincerely,



Loren Reinhold, P.E.
Surface Water & Environment Engineering Manager
206.870.6524; lreinhold@desmoineswa.gov

cc: Tyler Beekley, NPDES Coordinator

Washington Department of Ecology Submission Cover Letter

**WQWebSubmittal - Submittal Submission Id: 1533925 - 3/30/2016
9:34:07 AM**

Report Received Dated:

3/30/2016 9:34:08 AM

Company Name	Signer Name	System Name
City of Des Moines	Loren Reinhold, PE	WQWebPortal

Attachments:

Document Name of Description	Document File Name
WAR045511_5_03152016083320	2015S5C1ai-ii_5_03152016083320
WAR045511_20_03152016093154	2015S5C3div_20_03152016093154
	G20 Facility SWPPP 2016 (signed Loren)
Submitted Copy of Record for City of Des Moines	Copy of Record CityofDesMoines Wednesday March 30 2016
WAR045511_7b_03152016083320	2015S5C1c_7b_03152016083320
WAR045511_1_03282016082202	2016 SWMP_1_03282016082202

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

**For Ecology Use Only ---
Dev**



60ti27ESMSC3DbpbjA1pxij
+ozs8KbSfpoFFQhGHztA2EkcQBnW28r8EnFK1RFcfV1miMY9sLI6h5yno2xBZRnZVm
+HDbUu5+pEEKY5XNwE=