

**460th SPACE WING**  
**BUCKLEY AIR FORCE BASE COLORADO**



**ANNUAL REPORT — PERMIT YEAR 1**

**National Pollutant Discharge Elimination System (NPDES)  
Stormwater Discharges from Municipal Separate Storm  
Sewer System (MS4) Individual Permit # COR 042003**

**Report Date: Mar 26, 2015**

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List of Acronyms

460 CES	460th Civil Engineer Squadron	ECB	Erosion Control Blanket
460 CES/CEI	460th Civil Engineer Squadron / Installation Management Flight	MEP	Maximum Extent Practicable
460 CES/CEIE	460th Civil Engineer Squadron / Installation Management Flight/Environmental Element	MCM	Minimum Control Measure
460 CES/CEN	460th Civil Engineer Squadron / Engineering Flight	MS4	Municipal Separate Storm Sewer System
460 CES/CEO	460th Civil Engineer Squadron / Operations Flight	MSGP	Multi-Sector General Permit
460 CES/CEOH	460th Civil Engineer Squadron / Operations Flight/Heavy Repair Element	NOI	Notice of Intent
460 SW	460th Space Wing	NOT	Notice of Termination
460 SW/JA	460th Space Wing / Judge Advocate	NPDES	National Pollutant Discharge Elimination System
AAFES	Army & Air Force Exchange Service	SWMP	Stormwater Management Program
ADF-C	Aerospace Data Facility-Colorado	SWPPP	Stormwater Pollution Prevention Plan
Buckley AFB	Buckley Air Force Base	US EPA	U. S. Environmental Protection Agency
BMP	Best Management Practice	WQP	Water Quality Program
COANG	Colorado Air National Guard	WQPM	Water Quality Program Manager

## **1 – INTRODUCTION**

This Municipal Separate Storm Sewer System (MS4) Permit annual report is for the United States Department of the Air Force, 460th Space Wing, Buckley Air Force Base's (Buckley AFB's) Individual MS4 Permit Number COR 042003 (the Permit). In accordance with Part 3.3 of the Permit, the annual report covers activities during the period Jan 1 — Dec 31, 2014 (i.e., Permit Year 1); is to be submitted to Region 8 United States Environmental Protection Agency (US EPA) to the following address:

Stormwater Coordinator (8P-W-WW)  
Small MS4 Annual Report  
US EPA Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

In addition, the annual report is to be signed in accordance with the signatory requirements in Part 4.7 of the Permit. Because the report may be posted on the Region 8 US EPA web site, sections/paragraphs of the annual report which cannot be publicly available are marked as confidential and For Official Use Only (FOUO).

The Permit replaced Buckley AFB's previous MS4 permit, National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Operated by Federal Facilities in Colorado, COR 042000, that had been in place since April 2004 with tracking number COR 04208F. Coverage under Permit COR 04208F had been administratively extended by Region 8 US EPA since June 2008.

Buckley AFB is located on approximately 3,200 acres near the City of Aurora in Arapahoe County, Colorado. The 460th Space Wing (460 SW) is the host organization on Buckley AFB. The 140th Wing Colorado Air National Guard (140 WG COANG) operates and manages the Buckley AFB airfield. The Colorado Army National Guard's (COARNG) Army Aviation Support Facility (AASF) maintains aircraft, supports airlift detachment and other mission related activities. In addition to aircraft and flightline activities, Buckley AFB houses additional organizations on the installation including: the Aerospace Data Facility—Colorado (ADF-C), Air Reserve Personnel Center (ARPC), 556th Intelligence Squadron, 743rd Military Intelligence Battalion, Joint Forces Headquarters, as well as Navy and Marine Corps Reserve Detachments.

The Permit covers all areas of the installation within the exterior boundary of Buckley AFB, except for the privatized housing area located on the west side that is operated by Hunt Housing, LLC. The stormwater drain system on the privatized housing area operates separately from and independently of the stormwater drain system on the installation. However, the Permit does contain requirements to provide public education and outreach to installation residents, which does include the residents of the privatized housing area. During Permit Year 1, no areas have been added to the Permit due to annexation or other legal means on the installation.

Stormwater drainage on Buckley AFB is identified by four major drainage basins namely: Sand Creek, Murphy Creek, Granby Ditch, and East Toll Gate Creek. Drainage from the eastern portion of the Base, Murphy Creek Drainage Basin, drains overland into Murphy Creek. Murphy Creek, a water of the U.S., flows intermittently to the northwest until it joins Sand Creek. Drainage from the northeastern and

northern portion of the Base, Sand Creek Drainage Basin, drains overland and unnamed tributaries into Sand Creek. Sand Creek, a water of the U.S., flows intermittently to the northwest and discharges into the South Platte River about 12 miles downstream from Buckley AFB. Drainage from the northwestern portion of the Base, Granby Ditch Drainage Basin, drains into Granby Ditch. Granby Ditch is a natural/improved flood-control channel that is part of the City of Aurora MS4 storm sewer system, flows intermittently into Toll Gate Creek. Drainage on the western and southwestern portion of the Base, East Toll Gate Creek Drainage Basin, drains directly to East Toll Gate Creek. East Toll Gate Creek, a water of the U.S., flows intermittently to the northwest until it joins West Toll Gate Creek, which then is called Toll Gate Creek. Toll Gate Creek, a water of the U.S., joins with Sand Creek further downstream.

## **2 – PERMITTEE INFORMATION**

Permit Number: COR 042003  
Permittee Name: United States Department of the Air Force, 460th Space Wing  
Buckley AFB  
Mailing Address: 460th Space Wing  
510 S Aspen St (Mail Stop 88)  
City, State and Zip Code: Buckley AFB CO 80011-9572  
  
Point of Contact: Corwin Oldweiler, PE  
Water Quality Program Manager  
460th Space Wing, Civil Engineer Squadron,  
Environmental Element (460 CES/CEIE)  
660 S Aspen St (Mail Stop 86)  
Buckley AFB CO 80011-9564  
(720) 847-4655  
corwin.oldweiler@us.af.mil and 460ces.cevwater@us.af.mil

## **3 – REPORTING PERIOD**

Jan 1, 2014 to Dec 31, 2014: Permit Year 1.

Buckley AFB was issued NPDES Permit COR 042003 from US EPA Region 8 on Aug 6, 2013. The Permit effective date is Jan 1, 2014 (exception for Part 2.6 described in the following paragraph) and authorization to discharge expires at midnight on Sep 30, 2018.

On Sep 30, 2013, the Air Force filed with the US EPA Environmental Appeals Board a petition for appeal of part of the Permit. The Air Force appealed the conditions and requirements in Part 2.6 of the Permit relating to Post-Construction Stormwater Management for New Development and Redevelopment. Region 8 US EPA and the Air Force agreed to Alternative Dispute Resolution to settle the appeal. As a result, Region 8 US EPA modified Part 2.6 in the Aug 6, 2013 Permit and issued the Permit Modification on Dec 5, 2014 with an effective date of Jan 12, 2015 for Part 2.6 only.

#### **4 – PERMIT IMPLEMENTATION**

Part 2.1 of the Permit requires development of a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants and to protect water quality. Part 2.1.4 of the Permit requires an annual review of the SWMP in conjunction with preparation of the annual report.

The Permit defines the SWMP as a comprehensive program to manage the quality of stormwater discharged from an MS4 through implementation of Best Management Practices (BMPs). The SWMP defines BMPs including implementation to address the six Minimum Control Measures (MCMs), which are (1) Public Education and Outreach, (2) Public Involvement and Participation, (3) Illicit Discharge Detection and Elimination, (4) Construction Site Stormwater Runoff Control, (5) Post-Construction Stormwater Management in New Development and Redevelopment, and (6) Pollution Prevention/Good Housekeeping for Municipal Operations.

The SWMP (Rev 0) prepared by Tetra Tech under contract to the US Air Force, describes BMPs, measurable goals, and documentation procedures to comply with the terms and conditions of the Permit. The SWMP serves as a framework for identifying, assigning, and implementing control measures and BMPs intended to reduce the discharge of pollutants from the MS4 and protect downstream water quality.

BMPs have been developed pursuant to Buckley AFB MS4 Permit requirements and to reduce the discharge of pollutants to the installation storm drain system. BMPs presented in this SWMP include operations, maintenance, planning, and construction. BMPs will be updated as appropriate to comply with the Buckley AFB MS4 Permit requirements, as well as changes in installation mission or operations.

The BMPs described in Sections 4.1 through 4.6 have been generally implemented and completed in Permit Year 1 (i.e., 2014). However, limitations with program staffing and support, delays in SWMP development, and the ongoing Alternative Dispute Resolution process throughout Permit Year 1 to settle the appeal all combined to slow implementation. Therefore, completion of activity on several BMPs occurred in early 2015 rather than 2014. Credit for completion is applied to Permit Year 1 and the BMPs with an annual requirement are scheduled to be conducted again in Permit Year 2 (i.e., 2015).

**4.1. PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS (PEO)**

The goal of the Public Education and Outreach (PEO) minimum control measure (MCM) is to ensure greater public awareness of water quality and the Permit requirements. Specifically, this MCM educates the Buckley AFB community (hereafter referred to as “the public”), which includes, but is not limited to, project managers, contractors, tenants, residents, and environmental staff, about the importance of protecting stormwater quality for the benefit of the environment and human health.

The five PEO BMPs and measureable goals, presented in the following tables, will be implemented by Buckley AFB over the next five years (Years 1 – 5) to satisfy the PEO MCM, unless otherwise noted (e.g., Year 1).

In accordance with Permit Part 2.2.6.3, the estimated number of people to be reached by the PEO program is in excess of 10,000 people per year. This includes military, civilian, contractor, military dependents, and retired military personnel who work and utilize services on Buckley AFB, based on the estimated installation population reported by the 460 SW Public Affairs office.

In accordance with Permit Part 2.2.6.4, the Buckley AFB Water Quality Program Manager (see Section 2) is responsible for coordination and implementation of the PEO MCM.

<b><u>BMP / MEASURABLE GOAL(S):</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
PEO-1 Household Hazardous Waste and Stormwater Awareness  Provide awareness at least twice per year during Newcomers Orientation (Right Start).	<b>COMPLETED</b> In Permit Year 1 environmental awareness materials and information were provided by 460 CES/CEIE WQP staff three times (July 16, Aug 20, and Sep 16); other 460 CES/CEIE staff provided materials at several other sessions. Materials were provided in person; 460 CES/CEIE WQP staff set up a display table with copies of the environmental awareness information provided for attendees to take.
Provide environmental protection awareness materials to new housing residents, including household hazardous waste.	<b>COMPLETED</b> The Buckley Family Housing House Rules, Regulations, and Tenant Guidelines were reviewed in Feb 2015 by the 460 CES/CEIE WQP staff. Comments, suggested edits were reviewed with the 460 CES/CEIE Chief and forwarded on to the Housing Contractor. Copies of the environmental awareness materials and information provided follow.



## Coyote Conflicts In YOUR Neighborhood!

All Pets Are Great, but Pets Are Not Coyotes! There's a big difference between a dog and a wild coyote. Coyotes are wild animals that live in the mountains and are not domesticated. They are not dogs and should not be kept as pets.



Coyotes are wild animals that live in the mountains and are not domesticated. They are not dogs and should not be kept as pets.

### Your Home & Coyotes

- **Identified coyotes:**
  - Identify coyotes that are near your yard, including pet food, water sources, food, and other attractants.
  - Remove attractants from your yard, including pet food, water sources, food, and other attractants.
  - Fully enclosed garbage and compost piles.
  - This spring, remove old birdhouses and bird feeders.
  - Use a fence line or coyote-proof fence.
  - Use a coyote-proof fence.
  - Use a coyote-proof fence.
- **Other, un-identified coyotes:**
  - If you see a coyote, call the local wildlife agency.
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  - If you see a coyote, call the local wildlife agency.

### Your Pet & Coyotes

- Keep your pet on a leash at all times.
- Never allow your pet to "play" with a coyote.
- If you see a pet that is attacked by a coyote, call the local wildlife agency.
- Always report a pet that is attacked by a coyote to the local wildlife agency.
- Never allow your pet to play outside the fence.
- If you see a pet that is attacked by a coyote, call the local wildlife agency.

Questions or concerns regarding wildlife issues, call the local wildlife agency at 303-295-4227.

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Colorado Parks & Wildlife  
Wildlife Services Unit  
1500 East 17th Avenue  
Denver, CO 80202  
303-295-7207  
wildlife@cpw.state.co.us

### Did you know?

- Coyotes are the most common predator of domestic animals, especially dogs and cats.
- Coyotes can be seen throughout the state, but are especially active in areas with deer.
- Coyotes are highly adaptable and can live in a wide range of habitats, including parks and yards.
- Coyotes are predators of other animals, including pets, as well as humans, especially children.
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**CULTURAL RESOURCES**

**History**

Archaeological investigations indicate that the first inhabitants were probably wandering bands of hunters and gatherers that followed mammals, game birds, grasshoppers, and insects into the basin. There were several Native American tribes that eventually came to the area including the Apache, Choctaw, Arapaho, and Nez Perce Indians. Archaeological digs have unearthed only a few significant artifacts. The primary artifact, projectile points, including arrow and spearhead, dates of complex.

The base came into existence just after World War II and was used as quarters and for living quarters. Buckley was temporarily the only base west of the Rocky Mountains. The site was used and commissioned as a New Air Station under their leadership, several major construction projects were undertaken including large hangar and hangar 900. In 1950, hangar 900 was transferred to the Air Force which leased the base to the Colorado Air National Guard. Several lease transfers from the Cold War brought about the construction of the small communication ground station. In 2001, Buckley was relicensed as an Air Force Base. Buckley was built from a military developed installation designed for wartime activities of bombers and fighters. Ground personnel use a fully equipped skills only base. Since then Buckley has been a major in both the construction and number of buildings on the base.

**Cultural Significance**

Cultural Resources can include buildings, structures, and archaeological sites. There are no buildings that are eligible for listing in the National Register of Historic Places. Two historic hangars (hangar 800 and 900) are four historic communications ground stations (buildings 402, 403, 404, and 405).

Under Section 106 of the National Historic Preservation Act, Federal agencies are mandated to account for the effect of their actions on historic properties. Information on each project is provided to the State Historic Preservation Office (SHPO) regarding their review and comment before commencing on any activity. Project construction or design are done with care and avoid any of the excavated structures and contact the 400 Civil Environmental Liaison at 720-847-7000.



**GENERAL INFORMATION**

**Get Permits**

You MUST get a Dig Permit before you do any digging or touching on the installation. Your project will be evaluated to determine if it has a significant effect on the Base. While a cultural archeologist will perform a preliminary assessment, a permit is issued. Contact the Customer Service at 720-847-9823 or email at [Base Civil Engineering Work Clearance Request](mailto:Base Civil Engineering Work Clearance Request).

**SIS Resources**

Each base has a comprehensive inventory of animals, vegetation, and man-made structures on the base. This information has been incorporated into a SIS database called Wildlife Inventory System. It is accessible through the Air Portal. The maps are available to anyone on the network in order to plan projects. If an operator or operator concern to database contact the Civil Support at 720-847-9909.

**Important Environmental Issues to Remember During Your Duty at Buckley AFB:**

- Do not litter.
- Avoid pollutants out of the storm drains, 150 feet from creeks.
- Recycle.
- Recycle used oil.
- Do not disturb any birds, animals, plants, or protected DNR lands.
- Do not approve a project if it will be done on a DNR Cultural Service 720-847-9823.
- Call the Customer Service for getting a Dig Permit from buildings.
- Get a Dig Permit before any digging or touching on the installation.

**IMPORTANT ENVIRONMENTAL INFORMATION FOR BUCKLEY AFB**



September 2014

**NATURAL RESOURCES**

Buckley Air Force Base (AFB) is located in a semi-arid, arid grass prairie region of the western Great Plains. Average annual precipitation is approximately 16 inches. Grass (Scribner's shrub, sedge, and broom grass) of the year. Water is the most supply in the Great Plains and should be conserved. Agricultural practices should be managed to conserve and water of any available to keep the prairie alive and green.

The trees are found growing naturally along creek bottoms. The Base is planting more trees around buildings and along roads to enhance the appearance of the Base and provide shade during the hot summer months. The trees should be planted in full sun, well-drained soil, and during winter.

**Down Power**

Section 402(b) 200 down power permits which require that you keep a distance of 100 feet from birds, ducks and cranes. All construction projects must proceed within the area to be covered by the City of Aurora Water Dept. for water and sanitary sewer and the permits were approved by Aurora Water Dept. (2000) and the Aurora Water Dept. for water quality information. Section 402(b) 200 down power permits are required to meet limits of the unusual discharge. For questions call the Aurora Water Dept. at 720-847-7000.

**Wildlife**

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**Black-billed Prairie Dog**

Black-billed prairie dogs are burrowing mammals related to ground squirrels. Habitat is grass. It is a contributing factor to the decline of the species. The species is listed as a "sensitive species" of the Great Plains. Do not use herbicide or insecticide on the base. Contact the Civil Support at 720-847-9909.



**Scrubwren Owl**

The scrubwren owl is listed as "threatened" in Colorado. The owl lives in rocky and burrows and can be seen around the base during the summer. It is also a migratory bird that is protected under the Migratory Bird Treaty Act. Do not disturb burrows or their nests.



**Herring and Flamingo**

There is currently no nesting or foraging on the base.

**Sanctuary Birds**

Private, religious, historic, and scientific facilities have a variety of bird sanctuaries. Most of these sanctuaries are located under the Migratory Bird Treaty Act. Contact the Civil Support at 720-847-9909 for more information.

off road unless it affects performance of a job and there is no other way to reach that location. Activities in developing a development program in cooperation with the National Audubon Society. Contact the Civil Support at 720-847-9909.

**Wetland Birds**

Large tracts of open spaces have been dominated by non-native grasses or woods. There are water-dependent native species and birds. Some of the species that have been introduced to the base include Canada Goose, Mallard Duck, Diamond Tailed Woodpecker, and other species. The birds are currently being used to control the weeds, pests, and biological control of the introduced species.

**AIR RESOURCES**

**Air - General Land Use**

Under the land use plan, the base is in the atmosphere, ground level ozone is a health concern. Do not use herbicide or insecticide on the base. Contact the Civil Support at 720-847-9909.

All ground-level ozone is a health concern for all of us. Those who are active and exercising outdoors will experience a health concern. The base is currently using a variety of ground-level ozone. The base is currently using a variety of ground-level ozone. The base is currently using a variety of ground-level ozone.

when ozone levels are over unhealthy levels. Visit <http://www.epa.gov/ozone/> or call the 24-hour hot line number 1-800-455-4646.

Do not use herbicide or insecticide on the base. Contact the Civil Support at 720-847-9909.

**Air - Vehicle Emissions for Vehicle Emissions**

The base is currently using a variety of ground-level ozone. The base is currently using a variety of ground-level ozone. The base is currently using a variety of ground-level ozone.

The Air Force uses vehicle emissions and Employee Certification and Reporting System (ECRS) to document compliance with emission testing requirements. ECRS is a web-based system that allows employees to report their vehicle emissions. Contact the Civil Support at 720-847-9909.

Vehicle emissions testing is required for vehicles owned by the base employees on Buckley AFB. Do not use herbicide or insecticide on the base. Contact the Civil Support at 720-847-9909.

For more information, contact the Civil Support at 720-847-9909.

In an effort to increase environmental stewardship, Buckley Air Force Base initiated a new recycling program in November 2006. Recycling helps conserve our valuable natural resources, saves energy, reduces air and water pollution, and saves landfill space. Together we can make a difference as part of Team Buckley Recycles!

The program uses single-stream recycling collection, which means you can put everything into one recycling bin.

Research has shown that this new method will increase recycling user participation and lead to an increase in the volume of materials collected.

The Base has been outfitted with different sizes of clearly identifiable recycling dumpsters. All accepted material can go into the same dumpster, there is no need to sort materials. This new program allows many more products to be recycled. These include phone books, paperboard containers (cereal boxes), flattened cardboard boxes, and even shredded paper. Reference the list below to see what can and cannot be recycled.

**Recycle These**

Clear Resin  
 Plastic Bottles (1-2)  
 Flattened Cardboard Boxes  
 White and Colored Paper  
 Shredded Paper  
 Newspapers and Inserts  
 Books (hard or soft)  
 Fragments and Junk Mail  
 Envelopes (Windows OK)  
 Enrichers and Postcards  
 Corrugated Paper  
 Computer Printouts  
 Carbonless Receipts  
 Plastic Films  
 Manuals with Glass Binding  
 File Folders (metal fasteners)  
 Wire and Plastic Spools  
 Staples, Paper Clips, Clings  
 Plastic Beads

**Trash These**

Crusty Wrappers  
 Colored Paper  
 Glass (if not bottles or jars)  
 Food soaked cardboard  
 Food or Organic Waste  
 Liquids  
 Plastic Eggs  
 Lawn Wraps  
 Plastics (if not a bottle)  
 Plates and Dishes  
 Styrofoam  
 Used Paper Cups  
 Used Paper Plates  
 Used Paper Towels  
 Used Tissues  
 Wood Cardboard (junk)  
 Wet or soiled Paper  
 Windows Glass  
 Plastic Sinter  
 Lamp Wood/Wood Products



**Did You Know?**

- Recycling just one ton of paper saves:  
 17 trees  
 7,000 gallons of water  
 460 gallons of oil  
 590 pounds of air pollution  
 4,000 kilowatt hours of electricity, and  
 3 cubic yards of landfill space
- Americans make more than 200 million tons of garbage every year, enough to fill Bush Stadium from top to bottom twice a day.
- Recycling steel and tin cans saves 74 percent of the energy used to make them.
- Recycling one aluminum can saves enough energy to run a 100 watt light bulb for 20 hours, a computer for 3 hours, and a TV for 2 hours.
- Enough plastic is produced in the United States each year to shrink wrap Texas.
- 88 per cent of the energy is saved when plastic is made from recycled plastic rather than from the raw materials of gas and oil.

460th Civil Engineering Customer Service:  
 720-847-9913

**Team Buckley Recycles!**



*Together We Can Do It!*

For questions and/or suggestions please call the Qualified Recycling Program (QRP) Manager at 720-847-9913 or the Integrated Solid Waste Management Team at 720-847-2401



**WHAT'S CAUSING  
 OUR POLLUTION?**

**Construction**

- Sediment washing into gutters and streets from job sites or being tracked onto streets by vehicle tire traffic.
- Contractors disposing of concrete washout in storm drains and drainage ditches.

**Around the House**

- Car washing in the driveway or street, especially with soaps.
- Cleaning brushes or rinsing paint containers into the gutter.
- Residents and landscape companies over-fertilizing lawns or using pesticides and herbicides improperly.
- Pouring cooking grease and oils down storm drains.

**Motor Vehicles**

- Vehicles leaking oil and gas onto driveways and streets.
- Spills of oil and fuel during maintenance and refueling.
- Cracked batteries.
- Improper disposal of antifreeze, oil, old tires, batteries, and other fluids.
- Off-road vehicles tracking mud onto paved streets.



Remember, **ONLY** rain and snow go into storm drains.

Working together, we can make a difference.

To report a spill call  
 460<sup>th</sup> CES Customer Service  
 720-847-9913  
 Or  
 460th CES Fire Dept  
 720-847-9117

**Clean  
 Streams  
 Are  
 Important  
 To  
 Everyone!**



At Buckley AFB, as well as other systems in the Denver Metro area, the stormwater system (streets, storm drains, ditches) and sanitary sewer system (household and commercial drains) are separate. The sanitary sewer waste is treated at a wastewater treatment plant before it is released to a local stream, but storm sewer waters go directly to streams. Our drinking water is taken from those same streams!

It is important for all of us to make sure we keep that water as clean as possible for aquatic life to thrive and for lowering drinking water purification costs. That means keeping chemicals, mud, soap, pet waste and other pollutants out of the waters that enter our storm drains.

The cleanliness of our storm runoff is important because we only receive roughly 14-inches of precipitation per year, consisting of rain and snow melt combined. The average in the U.S. is 30-inches.



The stormwater that enters the storm drain enters the stream systems and is used in our drinking water.

Construction sites must protect our storm drains. These controls should be left alone during construction, and removed upon completion of vegetation re-establishment.



Buckley AFB has two stormwater permits issued by the EPA that require us to keep our stormwater clean.

Rainwater harvesting is not allowed in Colorado except in rural areas according to Colorado Water Law.

ONE quart of oil can contaminate over 250,000 gallons of water.



**MAKE A DIFFERENCE WITH  
 YOUR ACTIONS!**

Wash your car at the local car wash. Commercial car washes remove sand and oil and even recycle a portion of the water used!

Don't drive off the road except on designated trails and only when they're dry.

Don't rinse off spills or leaks with water. Apply cat litter or other dry absorbent material, sweep up and dispose of in the trash.

Follow directions on all pesticides, herbicides, and fertilizers. Do not apply if rain is expected within 48 hours.

Do not rake or blow leaves into the street or storm drains—bag them and consider composting them.

Don't hose down your sidewalk, sweep it and dispose of in the trash.

Use water-based biodegradable cleaning products.

Pick up pet waste and dispose of in the trash.

Wash out paint brushes in the sink.

Don't litter.

Do Recycle.





# KEEP IT CLEAN

'cause WE'RE ALL DOWNSTREAM

## Proper Used Motor Oil Management



**460TH Civil Engineering Squadron  
Flight Installation Management  
Buckley Air Force Base  
Aurora, Colorado**

460 CEN/CEI  
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### Tips on Collecting Your Used Motor Oil

- Once you are finished draining the oil from your car's engine, either pour the used oil from the dip pan, using the funnel, into a proper recycling container, or use a dip pan that serves as both a collecting and holding container.
- Check with your local collection center to determine what types of containers they use and how large. Some collection centers may want you to leave the container for disposal, if they are not set up to empty it on-site.
- **Do not mix other lubricants (such as motor oil) or other fluids (such as antifreeze) with the used oil.** Most recycling locations will not accept a if you do.
- Certain everyday household containers can typically be used for used motor oil collection, including milk and water jugs or the original motor oil bottles. Make sure the chosen storage container has a secure lid, is a well-seal spill or leak, e.g., a screwing lid. **DO NOT** use a container that previously held household chemicals, such as paint, solvents, fuel, gasoline, paint or bleach.
- There are numerous drop points in the station that serve as both a dip pan and holding container for recycling. Visit your nearest auto parts store to find these specialized containers for changing and recycling used oil.
- Once in a sealed container take the oil to a local motor oil collection center for recycling.
- Always always label the containers "Used Motor Oil".
- Keep collected and unused oil out of reach of children and pets at all times.



### Tips on Changing Your Oil Filter

- After you have drained all the oil from the engine to fill, use a filter wrench to loosen and remove the old oil filter.
- Place the flat end of the filter on the drain pan or in the used oil recycling container to allow as much of the used oil as possible to drain out of the filter. Leave the filter in this draining position for at least 10 hours, or as long as practical possible.
- Install the new oil filter according to the manufacturer's instructions.
- Wipe the filter in a clean rag or towel and take it with the used oil to a collection center for recycling.



### Check Your Local Recycling Options

- There are businesses in the local area who take used oil and oil filters from DIY oil changers. The website Earth 911 ([www.earth911.com](http://www.earth911.com)) is a resource for a variety of recycling programs and recycling centers. This site can be searched by zip code to locate programs and businesses near you that provide recycling services.
- Results of a search for used oil recycling locations in the area of Buckley AFB are provided on the following page for your convenience and reference.
- Please note that the 460th Space Wing is not financing or reimbursing any business and is not responsible for services provided by these. We require that you call first to confirm that business is still active in the recycling program, the materials they accept, any particular packaging requirements, and the hours of operation.

Do you change your car's motor oil? If so, you are considered a "do-it-yourself" (DIY) oil changer! Changing your own motor oil requires the same care that you provide for the rest of your vehicle.

According to the U.S. EPA, used motor oil is a top petrochemical or synthetic oil that has been used for vehicle lubrication. As a result of normal use, motor oil becomes contaminated with various impurities such as dirt, water, chemicals or metals from your engine. Some governmental regulations classify used motor oil as hazardous. It may contain additives (e.g. rust inhibitors, contaminants (e.g. heavy metals generated through engine wear, or externally introduced materials such as PCBs from old transformer oils), potentially carcinogenic polycyclic aromatic compounds (from the fuel combustion process), or glycol leaked from the cooling system. Because of these "impurities," used motor oil should be handled with care and disposed of responsibly to ensure the safety of the local community, environment and waterways.

DIY oil changers have the individual opportunity to directly impact their local environment by properly handling their used motor oil and recycling it at local collection programs or facilities. By recycling your used motor oil, and taking the time to make sure that you don't spill and leak, you can prevent damage to your environment and ensure the quality of the environment for future generations.

### Tips on Changing Your Motor Oil

- Follow your owner's manual for proper direction on changing your motor oil.
- Before removing the drain plug on the bottom of the engine's oil pan, make sure that you have a clean drain pan that will accommodate all the oil in your vehicle. For a standard passenger vehicle this is generally no more than 5 quarts.
- Drain the used oil into a dip pan and make sure you have rags available to clean up any spills or drips.
- Change your oil filter using care not to spill the oil that is in the filter. Again, make sure the dip pan is under the filter to catch any drainage. Properly drain the filter of all excess oil (see following section for tip). Replace the drain plug and securely tighten according to the manufacturer's instructions.
  - Using a funnel, add new motor oil using each container to fully drain. Be careful not to spill the oil. Have rags available to mop up any spills on the engine block or the ground. Do not reuse. Most cars generally will need four to five quarts of oil.
  - Once you have filled the engine with oil, be sure to check around the oil filter and draining for any evidence of leaking oil. Oil spilled or leaked on your driveway, on streets or other surfaces will eventually be washed into storm drains or into adjoining water bodies during precipitation periods, which can contaminate lakes, rivers, streams or groundwater.




### Local Commercial Locations

The websites below are identified for information only and should not be interpreted as endorsement by Buckley Air Force Base and the 460th Space Wing.

QUICKLY AUTO PARTS	ERSTONE COMPLETE AUTO CARE
<p>1680 E. Colfax Ave Aurora, CO 80013 (303) 343-4377</p> <p>1900 E. Colfax Ave Aurora, CO 80013 (303) 343-3888</p> <p>1700 E. Colfax Ave Aurora, CO 80013 (303) 343-4217</p> <p>1470 E. DuPuy Ave Aurora, CO 80013 (303) 778-9111</p>	<p>1080 E. Montague Aurora, CO 80017 (303) 341-4120</p> <p>1020 S. Parker Aurora, CO 80014 (303) 696-8196</p> <p>10701 E. Hampden Ave Aurora, CO 80015 (303) 693-1719</p>
QUICKLY AUTO PARTS	QUICKLY AUTO PARTS
<p>1610 E. 1st Ave Aurora, CO (303) 751-4001</p> <p>3601 North Tower Road Aurora, CO (303) 757-4000</p> <p>1128 Chambers Road Denver, CO (303) 754-4017</p> <p>11170 East Colfax Avenue Aurora, CO (303) 344-3443</p> <p>1700 South Buckley Road Aurora, CO (303) 751-3030</p>	<p>1610 E. 1st Ave Aurora, CO (303) 751-4001</p> <p>3601 North Tower Road Aurora, CO (303) 757-4000</p> <p>1128 Chambers Road Denver, CO (303) 754-4017</p> <p>11170 East Colfax Avenue Aurora, CO (303) 344-3443</p> <p>1700 South Buckley Road Aurora, CO (303) 751-3030</p>
TRUCK PLUS	TRUCK PLUS
<p>790 E. Arapahoe St Aurora, CO 80012 (303) 740-1740</p> <p>4400 Chambers Rd Denver, CO 80229 (303) 374-1774</p> <p>3710 Quaker St Thornton, CO 80229</p>	<p>790 E. Arapahoe St Aurora, CO 80012 (303) 740-1740</p> <p>4400 Chambers Rd Denver, CO 80229 (303) 374-1774</p> <p>3710 Quaker St Thornton, CO 80229</p>

<b><u>BMP / MEASURABLE GOAL:</u></b> PEO-2 Hazardous Waste or Stormwater Management Related Article	<b><u>STATUS / ACTIVITY:</u></b>
Publish one hazardous waste or stormwater management article in the Mile High Guardian and/or on the Buckley AFB website that discusses hazardous waste management and/or stormwater discharge impacts that may include options for disposing of household hazardous waste, pollution prevention, or other related information.	<p><b>COMPLETED</b>            Article on stormwater management was published in the May 15-21, 2014 edition of the Buckley Guardian and posted on the Buckley AFB website (<a href="http://www.buckley.af.mil">www.buckley.af.mil</a>).</p> <p>Copy of the article follows.</p>

## Lawns and pests: Stormwater awareness spring 2014

BY NICOLE JOHNSTON  
Stormwater program coordinator

Fertilizers and pesticides will make your grass thick and green, your flowers colorful, a vegetable crop explosive, and keep the bugs from ruining all the fun. It is also important to recognize that many of the pesticides and fertilizers could have hazardous chemicals that could contaminate the ground water or could leave your property and enter the nearby street, inlet, or creek.

### Here is some information to help you explore alternative methods:

This year commit to using fewer pesticides. We all encounter pest issues throughout the year, but there are less toxic ways to control and eliminate them. Green Planet Ethics has several recipes for make at home pest controls here.

For specific pest control options the site Beyond Pesticides has a great index on their website here.

Not only will you be protecting your home, family and pets, but you will be helping the bees. To learn more about bees read this guide.

### Give your lawn a facial this year:

#### Exfoliate:

In spring it is important to aerate your lawn to make the most of the water that you apply. Aerating

pulls out small cores of soil 3 to 5 inches deep. Although they look strange they will break down after a few rain events and your lawn will be much happier afterwards. Seeding after aerating will help fill in a patchy lawn too.

#### Mud Mask:

After aerating, instead of using a chemical fertilizer, spread some compost to provide nutrients to your lawn or garden all summer. Compost comes from decomposed yard waste and food leftovers. Organic composts add the same nutrients to the soil as commercial chemical fertilizers. According to the National Gardening Association, they also improve soil texture by increasing drainage, aeration and the ability of sandy soils to retain nutrients.

#### Moisturize:

The best time to water your lawn is early in the morning when the air temperature is cool to allow the water to soak into the ground before it evaporates. Typically allowed watering times in the Metro area are 6:00 PM to 10:00 AM, some areas have been known to ticket those found watering outside of these hours. You should also stop lawn watering when water runs off the turf. If you have clay soils, you may need to water multiple times in a short period of time to help the water soak into the ground and prevent runoff.

#### Extraction:

Scoop the poop! Pick up dog,

cat, and other pet waste from your yard to help your lawn and waterways. In waterways pet waste encourages the growth of algae and the bacteria in the pet waste may cause disease. In your lawn it will cause nitrogen burn and brown spots.

#### Sunscreen:

Now that you've got a lush green lawn, it will need regular maintenance. Grass mowed to 3" holds water in the soil better than grass mowed to 2" because there is more shade protecting the soil from drying out in the sun. Also, the grass clippings from a mulching lawn mower do not need to be raked off the lawn. The clippings will further promote water retention. More frequent mowing is generally required earlier in the year before the hotter months.

Use and dispose of harmful materials properly, don't dump them on the ground or outside. Hazardous waste that is dumped on or buried in the ground can contaminate the soil and can move down into the ground water or be carried into nearby surface waters by runoff during rainstorms. Products like motor oil, pesticides, paints or paint cans, mothballs, flea collars, weed killers, household cleaners and even a number of medicines contain materials that can be harmful to surface water and ground water.

Report pollution incidents and spills to 460th Civil Engineer Squadron, Water Quality Program at (20) 308-4655/6308 or to 460th CES customer service at (20) 347-9913.

<b><u>BMP / MEASURABLE GOAL:</u></b> PEO-3 Sediment And Erosion Awareness Training for Industrial Stormwater Personnel	<b><u>STATUS / ACTIVITY:</u></b>
Provide training at least once per year and maintain attendance record.	<b>COMPLETED</b> Annual Industrial Stormwater Permit training session held Jan 14, 2015 with 34 attendees; session included sediment and erosion awareness information. Method was in person by 460 CES/CEIE WQP staff using power point slide presentation.

<b><u>BMP / MEASURABLE GOAL:</u></b> PEO-4 Sediment and Erosion Awareness Training for Facility Managers	<b><u>STATUS / ACTIVITY:</u></b>
Provide facility manager training at least annually and maintain attendance record.	<b>COMPLETED</b> Facility Manager training sessions were held Jan 22 & 27, and Feb 3, 2015 with a total of 127 attendees; session included sediment and erosion awareness information. Method was in person session by multi-discipline 460 CES/CEO, /CEIE, and /CEN flight staff using power point slide presentation. Environmental portion was presented by 460 CES/CEIE staff.

<b><u>BMP / MEASURABLE GOAL(S):</u></b> PEO-5 Post-Construction Stormwater Control Awareness Training	<b><u>STATUS / ACTIVITY:</u></b>
Develop post-construction stormwater control awareness training materials. (Year 1)	<b>IN PROGRESS</b> Not completed in Permit Year 1 as planned because the Post-Construction Stormwater Management for New Development and Redevelopment portion of the Permit was not finalized and effective until Jan 12, 2015. Awareness materials are being developed and completion is targeted for NLT 2nd Quarter Permit Year 2.
Provide post-construction stormwater control awareness training materials to 460 CES/CEN and /CEIE, as well as the 460 CONF.	<b>IN PROGRESS</b> Not completed in Permit Year 1 as planned as described above. Distribution of awareness materials is targeted for NLT 3rd Quarter Permit Year 2.

#### **4.2. PUBLIC INVOLVEMENT/PARTICIPATION (PIP)**

The goal of the Public Involvement and Participation (PIP) MCM is to raise public awareness about urban runoff pollution through public involvement and participation in the Buckley AFB water quality protection program.

The five PIP BMPs and measurable goals, presented in the following tables, will be implemented by Buckley AFB over the next five years (Years 1 – 5) to satisfy the PIP MCM, unless otherwise noted (e.g., Year 1). These BMPs involve several departments and groups in order to raise awareness and gain the community’s input as it relates to Buckley AFB’s stormwater management program, water quality challenges, and implementation efforts.

In accordance with Permit Part 2.3.6.3, the Buckley AFB Water Quality Program Manager (see Section 2) is responsible for coordination and implementation of the PIP MCM.

<b><u>BMP / MEASURABLE GOAL(S):</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
PIP-1 Public Notice Requirements	
The 460CES/CEIE WQPM and 460 SW/JA will review and document the public notice requirements, if any, associated with the public involvement and participation program. (Year 1).	<b>COMPLETED</b> The 460CES/CEIE WQPM and 460 SW/JA conferred regarding public notice requirements associated with the PIP program. No public notification requirements were identified at this time.
Public notices are provided and documented for required public involvement and participation activities.	<b>NOT APPLICABLE</b> No activity required.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
PIP-2 SWMP Public Review	
Make MS4 annual reports available on the Buckley AFB website (www.buckley.af.mil).	<b>IN PROGRESS</b> The Permit Year 1 Annual Report will be posted on the Buckley AFB website NLT Apr 15, 2015. A copy of the final report will be provided to the 460 SW organization responsible for maintaining the Buckley AFB website. The target 15-day (report due date to Region 8 US EPA is Apr 1, 2015) window to post the report allows time for the organization to accomplish the task with consideration for their other assignments and duties. To locate the report on the Buckley AFB website, highlight the “Library” tab, and click on “Environmental” in the drop-down list; the MS4 Permit section is displayed along with posted documents that includes the complete Permit, the SWMP Plan, and this Annual Report.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
<p>PIP-3 Stormwater Action Line and Email Address</p> <p>Maintain stormwater action line email address. Document action line emails received from the public and actions taken in public participation log.</p>	<p><b>COMPLETED</b></p> <p>The stormwater action line email address, 460 CES/CEV Water (460 ces.cevwater@us.af.mil) is active and is being maintained. The email address (along with the 460 CES/CEIE WQP staff and 460 CES Customer Service direct telephone numbers) is published in a variety of sources including the Air Force Global Address List (GAL), the stormwater awareness brochures (see BMP PEO-1), and Facility Manager’s training environmental slides (see BMP PEO-4). No emails using the 460 CES/CEV Water address were submitted during Permit Year 1. Telephone calls from the public were received to report incidents such as tracking on streets from construction sites. A log of these calls is maintained in 460 CES Environmental Office files</p>
<p><b><u>BMP / MEASURABLE GOAL:</u></b></p> <p>PIP-4 Annual Meeting with City of Aurora</p> <p>The 460 CES/CEIE WQPM will conduct a meeting between appropriate Buckley AFB and City of Aurora stormwater/water quality managers at least once per year to discuss water quality and discharges to East Toll Gate Creek.</p>	<p><b><u>STATUS / ACTIVITY:</u></b></p> <p><b>COMPLETED</b></p> <p>460 CES/CEIE WQPM attended two meetings (Feb 12 and May 7, 2014) with City of Aurora reps from Public Works, Aurora Water, and Parks &amp; Open Space departments to review concept design plans for Urban Drainage and Flood Control District’s Lower East Toll Gate Creek Master Drainage Plan project for which the City and Buckley AFB were co-sponsors.</p>
<p><b><u>BMP / MEASURABLE GOAL:</u></b></p> <p>PIP-5 Volunteer and Cleanup of MS4 Receiving Water Activities</p> <p>Buckley AFB will maintain a log of public participation activities related to water quality protection and cleanup of MS4 receiving waters.</p>	<p><b><u>STATUS / ACTIVITY:</u></b></p> <p><b>COMPLETED</b></p> <p>In Permit Year 1 public participation activities included Earth Day and Arbor Day, Apr 22, 2014 (15 participants). Base-wide clean up events, which includes storm drain system drainage channels, swales, &amp; ditches all tributary to receiving waters, in addition to building areas and parking lots were held five times;</p>

### **4.3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDE)**

An illicit discharge is defined as any discharge to a MS4 that is not composed entirely of stormwater; except for allowable non-stormwater discharges identified in Part 1.3.2 of the Permit. Illicit discharge sources must be controlled and illegal behavior prohibited in accordance with the Permit.

The illicit discharge detection and elimination (IDE) BMPs and measurable goals reported in this section represent the Buckley AFB IDE MCM. Typical sources of illicit discharges include sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper used oil disposal, radiator flushing disposal, roadway spills, and the improper disposal of auto and household chemicals. Buckley AFB has performed annual dry weather screening of major outfalls for the last five years and completed a stormwater system inventory and condition assessment study in 2013. Based on these investigations, Buckley AFB representatives have determined that no known cross-connections currently exist in which sanitary wastewater is entering the stormwater system.

The five IDE BMPs and measureable goals, presented in the following tables, will be implemented by Buckley AFB over the next five years (Years 1 – 5) to satisfy the IDE MCM, unless otherwise noted (e.g., Year 1).

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
<p>IDE-1 Storm Sewer System Map</p> <p>Update the complete storm sewer system map in the Buckley AFB GIS. (Year 3).</p>	<p><b>IN PROGRESS</b></p> <p>Updates to the existing installation stormwater system map will be accomplished during the upcoming roughly two year period resulting in a completed update NLT Dec 2016 (i.e., End of Permit Year 3). The update process is organized by installation areas, called tiles; there are 35 tiles that cover the entire installation; each tile covers a specific portion or area of the installation; a certain number of tiles are scheduled to be covered by the update process each calendar quarter, so progress towards the goal can be measured.</p> <p>The update process involves staff from engineering, operations, and environmental flights in 460 CES who systematically conduct field inspections to validate/correct existing system maps, and add missing features. This information will be captured on a paper copy of each tile, that when completed, will be provided to the engineering flight (GIS group) for input to the installation GIS base map layer(s).</p>

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
<p><b>IDE-2 Dry Weather Screening of Major Outfalls</b></p> <p>Conduct dry weather screening of Buckley AFB outfalls once per year. Document findings of dry weather screening and erosion evaluation. Document results of any follow up illicit discharge investigation or assessments.</p>	<p><b>COMPLETED</b></p> <p>The visual dry weather screening for MS4 Permit Year 1 was conducted by Tetra Tech Inc. The visual screening was conducted on Sep 29, 2014 and the results documented in Tetra Tech Inc's report dated Oct 6, 2014. Major industrial and municipal outfalls were inspected; locations are shown on the installation stormwater system map included in the SWMP Rev 0. Results of the screening were no dry weather discharges were observed. Therefore, no actions to investigate / assess potential illicit discharges were implemented. In addition no significant erosion issues that need to be addressed were reported.</p>
<p><b><u>BMP / MEASURABLE GOAL(S):</u></b></p> <p><b>IDE-3 Illicit Discharge Detection and Elimination Program</b></p>	<p><b><u>STATUS / ACTIVITY:</u></b></p>
<p>Maintain one printed copy of the US EPA Illicit Discharge Detection and Elimination Manual in the Environmental Element's library.</p>	<p><b>COMPLETED</b></p> <p>A hardcopy of the US EPA's Illicit Discharge Detection and Elimination Manual is in place on the 460 CES/CEIE Stormwater library shelf.</p>
<p>At a minimum, the Water Quality Program Manager, Spill Program Manager, and Environmental Element Chief will conduct an annual review of the US EPA Illicit Discharge Detection and Elimination Manual. This review will serve as training for illicit discharge investigation and response techniques.</p>	<p><b>COMPLETED</b></p> <p>The 460 CES/CEIE: WQPM, Air and Tanks PM (aka SPCC PM), and Element Chief met Feb 5, 2015 and reviewed the US EPA's Illicit Discharge Detection and Elimination Manual. The meeting occurred after Permit Year 1 ended because the Element Chief position was vacant during Permit Year 1. This annual meeting will be held for Permit Year 2 NLT Dec 2015.</p>
<p>Document the time required to investigate, plan, and correct confirmed illicit discharges identified on Buckley AFB. For confirmed illicit discharges, Buckley AFB will develop a CAP within 15 business days and implement the corrective action within 45 business days of discovery. If corrective action will require more than 45 business days, permission must be obtained from Region 8 US EPA.</p>	<p><b>COMPLETED</b></p> <p>Two illicit discharges were documented in Permit Year 1; one involved a vehicle POL leak and the other some soil washed onto street pavement due to flow from a broken water pipe. Both incidents resulted from one-time, accidental events and the extent of area impacted was limited and well within the installation boundary. Therefore, both were considered not severe or significant, so a CAP was not prepared. Clean up involved application of BioSolve followed by excavation of visibly stained soil.</p>

<b><u>BMP / MEASURABLE GOAL(S):</u></b> IDE-4 Illegal Dumping and Non-Compliance Enforcement Procedures	<b><u>STATUS / ACTIVITY:</u></b>
<p>Document any illicit discharge and illegal dumping enforcement actions taken.</p>	<p><b>COMPLETED</b>  No enforcement actions (EAs) were required in Permit Year 1. No severe illicit discharge incidents occurred (see BMP IDE-3) and no illegal dumping incidents occurred.  As a military installation, all personnel working, assigned, visiting, or otherwise having access to the installation are subject to specific laws, regulations, and policies while on Buckley AFB. Existing illegal dumping and non-compliance enforcement procedures for non-compliance with laws, regulations, and policies include the Uniform Code of Military Justice, contracts subject to Federal Acquisition Regulations, Air Force Instruction (AFI) 51-202 Nonjudicial Punishment, and AFI 36-704 Discipline and Adverse Actions. Enforcement procedures vary based on specific situations; military and civilian employees can receive verbal reprimands, written reprimands placed in employment records, demotions, loss of pay, discharge from Federal service, and the Installation Commander has the authority to bar individuals from accessing Buckley AFB.</p>

<b><u>BMP / MEASURABLE GOAL(S):</u></b> IDE-5 Allowable Non-Stormwater Discharges and Controls	<b><u>STATUS / ACTIVITY:</u></b>
<p>Conduct annual review of allowable non-stormwater discharges listed in Paragraph 1.3.2 of the MS4 Permit. Identify if any category of allowable, non-stormwater discharge is a significant contributor of pollutants to the MS4. If a category of allowable, non-stormwater discharge is determined to be significant, the category is then considered an illicit discharge and controls must be enacted to minimize or eliminate the discharge.</p>	<p><b>COMPLETED</b>  A review of allowable, non-stormwater discharge sources listed in Part 1.3.2 of the Permit has been conducted. Of the 26 sources listed only five are identified as occurring on Buckley AFB during Permit Year 1. Of those five occurring, none have been determined to be a significant contributor of pollutants to the storm drain system. The details of the review are documented in an MFR signed by the 460 CES/CEIE WQPM. The MFR is maintained in 460 CES Environmental Office files.</p>

#### **4.4.CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (CON)**

The purpose of the Construction Site Stormwater Runoff Control (CON) MCM is to prevent soil and construction materials and wastes from leaving the site and entering the stormwater drainage system. Sediment is typically the primary pollutant of concern with regard to construction sites.

The five CON BMPs and measureable goals, presented in the following tables, will be implemented by Buckley AFB over the next five years (Years 1 – 5) to satisfy the CON MCM, unless otherwise noted (e.g., Year 1). Pollutants of concern specifically targeted by the BMPs include sediment, solid waste, phosphorous, nitrogen, pesticides, oil and grease, concrete truck washout wastewater, construction chemicals, and construction debris.

In accordance with Permit Part 2.5.10.8, the Buckley AFB Water Quality Program Manager (see Section 2) is responsible for coordination and implementation of the CON MCM.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
<p>CON-1 Construction Project Oversight Program</p> <p>Develop a written construction oversight program and inspection plan for use by Buckley AFB stormwater managers. The construction oversight program will include a list of policies and procedures that can be used to enforce compliance with applicable stormwater discharge permits related to construction activities. (Year 1)</p>	<p><b>COMPLETED</b></p> <p>The construction oversight program and inspection plan was developed/prepared (Rev 0) in Permit Year 1. The Plan will be updated in Permit Year 2 and the Rev 1 version issued.</p> <p>Description of the regulatory mechanism used to require sediment and erosion controls is provided in the following section.</p> <p>Description of the procedures used to address noncompliance and enforcement mechanisms is provided in the following section.</p>

<p><b><u>REGULATORY MECHANISM TO REQUIRE SEDIMENT AND EROSION CONTROLS</u></b></p> <p>The regulatory mechanism used to require sediment and erosion controls on construction projects located on Buckley AFB is the 2012 Construction General Permit (CGP), under the National Pollutant Discharge Elimination System (NPDES), a federal permitting program, under the authority of the Clean Water Act (CWA). In the State of Colorado areas subject to construction activity by a Federal Operator (i.e., a federal facility) the Region 8 US EPA is the NPDES stormwater permitting authority under general Permit No. COR12000F. Also, Department of the Air Force Engineering Technical Letter (ETL) 14-1 – Construction and Operation and Maintenance Guidance for Storm Water Systems – provides guidance specifically applicable to Air Force bases related to construction stormwater management.</p> <p>The construction project contract and standard specifications specify stormwater discharges from construction activities such as clearing, grading, excavating, and stockpiling that disturb one or more acres, or smaller sites that are part of a larger common plan of development, are regulated under the 2012 CGP, for which construction operators must obtain coverage (i.e., prepare a SWPPP and obtain an active status NOI) prior to commencing ground disturbing activity.</p>
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**PROCEDURES TO ADDRESS NONCOMPLIANCE AND ENFORCEMENT MECHANISMS**

Government contractors must comply with Federal Acquisition Regulations and contract requirements that include environmental protection. Acquisition regulations and contracts contain specific enforcement provisions for non-compliance by contractors. Enforcement provisions include cure notices, contract termination, stop work orders, liquidated damages, negative contractor performance ratings, and being precluded from future government contracts. Enforcement against a government contractor is a contracting officer responsibility with input and support from quality assurance evaluator and subject matter experts on Buckley AFB.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
<p>CON-2 Construction Project Oversight Inspections</p> <p>Conduct oversight compliance assistance inspections of permitted construction sites (&gt; 1 ac or part of a larger common plan of development that will cumulatively disturb <math>\geq</math> 1 ac) at least semi-annually and prior to construction permit termination to verify final stabilization has been met on all areas of the site. Buckley AFB has developed a spreadsheet based prioritization model to guide additional construction oversight inspections based on project location, size, nature of construction activity, site characteristics, and compliance history of construction contractor.</p>	<p><b>COMPLETED</b></p> <p>Oversight construction compliance inspections are conducted on sites with &gt; 1 ac ground disturbance or are part of a larger common plan of development. The log of construction site inspections conducted in Permit Year 1 follows. A total of 65 inspections were conducted on 18 different permitted project sites.</p> <p>The model for frequency of inspection planning on a given project is based on several factors including type of project, size of disturbed area, construction timeframe and time of year, natural slope, and previous experience with the contractor. Exceptions to the planned frequency are made by the 460 CES/CEIE WQPM as needed. A copy of the model is provided in the following section.</p>

LOG of OVERSIGHT INSPECTIONS  
BMP: CON-2

Construction Project Title	2012 CGP Authorization Number	Date CGP Coverage Obtained	MS4 Oversight Inspection Dates -- 2014	Date Final Stabilization Inspection -- 2014
Accessible Community Park Bldg 316 and Playground Bldg 725	COR12B39F	7-Jul-14	20-Aug	--
Accessible Community Park Bldg 316			9-Oct	
ARPC Parking Lot Pond Bldg 390	COR12A88F	8-Nov-11	16-Sep	2-Dec
ARPC Parking Lot Pond Bldg 390			23-Sep	
ARPC Parking Lot Pond Bldg 390			30-Sep	
ARPC Parking Lot Pond Bldg 390			2-Oct	
ARPC Parking Lot Pond Bldg 390			10-Oct	
ARPC Parking Lot Pond Bldg 390			14-Oct	
ARPC Parking Lot Pond Bldg 390			29-Oct	
ARPC Parking Lot Pond Bldg 390			11-Nov	
ARPC Parking Lot Pond Bldg 390			25-Nov	
Aspen Street Landscaping	COR12A46F	13-May-12	9-Apr	9-Apr
Cold Storage Extension Bldg 1017	COR12A39F	12-Feb-12	21-Jan	24-Sep
Cold Storage Extension Bldg 1017			6-Jun	
Medical Warehouse Expansion Bldg 602	COR12B32F	2-Jun-14	10-Jul	--
Medical Warehouse Expansion Bldg 602			15-Jul	
Medical Warehouse Expansion Bldg 602			21-Oct	
BAFB 140th Pavement Repair Breck/Vail	COR12B29F	20-May-14	14-Aug	--
Consolidate Fuels Soil Stockpile	COR12A88F	18-Oct-10	17-Sep	--
Consolidate Fuels Soil Stockpile			23-Sep	
Consolidate Fuels Soil Stockpile			30-Sep	
Consolidate Fuels Soil Stockpile			2-Oct	
Consolidate Fuels Soil Stockpile			10-Oct	
Consolidate Fuels Soil Stockpile			14-Oct	
Consolidate Fuels Soil Stockpile			29-Oct	
Consolidate Fuels Soil Stockpile			11-Nov	
Consolidate Fuels Soil Stockpile			25-Nov	
Consolidate Fuels Soil Stockpile			9-Dec	
Consolidate Fuels Soil Stockpile			19-Dec	
Const Garage/Access Rd Bldg 806	COR12A78F	16-Nov-11	9-Apr	--
Const Garage/Access Rd Bldg 806			5-May	
Const Garage/Access Rd Bldg 806			22-Aug	
Const Garage/Access Rd Bldg 806			30-Sep	
Const Garage/Access Rd Bldg 806			10-Dec	
Demo Parking Lots Bldg 28 / Bldg 730	COR12AP9F	14-Dec-12	9-Apr	22-Aug
Demo Parking Lots Bldg 28 / Bldg 730			22-Aug	
Feeder Line Buckley AFB	COR12AUBF	15-May-13	8-Apr	11-Nov
Feeder Line Buckley AFB			5-May	
Feeder Line Buckley AFB			14-Aug	
Feeder Line Buckley AFB			16-Sep	
Feeder Line Buckley AFB			25-Sep	

LOG of OVERSIGHT INSPECTIONS  
BMP: CON-2

Construction Project Title	2012 CGP Authorization Number	Date CGP Coverage Obtained	MS4 Oversight Inspection Dates -- 2014	Date Final Stabilization Inspection -- 2014
Mountainview Operations Facility	COR12A06F	21-Nov-12	19-Feb	--
Mountainview Operations Facility			26-Jun	
Mountainview Operations Facility			22-Oct	
NOSC Bldg 1301 - drainage Improv	COR12B41F	25-Jul-14	22-Aug	--
NOSC Bldg 1301 - drainage Improv			26-Aug	
NOSC Bldg 1301 - drainage Improv			23-Sep	
NOSC Bldg 1301 - drainage Improv			5-Nov	
Repair Runway 14/32	COR12A9SF	23-Aug-13	21-Jan	--
Repair Runway 14/32			30-Apr	
Repair Runway 14/32			20-May	
Repair Runway 14/32			15-Sep	
Repair Security Forces Bldg 700	COR12A54F	28-Mar-13	27-Mar	--
Repair Security Forces Bldg 700			17-Jun	
Replace ASTs at Ground Product	COR12A53F	31-May-12	9-Apr	--
Replace ASTs at Ground Product			16-Sep	
Runway 32 Extended Safety Area Grading	COR12B11F	2-Apr-14	20-May	--
Runway 32 Extended Safety Area Grading			15-Sep	
Site 3 - Former Landfill Site	n/a - CERCLA		23-Sep	--
Site 3 - Former Landfill Site			11-Dec	
TUAS Bldg 1515	COR12A66F	14-Nov-12	8-Apr	--
TUAS Bldg 1515			30-Apr	
TUAS Bldg 1515			13-May	
TUAS Bldg 1515			5-Jun	
TUAS Bldg 1515			8-Oct	

**MS4 Oversight Inspection Planning Guide**  
**Construction Project Site Score Sheet**

Site Name:

Category Description	Score Parameters	The Site	Score
1	Area of Disturbance	0 - 1	1
		>1 - 3	2
		>3 - 5	3
		>5 - 7	4
		>7 - 9	5
		>9 - 11	6
		>11 - 14	7
		>14 - 17	8
		>17 - 20	9
		20+	10
2	Anticipated Construction Period in months	0 - 1	1
		>1 - 3	3
		>3 - 6	5
		>6 - 9	7
		>9 - 12	9
		>12	10
3	Adjacent to E. Tollgate Creek or its Tributary	No	1
		Yes	10
4	Construction Season	Oct thru Mar	1
		Apr thru Sep	5
		All year	10
5	Slope of Site (avg)	1% = 1 thru 10% and greater = 10	1 - 10
6	Past Experiences with the Owner/Contractor (Note: This is a subjective evaluation)	1 (excellent), 5 (OK) or 10 (Poor)	1, 5, 10
7	Type of Construction Activity (Note: 10 is maximum)	Landscaping/Reseeding	1
		Grading	2
		Road Construction	3
		Building Construction	3
		Utility Construction	3
		Batch Plant	10

Note: Score sheet is a guideline and may be re-evaluated and adjusted at any time.

**Sum**

**Results**

Score of 56 to 70  
 Score of 36 to 55  
 Score of 16 to 35  
 Score of 7 to 15

**Frequency of Oversight Inspections**

Every 3 months  
 Every 4 months  
 Every 5 months  
 Every 6 months

*In addition to the above frequency an inspection prior to close-out of the permit is required. Advise contracting of the state of revegetation.*

MS4 Sect. 2.5.6 *Implement an inspection plan and keep a copy of that plan which provides inspection triggers, a priority for order of inspections, and a required timeframe upon which construction sites must be inspected by Buckley AFB. All construction sites within Buckley AFB must be inspected at a minimum semi-annually, and all sites must be inspected prior to construction stormwater permit construction to verify that 70% vegetation cover has been met on all areas of the site.*

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
CON-3 Construction Site Stormwater Training	
Document the number of Buckley AFB construction site quality assurance personnel who have received construction stormwater compliance annual training.	<b>COMPLETED</b> Construction stormwater training was conducted on Jul 23, 2014; 24 Buckley AFB personnel and contractors attended.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
CON-4 Design Review and Construction Site BMP Information	
Maintain existing review process for design and construction projects planned for Buckley AFB.	<b>COMPLETED</b> Existing design review processes/practices are being followed. Design projects plans/specs/reports are typically posted to a SharePoint website for easy access by multiple users. An email notification regarding availability of the design documents and the suspense date for completion of review and comment is sent to members of the 460 CES Design Review Group; the 460 CES/CEIE WQP are members. WQP staff review documents for compliance with stormwater permit requirements/regulations applicable to projects located on Buckley AFB such as 2012 CGP and EISA Section 438. Comments are provided back to the issuing source for incorporation by the project design team. In addition, the 460 CES/CEIE WQP attend project design review meetings.

<b><u>BMP / MEASURABLE GOAL(S):</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
CON-5 Site Plan and Construction SWPPP Review	
Maintain existing site plan and SWPPP review process. Document site plan and SWPPP reviews and record any comments provided to the construction entity pertaining to the contractor's SWPPP. Dates and copies of SWPPP review comments will be maintained by 460 CES/CEIE.	<b>COMPLETED</b> The file of SWPPP reviews and comments provided by 460 CES/CEIE WQP for applicable construction projects conducted in Permit Year 1 is maintained in 460 CES Environmental Office files. A total of 23 reviews were conducted on 13 different project SWPPPs.

#### **4.5. POST-CONSTRUCTION STORMWATER MANAGEMENT FOR NEW DEVELOPMENT AND REDEVELOPMENT (PC)**

The Air Force appealed the conditions and requirements in Part 2.6 – Post-Construction Stormwater Management for New Development and Redevelopment (PC) of the Permit issued in August 2013. Consequently, the effective date of Part 2.6 was postponed. Region 8 US EPA and the Air Force entered into Alternative Dispute Resolution (ADR) to settle the appeal. As a result of ADR, Region 8 US EPA issued the modified Buckley AFB MS4 Permit (i.e., modified Part 2.6 of the Permit) on Dec 5, 2014, with an effective date of Jan 12, 2015.

Therefore, Part 2.6 – Post-Construction Stormwater Management for New Development and Redevelopment (PC) of the Permit was not in effect during the period covered by this annual report and no BMPs or measurable goals related to the PC MCM were implemented. Implementation of the PC MCM BMPs and measurable goals commenced with Permit Year 2.

**4.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (P2)**

The purpose of the Pollution Prevention and Good Housekeeping (P2) practices MCM is to prevent or reduce pollutant runoff from municipal operations at Buckley AFB.

The seven P2 BMPs and measurable goals, presented in the following tables, will be implemented by Buckley AFB over the next five years (Years 1 – 5) to satisfy the P2 MCM, unless otherwise noted (e.g., Year 1).

<b><u>BMP / MEASURABLE GOAL:</u></b> P2-1 Conduct Annual Stormwater Training for All Fleet Maintenance and Civil Engineer Shops	<b><u>STATUS / ACTIVITY:</u></b>
Conduct annual training of fleet maintenance and civil engineer shops. Maintain attendance roster and training date.	<b>COMPLETED</b> For Permit Year 1 annual stormwater training for shop personnel was accomplished by the 460 CES/CEIE Industrial stormwater pollution prevention training session, which was held on Jan 14, 2015; a total of 34 military and civilian personnel attended this session. Also, the COANG 140 CES/CEV conducted P2 and Stormwater training on Jan 28, 2015; a total of 15 military and civilian personnel attended this session Attendance rosters are maintained in 460 CES Environmental Office files. The training sessions were conducted in person using Power Point slide presentations; topics covered included potential stormwater runoff impacts, control methods, and maintenance requirements/methods for onsite pollution control measures. In accordance with Permit Part 2.7.8.1 the list of attendees follows.

**BUCKLEY AFB INDUSTRIAL STORMWATER TRAINING  
 14 January 2015**

**Sign-In Sheet**

	Photo/ID	First Name	Last Name	Email
1	✓	Joe	Billock	joe@us.af.mil
2	✓	Timmy	Bosco	timmy.bosco@us.af.mil
3	✓	Frank	Verhovey	frank.verhovey@us.af.mil
4	✓	Jonathan	Compton	
5	✓	Jayce	Yount	
6		Kelvin		
7		Mike	Bluffton	
8		Silvia	Tracht	
9	✓	Ernie	Salt	
10	✓	Wendy	Falk	
11	✓	Carlene	Valencia	carlenevalencia@us.af.mil
12	✓	Bob	Seppala	bob@us.af.mil
13	✓	Illias	Kaw	illias.kaw@us.af.mil
14	✓	Ernie	Tracht	ernie.tracht@us.af.mil
15	✓	Beth	McGraw	beth.mcgraw@us.af.mil
16	✓	Michael	Hammaker	mhammaker@us.af.mil
17	✓	Sylvia	Tarrant	
18	✓	Jonathan	Compton	Jonathan.compton@us.af.mil
19	✓	Joseph	Sawyer	joseph.sawyer@us.af.mil
20	✓	Robert	Lee	robert.lee@us.af.mil
21	✓	Jim	Dobson	James.Dobson@us.af.mil
22	✓	Kevin	Kaplan	
23	✓	Nick	Murphy	
24	✓	Shawn	Seib	
25	✓	John	Watts	john.watts@us.af.mil
26	✓	Sara	Call	Sara.Call@us.af.mil
27	✓	Todd	Light	william.light@us.af.mil
28	✓	David	Harasio	

Lt Col. Ernie Tracht  
 Sgt. Michael Hammaker  
 SFC. Beth McGraw  
 SFC. Michael Hammaker  
 SFC. Sylvia Tarrant  
 SFC. Jonathan Compton  
 SFC. Joseph Sawyer  
 SFC. Robert Lee  
 SFC. Jim Dobson  
 SFC. Kevin Kaplan  
 SFC. Nick Murphy  
 SFC. Shawn Seib  
 SFC. John Watts  
 SFC. Sara Call  
 SFC. Todd Light  
 SFC. David Harasio

CPT Brown Andre a.w.brown@us.af.mil  
 CPT Ibanez Diaz Jeff Jeff.IbanezDiaz@us.af.mil  
 CIV Gilkey, Gerald L. gerald.gilkey@us.af.mil  
 CIV David G. Harasio David.Harasio@us.af.mil  
 CIV Celiann Gonzalez Celiann.gonzalez@us.af.mil  
 CIV Jackson H. Thompson JacksonThompson@us.af.mil



<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-2 Snow and Ice Control Training	
Conduct training once per year and maintain attendance roster.	<b>COMPLETED</b> The snow and ice control training session was conducted by 460 CES/CEO on Sep 25-26, 2014, with 32 attendees. Training topics included deicing and anti-icing agent application; snow removal and dump guidance; equipment training, and Boss & Crew responsibilities. Training is required for all personnel who operate snow and ice control equipment including deicing and traction equipment, which includes dump truck operator, pickup truck operator, plow operator, and backhoe operator.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-3 Street Sweeping	
Accomplish an average of 20 hours of street sweeping per month.	<b>COMPLETED</b> The 460 CES/CEOHH shop reported an average of 26 hours per month of street sweeping was conducted in Permit Year 1. In accordance with Permit Part 2.7.8.2 evaluation of the street cleaning operation in Permit Year 1 determined that sweeping will continue to focus on areas of sediment and debris accumulation rather than a set route of streets.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-4 Storm Drain Inlet Inspection and Maintenance Schedule	
Inspect an average of 5% of storm drain inlets and culverts per quarter. Develop maintenance schedule based on inspection results. Document cleaning activities, waste disposal practices, and amount of debris collected during maintenance. (Year 2-5).	<b>NOT SCHEDULED</b> Not scheduled for Permit Year 1.

<b><u>BMP / MEASURABLE GOAL:</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-5 Vehicle Washing Limitation	
Maintain copy of current policy.	<b>COMPLETED</b> A copy of the current municipal vehicle washing policy that limits washing to approved vehicle wash racks is maintained in the 460 CES/CEIE Environmental Stormwater library.

<b><u>BMP / MEASURABLE GOAL(S):</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-6 Post-Construction Stormwater Control Measure Maintenance	
Document post-construction stormwater control maintenance requirements during annual post-construction stormwater control inspection.	<b>COMPLETED</b> Annual inspection of existing post-construction BMPs was conducted in Oct 2014. The report included documentation of maintenance recommendations on each BMP. The report is maintained in 460 CES Environmental Office files.
Initiate a Work Order using the appropriate work request system/database, for any post-construction stormwater control maintenance activity that requires additional equipment, manpower, or resources to accomplish.	<b>COMPLETED</b> Work Orders for the recommended maintenance needs at each BMP were prepared and submitted during Feb-Mar 2015. Delay in preparation of work orders due to miss-communication about responsibility and shortage of resources.

<b><u>BMP / MEASURABLE GOAL(S):</u></b>	<b><u>STATUS / ACTIVITY:</u></b>
P2-7 Consolidated Wash Rack Evaluation	
Document completion of the consolidated wash area evaluation including methodology and recommendations. If a consolidated wash area is recommended, a Form 1391 will be generated. (Year 3).	<b>NOT SCHEDULED</b> Not scheduled for Permit Year 1.

## **5 STORMWATER MANAGEMENT PROGRAM (SWMP) REVIEW/REVISION**

In accordance with Part 2.1.4 of the Permit, the SWMP has been reviewed in conjunction with preparation of this annual report. Based on this review, several revisions and modifications of BMPs are planned for Permit Year 2 (2015). These revisions and modifications are described in summary in the following section. Detailed descriptions are provided in Rev. 1 of the SWMP, which is maintained in 460 CES Environmental Office files and a copy is posted on the Buckley AFB website (www.buckley.af.mil), see PIP-2.

<b><u>BEST MANAGEMENT PRACTICES (BMPs):</u></b>	<b><u>REVISION / MODIFICATION FOR PERMIT YEAR 2:</u></b>
<b><u>PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS</u></b>	
PEO-1 Household Hazardous Waste and Stormwater Awareness	Minor: Clarification language added to the description and measurable goals sections.
PEO-2 Hazardous Waste or Stormwater Management Related Article.	None
PEO-3 Sediment And Erosion Awareness Training for Industrial Stormwater Personnel	None
PEO-4 Sediment and Erosion Awareness Training for Facility Managers	None
PEO-5 Post-Construction Stormwater Control Awareness Training	Major: Modified the description, measurable goal and documentation to better align with the permit requirements.
<b><u>PUBLIC INVOLVEMENT / PARTICIPATION</u></b>	
PIP-1 Public Notice Requirements	None
PIP-2 SWMP Public Review	None
PIP-3 Stormwater Action Line and Email Address	Minor: Clarification language added to the description and measurable goals sections.
PIP-4 Annual Meeting with City of Aurora	None
PIP-5 Volunteer and Cleanup of MS4 Receiving Water Activities	None
<b><u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u></b>	
IDE-1 Storm Sewer System Map	None
IDE-2 Dry Weather Screening of Major Outfalls.	Minor: Clarification language added to the description and measurable goals sections identify which outfalls are to be included in the screening and a better description of the methods that are to be used during the screening.
IDE-3 Illicit Discharge Detection and Elimination Program.	None
IDE-4 Illegal Dumping and Non-Compliance Enforcement Procedures	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.

<b><u>BEST MANAGEMENT PRACTICES (BMPs):</u></b>	<b><u>REVISION / MODIFICATION FOR PERMIT YEAR 2:</u></b>
IDE-5 Allowable Non-Stormwater Discharges and Controls	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.
<b>CONSTRUCTION SITE STORMWATER RUNOFF CONTROL</b>	
CON-1 Construction Project Oversight Program	Major: Modified the description, measureable goal and documentation to better align with the permit requirements including annual program updates versus just Permit Year 1.
CON-2 Construction Project Oversight Inspections	Minor: Clarification language added to the documentation and measurable goals section to more closely align with the permit requirements.
CON-3 Construction Site Stormwater Training	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.
CON-4 Design Review and Construction Site BMP Information.	Major: Modified the description, measureable goal and documentation to better align with the permit requirements including added a measureable goal for Permit Part 2.5.3.
CON-5 Site Plan and Construction SWPPP Review	None
<b>POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT</b>	
Not applicable because Part 2.6 – Post-Construction Stormwater Management for New Development and Redevelopment of the Permit was not in effect during Permit Year 1 and no BMPs or measurable goals related to the Post-Construction MCM were implemented. Region 8 US EPA issued the modified Buckley AFB MS4 Permit (i.e., modified Part 2.6 of the Permit) on Dec 5, 2014, with an effective date of Jan 12, 2015. See Section 4.5 for additional description.	
<b>POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR FACILITIES OPERATION AND MAINTENANCE</b>	
P2-1 Conduct Annual Stormwater Training for All Fleet Maintenance and Civil Engineer Shops	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.
P2-2 Snow and Ice Control Training	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.
P2-3 Street Sweeping	Major: Modified the description, measureable goal and documentation to better align with the permit requirements including added an annual evaluation of the current sweeping schedule.
P2-4 Storm Drain Inlet Inspection and Maintenance Schedule	Major: Modified the description, measureable goal and documentation to better align with the permit requirements including added an annual evaluation and documentation of the schedule.
P2-5 Vehicle Washing Limitation	None

<b><u>BEST MANAGEMENT PRACTICES (BMPs):</u></b>	<b><u>REVISION / MODIFICATION FOR PERMIT YEAR 2:</u></b>
P2-6 Post-Construction Stormwater Control Measure Maintenance	Minor: Clarification language added to the documentation section to more closely align with the permit requirements.
P2-7 Consolidated Wash Rack Evaluation	None



**6 CERTIFICATION.**

Per Part 3.3 of the Permit, the annual report must be signed in accordance with the signatory requirements in Part 4.7 of the Permit.

This report is signed by a duly authorized representative of the permittee in conjunction with the signatory requirements for NPDES permitting provided at 40 CFR§122.22(b). A copy of the delegation letter is included as Attachment 1.

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

  
ALLEN L. THIBEAUX, Lt Col, USAF  
Base Civil Engineer  
460th Civil Engineer Squadron,  
Buckley AFB, CO

26 mar 15  
Date

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**ATTACHMENT 1 – SIGNATORY DELEGATION LETTER**



DEPARTMENT OF THE AIR FORCE  
460TH SPACE WING (AFSPC)

AUG 08 2014

D-18

Colonel John W. Wagner  
Commander, 460th Space Wing  
510 South Aspen Street (Stop 88)  
Buckley AFB CO 80011-9572

Mr. Shaun McGrath  
Regional Administrator  
US Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver CO 80202-1129

Dear Mr. McGrath

This letter designates specific positions as authorized to sign reports, stormwater pollution prevention plans, certifications or other information requested by the Regional Administrator or required by stormwater permits. This authorization cannot be used for signing National Pollutant Discharge Elimination System (NPDES) permit applications in accordance with 40 CFR 122.22. The following positions are hereby authorized to sign reports, plans, certifications or information other than the permit application:

460 CES/CC	Base Civil Engineer
460 CES/DD	Deputy Base Civil Engineer
460 CES/CEI	Installation Management Flight Chief

Furthermore, the following positions either conduct stormwater inspections or oversee those who conduct stormwater inspections and are authorized to sign inspection reports:

460 CES/CEIE	Environmental Element Chief
460 CES/CEIE	Water Quality Program Manager

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in either Part 4.7 of the Authorization to Discharge under the NPDES Municipal Separate Storm Sewer System (Permit No. COR042003), Part 9.7 of the NPDES Storm Water Multi-Sector General Permit for Industrial Activities, or Appendix I Section 11 of the NPDES General Permit for Discharges from Large and Small Construction Activities (Permit No. COR12000F).

As required by 40 CFR 122.22(d), 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

PERSISTENT GLOBAL SURVEILLANCE

submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

This authorization is valid until superseded or rescinded by me or my successor and may not be re-delegated by the positions listed above.

Please contact Mr. Corwin Oldweiler, Water Program Manager, at 720-847-4655 or email at [corwin.oldweiler@us.af.mil](mailto:corwin.oldweiler@us.af.mil) if you have any questions regarding this letter.

This letter supersedes previous letter dated 16 Sep 13, same subject.

Sincerely

A handwritten signature in black ink, appearing to read 'J. Wagner', written over a large, stylized circular flourish.

JOHN W. WAGNER, Colonel, USAF

cc:

Mr. Greg Davis, US Environmental Protection Agency Region 8 Storm Water Coordinator  
460 CES/CC  
460 CES/DD  
460 CES/CEI  
460 CES/CEIE  
460 SW/JA