

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Barnes Aerospace Windsor, Connecticut March 2026

Prepared for
Barnes Aerospace
169 Kennedy Road
Windsor, Connecticut 06095



Loureiro Engineering Associates, Inc.

100 Northwest Drive • Plainville, CT 06062 • 860.747.6181 • Fax 860.747.8822 • www.Loureiro.com

An Employee-Owned Company

Affirmative Action / Equal Opportunity Employer

Comm. No. 004WH3.12

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**BARNES AEROSPACE
WINDSOR, CONNECTICUT**

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Prepared by

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ACRONYMS

BMPs	Best Management Practices
CAM	Corrective Action Measure
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
CT DEEP	Connecticut Department of Energy and Environmental Protection
Cu	Total Copper
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
FOIA	Freedom of Information Act
GP	National Pollutant Discharge Elimination System General Permit for the Discharge of Stormwater Associated with Industrial Activities
HVAC	Heating, Ventilation, and Air Conditioning
NAICS	North American Industry Classification System
NDDDB	Natural Diversity Data Base
NO ₃ -N	Nitrate as Nitrogen
O&G	Oil and Grease
OSHA	Occupational Safety and Health Administration
Pb	Lead
PE	Professional Engineer
PM	Preventive Maintenance
POTW	Publicly Owned Treatment Works
PPT	Pollution Prevention Team
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
SIC	Standard Industrial Classification
SIDP	Substantially Identical Discharge Point
SWD	Stormwater Drain
SWPPP	Stormwater Pollution Prevention Plan
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TP	Total Phosphorous
TSS	Total Suspended Solids
USGS	United States Geological Survey
Zn	Total Zinc

Site Contact Information

Facility Operator(s):
Name: Barnes Aerospace
Address: 169 Kennedy Road
City, State, Zip Code: Windsor, CT, 06095
Telephone Number: (860) 298-7740
Email address: info@barnesaero.com

Facility Owners(s) if different than operator:
Name: Barnes Group Inc.
Address: 123 Main Street
City, State, Zip Code: Bristol, CT 06010
Telephone Number: 860-653-5531
Email address: mlloyd@barnesaero.com

Site Contact if different than operator:
Name: Carissa Galgano
Address: 169 Kennedy Road
City, State, Zip Code: Windsor, CT, 06095
Telephone Number: (860) 687-5225
Email address: cgalgano@barnesaero.com

SWPPP Contact(s):
SWPPP Contact Name (Primary): Same as above
Telephone Number: Same as above
Email address: Same as above
SWPPP Contact Name (Backup): Aiden Casey
Telephone Number: (860) 687-5377
Email address: acasey@barnesaero.com

1. INTRODUCTION

Loureiro Engineering Associates, Inc. (Loureiro) was retained by Barnes Aerospace (hereafter referred to as Barnes) to prepare a Stormwater Pollution Prevention Plan (SWPPP) (hereafter referred to as the “Plan”) for its Site located at 169 Kennedy Road in Windsor, Connecticut (hereafter referred to as the “Site”). This Plan has been prepared to provide Barnes with the appropriate information and guidance to ensure that stormwater discharges associated with industrial activities conducted at the Site are properly managed in compliance with the Connecticut Department of Energy and Environmental Protection (CT DEEP) *National Pollutant Discharge Elimination System General Permit for the Discharge of Stormwater Associated with Industrial Activities* (hereafter referred to as the “GP”), that went into effect on November 1, 2025. This Plan has been prepared according to the requirements of the GP and guidance provided by CT DEEP. An electronic copy of the GP is available to Barnes personnel at the location specified in Appendix A, GP, and a physical copy of the GP will be kept alongside this Plan. Documentation of GP registration for the Site is provided in Appendix B, General Permit Registration.

In general, this Plan identifies the potential sources of stormwater pollution and provides recommendations for implementing best management practices (BMPs) to reduce these pollutants. This Plan contains the necessary certifications and signatures required by the GP, identifies the members of the stormwater Pollution Prevention Team (PPT) and their associated responsibilities, describes the potential sources of pollutants which may reasonably be expected to affect stormwater quality, and presents the stormwater management measures and controls appropriate for the Site. A program for the routine sampling and analysis of the stormwater discharges is also provided to give the Site (i.e., the PPT and/or a contractor) the necessary guidance to comply with the requirements of the GP.

This Plan must be revised and updated periodically and as necessary to include any changes to the configuration and operation of the Site. The conditions requiring amendments to this Plan are identified in Section 8 of this Plan.

1.1 Description of the Site

Barnes operates under the Standard Industrial Classification (SIC) Code 3724 (Aircraft Engines and Engine Parts), and North American Industry Classification System (NAICS) Code 336412 (Aircraft Engine and Engine Parts Manufacturing). The Site consists of three buildings: Building #1, Building #2 and Building #3. Building #2 is the primary site of the facility's industrial activities, which include various machining operations associated with the manufacture of aircraft engine parts. Machining operations conducted in Building #2 primarily consist of metal milling, turning,

and grinding. Building #1 is used primarily for storage, machining, and maintenance. Building #1 may also be used periodically for light industrial activities. Building #3 is used exclusively for storage and is considered a vacant building. No industrial activities take place in Building #3.

The size of the property is 558,306 square feet, and the total impervious area is 375,229 square feet. The property consists of three buildings, paved parking and driveway areas, grassy areas, and wooded areas.

The stormwater runoff from the Site was evaluated for consistency with the applicable goals and policies set forth in the CT General Statutes §22a-92. The Site is not located within the Coastal Boundary of Connecticut as defined in the Connecticut Coastal Management Act.

The June 2024 Natural Diversity Data Base (NDDDB) maps were reviewed, and the Site is in a State and Federal Listed Species area. The NDDDB Freshwater Mussel Areas were reviewed on October 3, 2024, and the Site is in an area of Freshwater Mussels as a State-Listed Species. Therefore, the Site and the contents of this Plan must not threaten the continued existence of any species listed pursuant to CT General Statutes § 26-306 as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species. The NDDDB Letter from CT DEEP is included in Appendix B.

The Aquifer Protection Area Maps from CT DEEP were reviewed, and Windsor is not a town with Aquifer Protection Areas. Therefore, the activities at Barnes are not subject to regulations adopted pursuant to CT General Statutes § 22a-354i.

The water quality at the Site was assessed using the Water Quality Classification Map for Windsor, Connecticut, and the Water Quality Plans and Assessments website provided by CT DEEP. There is a small unnamed brook that extends along the eastern border of the property labeled as surface quality A according to the Water Quality Classification Map. There is groundwater of class GA that envelops the entire property of the Site. These water bodies are not labeled in the Water Quality Plans and Assessments data and therefore are not identified as impaired waters. Thus, no additional monitoring related to discharges to an impaired water body is required for this Site.

The Site is located at 41.8662, -72.6354. A United States Geological Survey (USGS) Map depicting the location of the Site is included as Figure 1, USGS Site Location Map. A Site Plan depicting Site features, activities, and materials that may be sources of stormwater pollution is included as Drawing 1, Site Plan.

2. SIGNATURES AND CERTIFICATIONS

The following section details and provides the certifications required by the GP.

2.1 Management Certification

As required by the GP, Section 5.21.1 this Plan must be signed by a responsible corporate officer of the Site as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”

Permittee: Barnes Aerospace

Certifier Name: Carissa Marie Galgano on behalf of Barnes Aerospace

Certifier Title: Regional HSE Manager

Certifier's Signature: 

Date: 3/31/2026

Site/Facility Name: Barnes Aerospace

Site/Facility Address: 169 Kennedy Road, Windsor, CT 06095

General Permit No.: CTR050000

2.2 Certification that the SWPPP Meets Permit Criteria


As required by the GP, Section 4.3.1.1, this Plan must be certified by a Qualified Professional as defined in the GP as follows:

I certify that I have thoroughly and completely reviewed the Stormwater Pollution Prevention Plan prepared for the site or facility known as Barnes Aerospace. I further certify, based on such review and site visit by myself or my agent, and on my professional judgment, that the Stormwater Pollution Prevention Plan meets the criteria set forth in the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective on November 1, 2025.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

Certifier Name: Jared Shapiro, CHMM

Certifier Title: Senior Project Manager

Certifier's Signature: 



Date: 3/31/2026

Site/Facility Name: Barnes Aerospace

Site/Facility Address: 169 Kennedy Road, Windsor, CT 06095

General Permit No.: CTR050000

2.3 Certification of Non-Stormwater Discharges

As required by the GP, Section 4.3.2.9, this Plan must include the following certification of non-stormwater discharges.

I certify that in my professional judgment, the stormwater discharge from the site or facility known as Barnes Aerospace consists only of stormwater, or of stormwater combined with wastewater authorized by an effective permit issued under section 22a-430 or section 22a-430b of the Connecticut General Statutes, including the provisions of Section 5(b)(10) the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective on November 1, 2025, or of stormwater combined with any of the following discharges provided they do not contribute to a violation of water quality standards:

- 1. discharges from emergency/unplanned fire-fighting activities,*
- 2. landscape irrigation or lawn watering,*
- 3. uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids.*
- 4. uncontaminated ground water or spring water,*
- 5. uncontaminated groundwater from foundation or footing drains.*
- 6. water sprayed for dust control, in accordance with the conditions of the general permit, and*
- 7. for Sector A only, discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage.*

This certification is based on testing and/or evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test have been described in detail in the Stormwater Pollution Prevention Plan prepared for the site. I further certify that no interior building floor drains exist unless such floor drain connection has been approved and permitted by the commissioner or otherwise authorized by a local authority for discharge as domestic sewage to sanitary sewer.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

Certifier Name: Jared Shapiro, CHMM

Certifier Title: Senior Project Manager

Certifier Signature:



Date: 3/31/2026



Site/Facility Name
and Address:

Barnes Aerospace
169 Kennedy Road, Windsor, CT 06095

General Permit No.: CTR050000

3. STORMWATER POLLUTION PREVENTION TEAM (PPT)

The PPT is responsible for the implementation of all actions set forth in the GP and detailed in this Plan. The PPT must direct all necessary revisions and additions to this Plan as dictated by operational changes at the Site, as required by the provisions of the GP, as well as maintain control measures and take corrective actions where required. The following table lists the PPT Members who may be contacted in the event of an accidental release of pollutants to the stormwater system. At least one PPT Member must be present at the Site or on call during all operational shifts.

TABLE 3-1 PPT

Role	Name and Title	Phone Number	Responsibilities
PPT Leader	Carissa Galgano HSE Leader	860-687-5225 (office) 860-595-9798 (cell)	<ul style="list-style-type: none"> • Directing the development and implementation of the Plan • Routinely evaluate the effectiveness of the Plan • Coordinate employee training • Ensure performance or perform site inspections and monitoring • Maintain records and ensure reports are submitted • Ensure control measures are maintained • Assist in initial site assessment • Assist in the identification of pollutant sources and risks • Assist in the selection of appropriate BMPs • Oversee housekeeping practices • Coordinate spill response activities • Ensure preventive maintenance program is implemented
PPT Member	Wayne Gibson General Manager	860-687-5297 (office) 586-944-6198 (cell)	<ul style="list-style-type: none"> • Evaluate the effectiveness of the Plan • Coordinate employee training • Assist in the selection of appropriate BMPs • Direct implementation of BMPs • Assist in implementation, maintenance, and revision of plan • Oversee housekeeping practices • Ensure preventive maintenance program is implemented
PPT Member	Aiden Casey HSE Coordinator	860-687-5377 (office) 860-992-8871 (cell)	<ul style="list-style-type: none"> • Maintain records and ensure reports are submitted • Ensure control measures are maintained • Assist in initial site assessment • Assist in the identification of pollutant sources and risks • Assist in the selection of appropriate BMPs • Assist in implementation, maintenance, and revision of Plan • Direct implementation of BMPs • Oversee housekeeping practices

4. POTENTIAL POLLUTANT SOURCES

4.1 Summary of Drainage Areas

The Site has eight drainage areas. The stormwater discharges, drainage areas, flow, and potential pollutant sources at the Site are depicted in Drawing 1. In addition, the potential pollutants associated with the activities conducted at the Site and the stormwater drainage systems at the Site are detailed in this section.

TABLE 4-1 SUMMARY OF DRAINAGE AREAS

Location of Discharge Point	Sequential Number & Descriptor	Estimate of Runoff Coefficient of Drainage Area
12" RCP discharges into an unnamed brook on the east side of the site - second from north outfall out of six outfalls (SWD-001)	001 North Parking Area	0.54
8" PVC discharges into an unnamed brook on the east side of the site - third from north outfall (SWD-002)	002 Roof 1D	0.95
24" RCP discharges into an unnamed brook on the east side of the site - third from south outfall (SWD-003)	003 Industrial Core Area	0.69
12" RCP discharges into an unnamed brook on the east side of the site - second from south outfall (SWD-004)	004 Southeast Parking	0.48
36" RCP discharges into an unnamed brook on the east side of the site - southernmost outfall (SWD-005)	005 Building 2 Operations	0.64
12" RCP discharges into an unnamed brook on the east side of the site - northernmost outfall (SWD-006)	006 Building 3 Storage	0.80
N/A - Sheet flow (no point source discharge)	007 & 008 East Parking Area	0.83

4.1.1 Drainage Area 001

Drainage Area 001 is located on the north side of Building #1 adjacent to Old Kennedy Road and consists of the paved parking areas and driveway entrances to Building #1. No potential pollutant sources associated with industrial activity are located within the drainage area.

Potential pollutant sources located within Drainage Area 001 include:

- The leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,
- Accumulation of organic debris, sand, and salt on paved areas.

The stormwater collection system for Drainage Area 001 consists of two catch basins that collect stormwater from either side of Old Kennedy Road, and one catch basin that collects stormwater from the grassy area on the southeast side of the parking area. There is a yard drain in this grassy area that connects to the catch basins. The stormwater collected within Drainage Area 001 is discharged through a 12-inch RCP into an unnamed brook located along the eastern property boundary of the Site via SWD-001.

Control measures for Drainage Area 001 include routine inspections for signs of pollution. There is curbing around the parking lot and vegetated areas to direct stormwater and prevent erosion.

4.1.2 Drainage Area 002

Drainage Area 002 includes Roof 1D of Building #1, as depicted on Drawing 1. This area includes multiple heating, ventilation, and air conditioning (HVAC) units, process vents associated with machines inside Building #1, and decommissioned exhaust stacks on the southern corner of Roof 1D.

Potential pollutant sources within Drainage Area 002 include:

- Spills and leaks from the transformer and HVAC units; and,
- Emissions from process vents associated with metal machining operations.

Control measures for Drainage Area 002 include preventive maintenance and routine inspections. The stormwater collection system for Drainage Area 002 consists of three roof drains along the middle of the Roof 1D and five roof drains along the northwest side of the roof. There are two gutters along the southeastern side of Roof 1D. The roof drains and one section of gutter discharge through interior and exterior drainage leaders to an 8-inch PVC pipe into the unnamed brook via SWD-002. The section of gutter along the southern portion of the roof discharges through exterior drainage leaders onto the underlying grassy area.

4.1.3 Drainage Area 003

Drainage Area 003 is located around Building #1 and consists of Roofs 1A, 1B, and 1C of Building #1, Roofs 2D, 2E, and 2F of Building #2, the southeast portion of Roof 2C, and paved areas northwest and southeast of Building #1, and between Buildings #1 and #2. Industrial activities conducted in this drainage area consist of handling and transferring waste materials and covered storage of materials. There are also process vents associated with metal machining operations.

Potential pollutant sources located within Drainage Area 003 include:

- Exhaust emissions and spills and leaks of oil and grease from roof-top and pad-mounted HVAC units;
- Emissions from roof-top process vents associated with metal machining activities;
- Contaminants to stormwater runoff from HVAC cleaning chemicals stored on Roof 2C;
- Contaminants to stormwater runoff caused by leaks from the cardboard dumpster in the northwestern paved area of Drainage Area 003;
- Contaminants to stormwater runoff caused by leaks from the general plant refuse trash compactor and its hydraulic reservoir located on the north side of Building #2;
- Contaminants to stormwater runoff from the dust collector located on the northeast side of Building #2;
- Contaminants to stormwater runoff caused by leaks from the pad-mounted transformer located on the southwest side of Building #1;
- Spills and leaks from material handling and transfer of waste coolant and oil mixtures at the loading dock between Building #1 and Building #2;
- Contaminants from the leakage of virgin oil storage in the chemical storage shed along the northeast side of Building #2;
- Contaminants to stormwater runoff from transfer activities of scrap metal and chips at the loading dock on the southwest side of Building #1;
- Exhaust emissions and the leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,
- Accumulation of organic debris, sand, and salt on paved areas.

The stormwater collection system for Drainage Area 003 consists of roof drains, downspouts, and catch basins. There is curbing in the paved areas of the southern portion of Drainage Area 003 to direct stormwater and prevent erosion. Stormwater from Roofs 1A and 1C and Roofs 2D and 2E is collected by roof drains that discharge through interior drainage leaders and stormwater piping into catch basins located within Drainage Area 003. Roof drains on Roof 1A drain discharges onto the paved areas and into the grassy areas. Stormwater from Roof 1B sheet flows from the roof onto the adjacent pavement, which allows for volatilization of organic compounds. Roof 2F is equipped with downspouts that discharge through exterior roof leaders into subsurface stormwater piping, which in turn discharges to the adjacent catch basin. Stormwater from the southeast half of Roof 2C is collected by downspouts that discharge to Roof 2D, which is equipped with interior roof drains that discharge to the subsurface stormwater piping. Stormwater runoff from the paved areas within Drainage Area 003 is collected by a total of five catch basins. The stormwater collected

from Drainage Area 003 is ultimately conveyed through the southernmost catch basin and discharges through a 24-inch RCP into the unnamed brook via SWD-003.

Control measures for Drainage Area 003 include good housekeeping, routine inspections, and preventive maintenance. The chemicals used to clean the HVAC units on the roof are covered. The cardboard dumpster and trash compactor are covered in watertight containers. The cardboard recycling dumpster is kept closed unless it is being loaded or unloaded. The loading dock between Roofs 1C and 1D where scrap metal and chip drums are transferred off-site has a roof, so drums are not exposed to stormwater. The chemical storage shed located along the northeast side of Building 2 is equipped with built-in secondary containment to prevent stormwater from contacting any chemicals or oils. The catch basin between Buildings #1 and #2 has a plug valve that can be closed in the event of an emergency. Additional catch basin covers are available between Buildings #1 and #2.

4.1.4 Drainage Area 004

Drainage Area 004 is located in the southeast portion of the property and consists of paved parking and driveway area located east of Building #2, as depicted on Drawing 1. There are no industrial activities that occur in this drainage area.

Potential pollutant sources located within Drainage Area 004 include:

- The leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,
- Accumulation of organic debris, sand, and salt on paved areas.

Control measures for Drainage Area 004 include routine inspections and good housekeeping. The stormwater collection system for Drainage Area 004 consists of one catch basin in a depression in the pavement that directs stormwater runoff towards it. The stormwater collected within Drainage Area 004 is discharged southeast through a 12-inch RCP into the unnamed brook via SWD-004.

4.1.5 Drainage Area 005

Drainage Area 005 is on the southwest side of Barnes and includes Roofs 2A, 2B, a large portion of Roof 2C of Building #2, the grassy and wooded area along the southwest side of Building #2, and paved areas around Building #2. Industrial activities in this area include the operation of process vents for metal finishing operations and material transfer activities at the receiving dock northwest of Building #2.

Potential pollutant sources located within Drainage Area 005 include:

- Exhaust emissions and spills and leaks of oil and grease from roof-top HVAC units;
- Emissions from roof-top process vents associated with metal finishing operations;
- Contaminants from the dust collector that captures metal dust located along the southwest side of Building #2;
- Contaminants from material transfer activities and truck traffic associated with the receiving dock located on the northwest side of Building #2;
- The leakage of oil and other fluids from the pad-mounted electrical transformer;
- The leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,
- Accumulation of organic debris, sand, and salt on paved areas.

The stormwater collection system for Drainage Area 005 consists of gutters and downspouts along Roofs 2A, 2B, and 2C of Building #2, catch basins within the paved and grassy areas, and a trench drain located in the loading dock area on the northwest side of Building #2. Stormwater from Roofs 2A and 2B and the northwest portion of Roof 2C is collected by gutters/downspouts that discharge through exterior drainage leaders into subsurface stormwater piping within Drainage Area 005. Two catch basins in the grassy area along the southwest side of Building #2 collect stormwater from the immediate surrounding area. Four catch basins in the parking lot collect stormwater from the paved areas in Drainage Area 005. The catch basins in the grassy and paved areas unify through the catch basin on the southeast boundary of Drainage Area 005 and discharge through a 36-inch RCP into the unnamed brook via SWD-005.

Control measures for Drainage Area 005 include good housekeeping, routine inspections, and preventive maintenance. There is curbing around the paved areas to direct stormwater and prevent erosion.

4.1.6 Drainage Area 006

Drainage Area 006 is located on the northeast side of Old Kennedy Road and consists of the roof of Building #3 and the paved areas south of the building. Building #3 is only used for material storage and no industrial activities take place there.

Potential pollutants sources located within Drainage Area 006 include:

- Spills and leaks of oil and grease from decommissioned roof-top HVAC units;
- The leakage of oil from the pad-mounted electrical transformer located along the southwest side of Building #3;
- The leakage of oil and other fluids from material transfer activities at the loading dock located on the southwest side of Building #3;
- The leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,

- Accumulation of organic debris, sand, and salt on paved areas.

The stormwater collection system for Drainage Area 006 consists of gutters/downspouts along the Building #3 roof, catch basins within the paved and grassy areas, and a trench drain located in the loading dock area on the southwest side of Building #3. The stormwater collected from these areas is discharged into the unnamed brook on the east side of Building #3 through a 12-inch RCP pipe via SWD-006.

Control measures for Drainage Area 006 include good housekeeping, routine inspections, and preventive maintenance. There is curbing around the paved areas to direct stormwater and prevent erosion.

4.1.7 Drainage Area 007 & 008

Drainage Areas 007 & 008 are located on the northeast side of Old Kennedy Road and consist of the paved parking and driveway areas located east and northeast of Building #3.

Potential pollutant sources located within Drainage Areas 007 & 008 include:

- Contaminants to stormwater runoff from the scrap metal dumpster;
- The leakage of oil and other fluids from vehicle traffic and parking on paved areas; and,
- Accumulation of organic debris, sand, and salt on paved areas.

The stormwater collected within Drainage Areas 007 & 008 has a sheet flow over the paved areas. The stormwater is discharged through curb cuts or surface flow to the unnamed brook. There are no formal stormwater collection devices and the stormwater in this area does not have a point discharge.

Control measures for this drainage area include routine inspections and good housekeeping. The scrap metal dumpster is covered and is only uncovered when it is actively being loaded or unloaded.

4.2 Non-Stormwater Discharges

At the time of certification of this Plan, there are no non-allowable, non-stormwater discharges entering the stormwater drainage system. The Certification of Non-Stormwater Discharges is included in Section 2.3 of this Plan, and the supporting information for the certification is provided in Appendix C, Certification of Non-Stormwater Discharges Supporting Information.

The following allowable non-stormwater discharges under Section 2.1.1 of the GP are present at Barnes:

- Uncontaminated condensate from the facility's roof-top and ground-mounted HVAC units is discharged on the facility's roof or the ground and either evaporates during warmer weather or enters the stormwater collection system.
- Landscape irrigation and lawn watering water is discharged to the grassy areas and infiltrates into the ground
- The site discharges wastewaters to the sanitary Publicly Owned Treatment Works (POTW) under the authority of the General Pretreatment Permit for Non-Significant Industrial User Discharges to POTW. The discharges include condensate, boiler blowdown, Proceco parts washing wastewater, and non-destructive test rinsewater.

The facility has eight discharge locations on the outside of the Site buildings where fire sprinkler system test water is discharged to the ground surface. According to the GP, the fire sprinkler test system wastewater cannot be discharged to surface water via stormwater outfalls and must be routed to the sanitary sewer or discharged to groundwater under the authority of other permitting programs developed by CT DEEP. In areas where fire sprinkler test system wastewater has the potential to discharge to a paved area, wastewater is routed to an adjacent gravel or grassy area during testing to avoid a discharge to surface water and to limit erosion. There are mats to cover catch basins and spill response equipment available on site to prevent fire test water from entering the stormwater collection system.

4.3 **Summary of Potential Pollutant Sources & Controls**

Table 4-2, Inventory of Exposed Materials, provides an inventory of the potential pollutant sources located within the discharge drainage areas of the Site. In addition, a detailed description of the potential pollutant sources related to stormwater runoff is presented in this section. Areas of concern due to their potential to contribute to stormwater pollution at the Site include outdoor storage areas, material handling areas, and exhaust ventilation. Barnes will notify CT DEEP no fewer than 30 days prior to making any planned physical alterations or additions to the Site that qualify the Site as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged.

4.3.1 **Outdoor Material Storage**

As depicted on Drawing #1, outdoor storage at the Site includes one enclosed trash compactor, one covered dumpster, two enclosed storage boxes for raw solid materials, two dust collectors with

up to 55-gallon collection drums, two pad-mounted transformers, and one covered scrap metal dumpster.

There is one enclosed trash compactor for general plant refuse with an external hydraulic reservoir located on the north corner of the Building #2. A covered dumpster for recycled cardboard is located near the northwest corner of Building #1. A covered dumpster for scrap metal is located on the east side of Building #3. These are identified in Table 4-2. Section 4.2.2.3 of the GP requires dumpsters, trash compactors, and roll-off containers to be in sound watertight condition and have covers and drain plugs intact. The dumpster and compactor are inspected monthly for signs of leakage that could cause stormwater contamination and to confirm the dumpsters are watertight. Two enclosed storage containers with solid raw materials are located on the northeast side of Building #2. Since the materials are stored within closed storage containers, there is minimal potential for contamination to stormwater from these storage activities.

Dust collectors that capture emissions from metal finishing operations are located on the west and east sides of Building #2. The captured dust is collected within drums with a capacity up to 55-gallons beneath the dust collectors. Section 4.2.5.3 of the GP requires that baghouses are inspected and maintained at least quarterly to prevent the escape of dust from the system. To minimize the potential for stormwater contamination, Barnes replaces the collection drums before they reach capacity, inspects the dust collectors and collection drums monthly for exterior contamination, and cleans up any dust contamination immediately upon discovery.

There is an enclosed chemical storage shed used to store oil, located between Buildings 1 and 2. This enclosure is intact, sealed, and equipped with secondary containment, and therefore has minimal potential for contamination to stormwater.

There are three transformers at the Site in Drainage Areas 003, 005, and 006, respectively. Due to the design and operational integrity of the transformers, the potential for stormwater pollution is considered to be insignificant. Any minor leakage of transformer oil will be detected during monthly inspections conducted by Barnes. If a transformer oil release is observed by Barnes personnel, Barnes should immediately notify the utility company to mitigate the release.

4.3.2 Material Handling

As depicted on Drawing 1, the facility has four primary loading docks. The loading dock located on the southwest side of Building #1 within Drainage Area 003 is primarily used for the shipping of scrap metal and metal chips. The loading dock has an elevated exterior staging area that is covered by a permanent roof to prevent direct exposure to precipitation. Drums containing drained metal chips are stored in this staging area until they are shipped off-site for recycling. Since metal

chips staged in this area are typically drained of free liquids, the potential for a spill to occur and impact stormwater quality is considered low. Barnes should follow the good housekeeping practices listed in Section 5.1 of the Plan to further minimize the potential for stormwater contamination from the staging activities at the loading dock.

The loading dock located on the northeast side of Building #2 within Drainage Area 003 is primarily used to transfer waste coolants from an interior aboveground storage tank to a vacuum truck for off-site disposal. To minimize the potential for a release to occur during transfer, the truck driver and Barnes' personnel should follow the standardized transfer procedures described below:

- Transfer operations are supervised by Site personnel.
- Truck drivers will coordinate with appropriate Site personnel before any material transfer begins.
- The catch basin valve is put in the closed position before any material transfer begins.
- Appropriate absorbents and catch basin covers will be readily available to contain spills that may occur to preclude their entry into the stormwater conveyance.
- The driver and Site personnel will remain present and attentive at all times during the transfer.
- Transfer hoses are detached when transfer is complete. Residual product in the hose is drained back into the storage tank and/or delivery truck.
- Transfer valves are closed and secured.

The loading dock located on the northwest side of Building #2 within Drainage Area 005 is the facility's primary loading and unloading area used for receiving raw materials, chemicals, and oils, as well as shipping finished goods, non-hazardous waste, and hazardous waste. The loading dock is recessed approximately 20 feet into the building and has two flush-type loading dock doors. This loading dock area is covered by the building roof and is therefore not directly exposed to precipitation. There is a trench drain at the loading dock entrance that discharges to the stormwater collection system for Drainage Area 005. Loading, unloading, and material transfer activities at this loading dock are primarily performed inside the building and under cover. Therefore, there is minimal potential for pollutants to enter the stormwater system as a result of material transfer activities at this loading dock. Materials spilled outside along with leaks from vehicles or forklifts are potential pollutant sources in the loading dock areas. Spill control materials and equipment are available at the Site to prevent the entry of spilled materials into stormwater conveyances during transfer activities.

The loading dock located on the southwest side of Building #3 is occasionally used for loading and unloading materials stored in Building #3. Materials spilled outside along with leaks from vehicles or forklifts are potential pollutant sources in the loading dock areas. Spill control materials and equipment are available at the Site to prevent the entry of spilled materials into stormwater conveyances during all transfer activities.

4.3.3 De-icing Material Storage

Barnes does not store de-icing materials at the Site.

4.4 Spills and Leaks

Under the GP, Section 4.3.2.4(b), Barnes is required to document any spills or leaks of five (5) gallons or more of petroleum products, or of toxic or hazardous substances that could affect stormwater. A log for documenting spills is provided in Appendix D, Spill Recordkeeping Log, and should be maintained for the life of this Plan.

5. MEASURES AND CONTROLS

Control measures implemented by Barnes include BMPs and other structural and non-structural practices which are used to prevent or minimize the discharge of pollutants to stormwater. A combination of management procedures, structural controls, and employee training provides the most effective means of stormwater management. The GP contains a list of control measures and inspection frequencies that are expected to be in place to minimize the discharge of pollutants in stormwater runoff from the Site. This section details the control measures in place and management practices that should be implemented at Barnes.

5.1 Good Housekeeping

In general, good housekeeping practices are designed to maintain a clean and orderly work environment. Poor housekeeping in areas that are exposed to rainfall can result in an increased potential for stormwater contamination. A clean and orderly site reduces the possibility of accidental spills caused by mishandling of chemicals and equipment, and should reduce safety hazards to Site personnel. Well maintained material and chemical storage areas will reduce the possibility of stormwater being exposed to pollutants. The following is a list of good housekeeping practices that should be implemented at the Site:

- Sweep or vacuum at regular intervals.
- Store materials in appropriate containers. Liquid materials require appropriate secondary containment and cover.
- Minimize the potential for waste, garbage, and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.
- Ensure that all dumpsters, trash compactors, and roll-off containers used to store waste or recyclable materials are in sound, watertight condition and have covers and drain plugs intact, are in roofed areas or in secondary containment areas that will prevent exposure to rainfall.
- All covers on dumpsters not under a roof must be closed when dumpsters are not being loaded or unloaded.
- Stormwater collection and drainage facilities adjacent to the loading dock must be designed and maintained in a way that prevents any materials spilled or released at the loading dock from discharging to the storm sewer system.
- Drains located directly beneath the loading dock must be routinely inspected for the accumulation of sludge, sediment, grit, tailings, trash, and any other debris. Drains must be cleaned out when the depth of debris reaches half of depth of the drain.

- Identify roof areas that may be subject to drippage, dust or particulates from exhausts or vents or other sources of pollution. Inspect such areas to determine if any potential sources of stormwater pollution are present, and if so, minimize the sources or potential sources of pollution.
- Provide adequate aisle space in virgin and waste material storage areas to facilitate material transfer and easy access for inspections.
- Stack containers according to manufacturers' instructions to avoid damaging the containers from improper weight distribution.

The PPT shall make employees aware of good housekeeping practices by discussing good housekeeping at employee meetings and posting bulletin board with updated good housekeeping procedures, tips and reminders.

5.2 Preventive Maintenance (PM)

PM activities, as outlined in the GP, include the following:

- Inspection and maintenance of stormwater management devices (e.g., cleaning stormwater treatment devices, catch basins) that could fail and result in contamination of stormwater. Visual inspection, maintenance, and/or testing of on-site equipment and systems to identify conditions that could cause breakdowns or failures resulting in discharges of pollutants to stormwater.
- Maintaining non-structural control measures, such as keeping spill response supplies available, and ensuring that personnel are appropriately trained.
- Cleaning catch basins when the depth of debris reaches half of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe.
- Inspecting and maintaining baghouses at least quarterly to prevent the escape of dust from the system and immediately removing accumulated dust at the base of the exterior baghouse and surrounding environment.

PPT Members are responsible for the implementation of PM at the Site. PM activities performed by Barnes include:

- Inspections and tests for all equipment that can potentially pollute the discharge to the stormwater system.
- Maintenance performed semiannually on HVAC units by an outside contractor.
- Cleaning of catch basins by an outside contractor on an as-needed basis.
- Appropriate and timely adjustment, repair, or replacement of all such equipment to ensure proper working order.

- Record keeping of all inspections, repairs, tests, etc.

All maintenance records for the site are maintained in Building #2 records room. Records for the repair and maintenance of stormwater control measures should include date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules.

5.3 Spill Response Procedures

Barnes should maintain emergency response procedures in order to minimize hazards to human health or the environment caused by fires, explosions, or any unplanned release of oil products or toxic or hazardous substances. In the event of a release or spill, Barnes should follow the Spill Response Procedures provided in Appendix E of this Plan, excerpted from the Site's Spill Prevention, Control, and Countermeasure Plan. Barnes employees are only authorized to respond to incidental releases as defined by the Occupational Safety and Health Administration (OSHA) in 29 Code of Federal Regulations (CFR) 1910.120. In the event of a non-incidental release, Barnes will contact a spill contractor to mitigate the release.

For any spill, leak, release, or discharge of non-stormwater not authorized by the GP or another permit, the PPT leader should report it to the CT DEEP Emergency Response and Spill Prevention by calling **860-424-3338 or 866-DEP-SPIL (866-337-7745, toll free)**, 24 hours/day Signs with emergency contact information should be posted throughout the Site.

For any oil release that violates state water quality standards, causes a film or sheen on the water's surface, or leaves sludge or emulsion beneath the surface, the PPT Leader should report it to the EPA's National Response Center (NRC) at (800) 424-8802.

5.4 Employee Training

All employees whose activities may affect stormwater quality must receive training within 90 days of employment and at least once a year thereafter. Employees who should receive training include but are not limited to: PPT members; employees responsible for implementing activities necessary to meet the conditions of the GP (e.g., inspectors, maintenance personnel); and, employees who work in areas where industrial materials or activities are exposed to stormwater.

The PPT leader is responsible for organizing an adequate stormwater training program. Training must be conducted or supervised by a member of the PPT or other qualified person and a written record of training must be maintained in Appendix F, Training Records, including the dates of training, employee name, employee responsibility, and training agenda.

If related to the scope of their job duties, personnel must be trained in at least the following:

- An overview of what is in the SWPPP;
- Spill response procedures, emergency equipment locations, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by the GP, and how they are to be maintained;
- The proper procedures to follow with respect to the control measures on site;
- When and how to conduct inspections, record applicable findings, and take corrective actions; and,
- The Site's emergency procedures.

The PPT leader must also ensure the following personnel understand the requirements of the GP and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures);
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges;
- Personnel who are responsible for conducting and documenting inspections and monitoring; and,
- Personnel who are responsible for taking and documenting corrective actions.

5.5 **Sediment and Erosion Control**

As required by the GP, Section 4.2.9, Barnes must identify areas of the Site that have a potential for soil erosion due to topography, activities, or other factors, and must include measures to limit erosion and stabilize such areas. No areas susceptible to erosion or showing signs of erosion were observed during all comprehensive inspections. No polymers or other chemical treatments for erosion and sediment control are in use at the Site.

5.6 **Management of Runoff**

As depicted in Drawing 1, runoff management at the Site consists of catch basins, gutters, roof leaders, and roof drains before being discharged offsite through stormwater outfalls.

Stormwater management practices that are considered appropriate to Barnes are as follows:

- Gutters, roof leaders, roof drains, and catch basins have been installed to direct stormwater through the storm drainage system to outfalls away from industrial activities. They should be inspected and properly maintained.
- The roof areas shall be observed at least monthly to ensure that the roof areas are clear of debris and for signs of leaks and material deposition from the HVAC units and process vents.
- All access roads, parking areas, and truck routes that have been paved to reduce erosion shall be periodically swept and properly maintained. All unpaved areas should be regularly monitored to ensure limited erosion.
- Dumpsters and trash compactors shall be routinely inspected to ensure watertight conditions.

5.7 **Equipment and Vehicle Washing**

Exterior equipment or vehicle washing does not take place at the Site.

5.8 **Future Construction**

Any construction activity that disturbs greater than one acre must be conducted in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (as amended), including the creation of a Stormwater Pollution Control Plan. All construction activities, regardless of size, shall comply with the Connecticut 2024 Guidelines for Soil Erosion and Sediment Control during construction and the 2024 Stormwater Quality Manual for the design and implementation of post-construction stormwater management measures. In addition, Barnes must avoid, wherever possible, the use of copper or galvanized roofing or building materials where these materials will be exposed to stormwater.

Any evaluation, construction, or modification of the design of an engineered stormwater drainage system, as defined in the Connecticut Stormwater Quality Manual, requires certification by a Professional Engineer (PE).

5.9 **Resilience Measures**

Barnes will consider the resilience measures outlined in Section 4.2.3.8 of the GP when selecting and designing new stormwater control measures.

6. INSPECTIONS

The GP requires two types of inspections: routine inspections that must be conducted monthly, and comprehensive site inspections that must be conducted semiannually. The primary purpose of these inspections is to ensure that management practices and control measures prescribed in this Plan are being implemented correctly and effectively. In addition, the inspections can help determine if changes to stormwater management practices and controls measures need to be made due to changes at the Site. Inspections must be conducted by qualified personnel. Routine inspections will be the responsibility of the PPT Leader and semiannual inspections will be the responsibility of the PPT Leader.

6.1 Routine Inspections

The Site shall complete the required routine inspections on a monthly basis. At least one routine inspection per calendar year must be conducted while a stormwater discharge is occurring. A Monthly Inspection Form is provided in Appendix G to facilitate and document the completion of the inspections.

During normal operating hours, Barnes must conduct inspections of areas covered by the requirements in the GP, including, but not limited to, the following:

- Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in this Plan and those that are potential pollutant sources;
- Areas where spills and leaks have occurred in the past three years; and,
- Stormwater discharge points.

Copies of the completed inspection forms should be maintained in Appendix G of this Plan for a period of no less than five (5) years after the date that coverage under the GP expires or is terminated.

6.2 Semiannual Comprehensive Compliance Evaluations

In accordance with the requirements of the GP, Section 4.4.3, Comprehensive Site Compliance Evaluations must be performed at the Site on a semiannual basis (twice per year). These evaluations should be conducted during a rainfall event if possible. They should consist of a documentation review, interviews with Site personnel, and a visual inspection of the Site. A Semiannual Comprehensive Compliance Evaluation Form is provided in Appendix H. During normal operating hours, Barnes must conduct inspections of areas of the Site covered by the requirements in the GP, including, but not limited to, the following:

- Drainage areas;
- Buildings, structures, permanent cover, and impervious area;
- Structural control measures;
- Non-structural stormwater control measures;
- Stormwater Management Systems;
- Stormwater discharge points;
- Areas where industrial materials or activities are exposed to stormwater;
- Industrial materials storage areas;
- Materials handling activities areas;
- Other areas where industrial activity has taken place;
- Areas identified in the SWPPP and those that are potential pollutant sources; and,
- Spill prevention and response procedures (e.g., presence of spill kits and dry clean-up methods);

Completed forms must be maintained as a part of this Plan in Appendix H for a period of no less than five (5) years after the date that coverage under the GP expires or is terminated.

6.3 Inspection Follow-Up

Upon completion of each inspection, the routine inspection logs or semiannual inspection reports must be reviewed by the PPT leader to identify observations or unsatisfactory conditions that require remedial action. The PPT leader is responsible for ensuring that appropriate actions are taken to remedy unsatisfactory conditions in a timely manner. Any corrective actions taken should also be recorded on the inspection forms.

7. STORMWATER MONITORING PROGRAM

The GP requires Barnes to perform stormwater outfall monitoring. Barnes operates under SIC Code 3724, and therefore is subject to the monitoring requirements for Sector AB (Transportation Equipment, Industrial, or Commercial Machinery Facilities) under Section 8.28 of the GP. The monitoring requirements are detailed in the following subsections. Stormwater monitoring will be the responsibility of the PPT Leader to implement.

A summary of the stormwater discharge sampling data that was collected by Barnes under the previous permit (*General Permit for the Discharge of Stormwater Associated with Industrial Activity*) is provided in Appendix I, Summary of Monitoring During Previous Permit Term.

7.1 Stormwater Sampling Locations

As described in Section 4.1 of this Plan, the Site has a total of six point source discharges of stormwater. The stormwater collected within Drainage Area 001 is discharged through a 12-inch RCP east of Building #1 along the property boundary of the Site via SWD-001. The point source discharge for Drainage Area 002 is an 8-inch PVC pipe southeast of Building #1 brook via SWD-002. The stormwater collected from Drainage Area 003 is discharged through a 24-inch RCP east of Building #2 via SWD-003. The stormwater collected within Drainage Area 004 is discharged east of Building #2 through a 12-inch RCP via SWD-004. The stormwater collected within Drainage Area 005 is discharged through a 36-inch RCP southeast of Building #2 via SWD-005. The stormwater collected from Drainage Area 006 is discharged south of Building #3 through a 12-inch RCP pipe via SWD-006. All point source discharges of these drainage areas discharge into the unnamed brook on the east side of the Site.

There are four stormwater outfalls associated with industrial activities at the Site: SWD-002, SWD-003, SWD-005, and SWD-006. Stormwater will not be collected from outfalls SWD-001 and SWD-004 because Drainage Areas 001 and 004 consist solely of paved parking and driveways areas and are not directly associated with industrial activity.

The site does not discharge within 500 feet of a tidal wetland. The stormwater from the site discharges to an unidentified brook on the southeast portion of the facility. This waterbody does not have a Total Maximum Daily Load (TMDL), and is classified as surface quality A.

7.2 Stormwater Monitoring Procedures

The following sampling procedures must be followed during the quarterly, semiannual, and annual sampling events:

- Samples can only be collected from a storm event that occurs at least 72 hours after the last previous storm event generating a stormwater discharge from the Site.
- For sites that discharge through a detention basin or other stormwater management structure, the sample must be taken at the discharge from the basin or structure.
- Grab samples shall be used for all monitoring and shall not be commingled or combined with other waste streams.
- Collection of grab samples must begin within the first 30 minutes of stormwater being discharged at the sampling location and must be completed as soon as possible. If collection is more than 30 minutes after discharge begins, the reason for the delay must be documented on the sampling form and in Appendix J, Deviations from Monitoring Schedule.
- Samples must be collected at the designated outfalls or at the nearest feasible location representative of the discharge if the designated sampling location is inaccessible.
- All samples for a monitoring event must be taken during the same storm event, if feasible.

The following information must be collected and recorded for the storm events monitored:

- The place, date, and time of sampling and the time the discharge started;
- The person(s) collecting samples;
- The dates and times the analyses were initiated;
- The person(s) or laboratory that performed the analyses;
- The analytical techniques or methods used; and,
- The results of all analyses.

7.3 Quarterly Visual Assessment

Once each quarter for the entire permit term, Barnes must collect stormwater discharge samples from the sample locations designated in Section 7.1 of this Plan and conduct a visual assessment for specific water quality characteristics. For monitoring purposes, the quarters begin on January 1st, April 1st, July 1st, and October 1st. If the Site is subject to snowfall during one or more of these quarters, at least one quarterly visual assessment must capture snowmelt discharge if feasible and the corresponding form should be annotated to indicate this.

The visual assessment must be made with the sample in a clean, colorless glass or plastic container and in a well-lit area. During the assessment, the sample must be qualitatively evaluated for the following water quality characteristics:

- Color;
- Odor;

- Clarity (diminished);
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and,
- Other obvious indicators of stormwater pollution.

A Quarterly Visual Assessment Form is included in Appendix K. This form can be used to document the results of each visual assessment event. If unsatisfactory water quality characteristics are observed during a visual assessment, this may indicate that the stormwater pollution control measures at the Site are inadequate or are not being properly implemented or maintained. After an unsatisfactory assessment, Barnes must review and revise this Plan as appropriate, following the corrective action schedule in Section 8.2 of this Plan. A monitoring remedial action log is also included in Appendix K. This form should be used to document any corrective actions or changes in control measures completed as result of an unsatisfactory visual assessment.

If Barnes is unable to collect a visual assessment sample during an entire sampling quarter, the circumstances pertaining to this must be documented and the documentation must be maintained in Appendix J of this Plan.

7.4 Benchmark and Toxicity Monitoring

In addition to quarterly visual assessments, Barnes must perform benchmark stormwater monitoring for the parameters listed in Table 7-1, Summary of Sector AB Monitoring Requirements, at the specified frequencies.

The first semiannual benchmark monitoring event of each sampling year must be conducted between January 1st and June 30th, and the second must be conducted between July 1st and December 31st. Monitoring events must be separated by at least 30 days. The semiannual stormwater samples may be collected along with the quarterly visual samples. As with the quarterly visual assessment, the stormwater discharge samples must be collected from the sample locations designated in Section 7.1 of this Plan.

7.5 Aquatic Toxicity Monitoring

Annual aquatic toxicity monitoring must be performed in the first year after receiving the Notice of Coverage from the Commissioner. Aquatic Toxicity must be included in a regularly scheduled semiannual sample.

7.6 **Monitoring of Discharges to Impaired Waters**

Impaired waters are waterbodies that have been assessed by CT DEEP as not meeting Connecticut's Water Quality Standards for a given designated use such as fish and wildlife habitat, recreation, or agricultural and industrial supply. According to the GP, industrial activities that discharge directly to impaired waters, as identified by CT DEEP, must conduct stormwater monitoring in addition to the standard benchmark monitoring discussed in Section 7.4 of this Plan.

All fresh waterbodies in the state of Connecticut are considered impaired for fish consumption due to atmospheric deposition of mercury. Sites where stormwater is or could be exposed to sources of mercury must monitor for mercury once per year. Due to the operations conducted by Barnes, the Site does not have the potential to contaminate stormwater with mercury and therefore no additional monitoring for mercury is required.

In order to achieve water quality standards for dissolved oxygen in Long Island Sound, a statewide limit has been implemented by CT DEEP to address nitrogen loading to the Sound. Monitoring for nitrogen in stormwater runoff, in the form of nitrate and total Kjeldahl nitrogen, is already required by the GP.

Based on a review of CT DEEP's list of impaired waters, none of the Site's drainage areas discharge directly into any impaired waters, so no additional monitoring is required.

7.7 **Test Procedures**

The following testing procedures must be followed:

- All pollutant parameters must be tested according to methods pursuant to 40 CFR 136 for the analysis of pollutants having approved methods under that part, unless a method is required under 40 CFR Subchapter N or unless an alternative method has been approved in writing pursuant to 40 CFR 136.5.
- Acute toxicity biomonitoring tests must be conducted according to the procedures specified in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition (Environmental Protection Agency (EPA) 821-R-02-012).

A list of the required monitoring parameters should be submitted to the analyzing laboratory prior to a sampling event, so that the lab can supply Barnes with the necessary collection containers. It is recommended that an extra set of containers be obtained in the event any are damaged during the sampling event or in transport from the laboratory. The laboratory may also provide coolers and corresponding paperwork such as a chain-of-custody form and sample container labels.

Instructions for the proper completion of the corresponding paperwork may be obtained through the laboratory.

7.8 Evaluation of Benchmark Monitoring Results

As required by the GP, Section 4.5.1, the results of Barnes's Semiannual Benchmark Monitoring must comply with the benchmarks for the parameters specified in Table 7-1. Barnes must calculate the average of the monitoring results from the four (4) most recent sampling events for each of the parameters. For averaging purposes, if a parameter is detected at a concentration less than the analyzing laboratory's method detection limit, a value equal to half the method detection limit reported by the laboratory should be used. For sample values that fall between the method detection level and the reporting level (i.e., a confirmed detection but below the level that cannot be reliably quantified), a value equivalent to half the reporting level reported by the analyzing laboratory should be used. These averages must then be compared to the benchmark values listed in Table 7-1. If Barnes fails to collect a sample during an entire semiannual benchmark monitoring period, monitoring results from preceding semiannual periods cannot be used for averaging purposes.

7.8.1 Data Not Exceeding Benchmarks

If the average of the four most recent consecutive semiannual monitoring results for any parameter is less than or equal to the benchmarks, Barnes can discontinue monitoring for that parameter for a maximum of two (2) years. An exemption for sample pH cannot be earned until exemptions for all other parameters are met. Once Barnes is able to discontinue monitoring for all parameters, CT DEEP should be notified of the change of monitoring frequency by email at DEEP.StormwaterIndustrial@ct.gov.

7.8.2 Data Exceeding Benchmarks

An exceedance occurs for a parameter if the average of four (4) consecutive semiannual monitoring values exceeds the benchmark threshold, or if fewer than four (4) samples have been collected but a but a single sample exceeds the benchmark threshold by more than four (4) times that parameter's threshold.

In the case of an exceedance, Barnes must follow the corrective action schedule outlined in Section 8.3 of this Plan. Failure to conduct any required corrective actions after a benchmark exceedance occurs is a permit violation.

7.8.3 Off-Site Pollutant Levels

Following the first four (4) semiannual events of benchmark monitoring (or sooner if the exceedance is triggered by less than four (4) monitoring events), if the average concentration of a pollutant exceeds a benchmark value, and Barnes determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in “run-on” entering from off-site, Barnes is not required to perform corrective actions or additional benchmark monitoring provided all of the following conditions are met:

- The average concentration of the benchmark monitoring results is less than or equal to the pollutant concentration in “run-on” entering from off-site (Including changes in pH due to rainfall).
- Barnes documents and maintains with this Plan the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to “run-on” entering from off-site, including any supporting rationale or any data previously collected by them or others.
- Barnes demonstrates that the diversion of off-site run-on containing these pollutant levels is infeasible through engineering analysis..
- Barnes notifies CT DEEP’s Commissioner of the findings, and the Commissioner issues a written approval of the permittee’s documentation demonstrating that the benchmark exceedances are attributable solely to off-site pollutant levels.

7.8.4 Inability to Collect a Sample

If a benchmark monitoring sample could not be collected during an entire semiannual monitoring period, a Discharge Monitoring Report (DMR) should still be submitted as per Section 7.9.1 of this Plan. In such a case, Barnes must indicate in NetDMR any failure to monitor during the regular reporting period with an explanation of the limitations restricting the collection of an appropriate sample. The appropriate No Data Indicator code from the GP should be included on the DMR. Documentation should also be maintained in Appendix J. Reasons may include the absence of a 72-hour period of dry weather, the absence of a rain event that produces a stormwater discharge, the absence of a discharge from a detention or retention basin, or adverse weather conditions preventing access to the stormwater discharge location. The timing of a rain event is not an acceptable reason to fail to sample unless it precludes the analysis of a parameter within the acceptable hold time specified by a laboratory.

7.9 Reporting and Record Retention

7.9.1 Benchmark Monitoring

Barnes will submit DMRs until via email to DEEP.StormwaterIndustrial@ct.gov until the Notice of Coverage is received by the Commissioner. Following this, DMRs must be submitted to CT

DEEP via NetDMR. Stormwater DMR forms must be submitted no later than 30 days after the end of the monitoring period. Aquatic toxicity testing results should be submitted in NetDMR along with the corresponding semiannual results.

7.9.2 Annual Report

An Annual Report summarizing monitoring data, site inspections, visual assessments, corrective actions, and noncompliance during the previous calendar year must be submitted to CT DEEP by April 15th of each year. A template for the Annual Report will be included in Appendix L, Annual Report Template. The Annual Report shall be submitted via email to DEEP.StormwaterIndustrial@ct.gov.

7.9.3 Records Retention

All records pertaining to stormwater monitoring activities including submitted DMR forms, laboratory reports, field data collection forms, and visual assessment records must be maintained in the appropriate location (Appendix M, Semiannual Monitoring Records, or Appendix K, Quarterly Visual Assessment Form) and retained for at least five (5) years beyond the expiration date of the GP.

7.9.4 Permit Noncompliance

Any incidences of GP noncompliance should be recorded. If there is an incidence of noncompliance that constitutes a permit violation, Barnes should notify CT DEEP's Commissioner via the Online Noncompliance Reporting web-based platform.

8. CORRECTIVE ACTIONS

8.1 Conditions Requiring Corrective Actions

When conditions requiring corrective actions occur or are detected through inspections, monitoring or other means, Barnes must take the appropriate corrective actions. Failure to take corrective action is a violation of the GP. All corrective action documentation should be maintained in Appendix N, Corrective Action Measure Documentation. The form in Appendix N should be filled out for any of the following conditions which require corrective actions:

- A discharge or representative discharge exceeds an applicable benchmark threshold in Table 7-1 after four consecutive semiannual measurements (or is mathematically certain to do so after less than four measurements)
- A spill, leak, release, or discharge of non-stormwater not authorized by the GP or another permit
- A required control measure is not stringent enough for a stormwater discharge to be controlled as necessary such that the receiving water will meet applicable water quality standards
- A required control measure was never designed, installed, implemented, or maintained
- Construction or a change in design, operation, or maintenance at the Site occurs that significantly changes the nature or quantity of pollutants discharged
- Color, odor, floating solids, settled solids, suspended solids, or foam observed in discharge water
- CT DEEP's Commissioner may utilize enforcement discretion to require additional corrective actions in response to permit violations

The specific corrective action requirements for each of the above conditions are laid out in GP Section 4.6.

8.2 Corrective Action Schedule

When Corrective Action Measures (CAMs) are necessary, they must be taken according to the following schedule. If corrective actions result in changes to any of the controls or procedures documented in the SWPPP, Barnes must modify the SWPPP accordingly within fourteen (14) calendar days of completing corrective action work.

8.2.1 Immediate Actions (Within 1-2 Days)

If corrective action is needed, the permittee must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

8.2.2 Subsequent Actions (Within 14-60 Days)

If additional actions are necessary (e.g., installing a new or modified control measure or completing a repair), they must be completed before the next storm event, if possible, and within fourteen (14) calendar days from the time of discovery of the corrective action condition.

If it is not feasible to complete the corrective action within fourteen (14) calendar days, Barnes must document the reason why. They must also identify a schedule for completing the work, which must be done as soon as practicable and but no longer than sixty (60) days after discovery. Documentation must be maintained within Appendix N of this Plan.

8.2.3 Extension (Greater than 60 Days)

If the completion of corrective actions will exceed the 60-day timeframe, Barnes must document their intention to exceed 60 days, the rationale for an extension, and a completion date. Documentation must be maintained within Appendix N of this Plan.

If a structural control measure is needed for a level 3 corrective action measure, Barnes may take up to one-hundred and twenty (120) days to install such measures. Any extension beyond this must be obtained from CT DEEP's Commissioner.

8.2.4 Follow-Up Sampling

For those corrective action triggering conditions that require or recommend follow-up sampling, Barnes will have an additional thirty (30) calendar days (or until the next qualifying storm event, should none occur within thirty (30) calendar days) after implementing CAM Level 1, 2, or 3 to collect the follow-up sample. Once sampling results are received, the results must report be reported by email to DEEP.StormwaterIndustrial@ct.gov within thirty (30) days.

8.3 CAM Levels

Barnes must enact the following corrective action measures when a corrective action triggering condition occurs. Corrective actions should follow the schedule above, and should be documented in Appendix N.

8.3.1 CAM Level 1: Review SWPPP and Stormwater Control Measures

Immediately review the SWPPP and the selection, design, installation, and implementation of the stormwater control measures to ensure the effectiveness of existing measures and determine if modifications are necessary to meet GP conditions. After the review, Barnes must either:

- Implement additional measures, considering good engineering practices, that would reasonably be expected to address the triggering condition; or
- Determine nothing further needs to be done, and document their rationale and include relevant information in the SWPPP as to why they expect the existing control measures and best management practices to be sufficient to meet permit requirements.

If subsequent inspections and/or follow-up monitoring data indicate that the triggering condition persists after the steps taken for CAM Level 1, CAM Level 2 is initiated.

8.3.2 CAM Level 2: SWPPP Review and Additional Stormwater Control Measures

Review the SWPPP again and implement additional pollution prevention/good housekeeping stormwater control measures beyond those already in place. Subsequent control measures should consider good engineering practices, beyond what was done in the initial response, that would reasonably be expected to be expected to control the release of pollutants.

If subsequent inspections and/or follow-up monitoring data indicate that the triggering condition persists for a third time after the steps taken for CAM Level 2, CAM Level 3 is initiated.

8.3.3 CAM Level 3: Implementation of Structural Control Measures

Install structural source controls (e.g., permanent controls such as permanent cover, berms, and secondary containment), and/or treatment controls (e.g., sand filters, hydrodynamic separators, oil-water separators, retention ponds, and infiltration structures, where applicable). The control measures, treatment technologies, or treatment train should be appropriate for the pollutants that triggered a CAM Level 3 should be more rigorous than the pollution prevention/good housekeeping-type stormwater control measures implemented under Level 2.

Barnes must select controls with pollutant removal efficiencies that are sufficient to prevent or minimize pollution of stormwater. Barnes must install such stormwater control measures for the discharge point(s) in question and for any discharge point represented by this point, unless they individually monitor those discharge points and demonstrates that Level 3 requirements are not required at those discharge points.

If the issue is still not resolved after CAM Level 3 actions, and further corrective actions are infeasible, Barnes may request a waiver from further corrective actions and/or follow-up

monitoring. CT DEEP's commissioner will approve or deny the request and may notify Barnes that coverage under an individual permit is necessary.

9. AMENDMENT AND DISTRIBUTION OF THIS PLAN

In accordance with conditions of the GP, this Plan must be amended under the any of the following conditions:

- There is a change at the Site which has an effect on the potential to cause pollution of the surface waters of the state.
- The actions required by this Plan fail to ensure or adequately protect against pollution of the surface waters of the state.
- CT DEEP's Commissioner requests modification of this Plan.
- Barnes is notified that it is subject to requirements because the receiving water to which the industrial activity discharges has been designated as impaired under Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.
- Barnes is notified that a TMDL to which they are subject has been established for the receiving water to which the stormwater discharges.
- It is necessary to address any significant sources or potential sources of pollution identified as a result of any inspection or visual assessment.
- Amendment is required due to failure to meet the monitoring benchmarks of the GP.

This Plan must be amended, and all actions required by this Plan must be completed within 120 days (or within another interval as may be specified in the GP or as may be approved in writing by CT DEEP's Commissioner) of the date Barnes becomes aware or should have become aware that any of the conditions listed above has occurred. Any changes to this Plan should be recorded on Appendix O, SWPPP Revision Log.

9.1 Recertification of this Plan

If significant changes are made to the Site or to this Plan in accordance with the conditions for amendment of this Plan listed in Section 8 above, this Plan must be recertified in accordance with the "Non-Stormwater Discharges" and "Plan Certification" sections of the GP, by a Qualified Professional as defined in the GP. Barnes must maintain compliance with such Plan thereafter.

9.2 Distribution of this Plan

An up-to-date copy of this Plan is maintained by the PPT leader and accessible to key management, supervisors, and members of the PPT.

9.3 **Plan Availability**

According to the GP, Section 3.12.1, Barnes must make a copy of their registration under the GP available electronically on their official website for public review. Copies of the registration and of this Plan shall also be provided immediately upon request to: the municipal operator of the municipal separate storm sewer system to which the Site discharges, and the water company or entity responsible for that water supply if the stormwater discharge is located within a public drinking water supply watershed or aquifer protection area.

If available, on or before thirty (30) days of receipt of a registration and SWPPP, CT DEEP's Commissioner shall post the SWPPP on the CT DEEP website for public review and comment. If Barnes claims that certain elements of this Plan constitute a trade secret or are otherwise exempt from the disclosure requirements of the state Freedom of Information Act (FOIA) (Section 1-210 et Seq of the Connecticut General Statutes), Barnes must follow the procedures provided in the GP registration form instructions regarding information subject to FOIA requirements.

TABLES

TABLE 4-2 INVENTORY OF EXPOSED MATERIALS

Drainage Area	Location of Potential Pollutant Source	Activity Generating Potential Pollutant	Pollutants Associated With Source	Method of Storage/Extent of Exposure	Control Measures	Method of Disposal, if Applicable	Outfall(s) Affected by Potential Spills or Leaks
001, 003, 004, 005, 006, 007, 008	Paved and parking areas	Vehicle traffic and accumulation of salt/sand	O&G, TSS	N/A (Medium)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping 	N/A	SWD-001, SWD-003, SWD-004, SWD-005, SWD-006
002, 003, 005, 006	Roof areas	HVAC units	O&G, TSS	HVAC reservoirs (Low)	<ul style="list-style-type: none"> • Monthly inspections • Preventive maintenance 	N/A	SWD-002, SWD-003, SWD-005, SWD-006
002, 003	Roof areas	Process vents associated with metal machining operations	Metals, TSS	N/A (Medium)	<ul style="list-style-type: none"> • Monthly inspections 	N/A	SWD-002, SWD-003
003	Paved areas	HVAC units	O&G, TSS	HVAC reservoirs (Low)	<ul style="list-style-type: none"> • Monthly inspections • Preventive maintenance • Concrete pad 	N/A	SWD-003
003	Roof 2C	Storage of cleaning chemicals for HVAC units	Organics	Container/Cabinet (Low)	<ul style="list-style-type: none"> • Monthly inspections • Shed covers 	N/A	SWD-003
003	North paved area	Cardboard dumpster	TSS	Dumpster (Medium)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping • Watertight container with drain plugs • Closed with cover when not in use 	Via truck, as needed	SWD-003
003	Between Building #1 and Building #2	Trash compactor and hydraulic reservoir	O&G, TSS	Machine reservoir (Low)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping 	Via truck, as needed	SWD-003
003, 005	Between Building #1 and Building #2, west side of Building #2	Dust collectors	Metals, TSS	Dust collector reservoir & steel drums (medium)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping • Preventive maintenance 	N/A	SWD-003, SWD-005

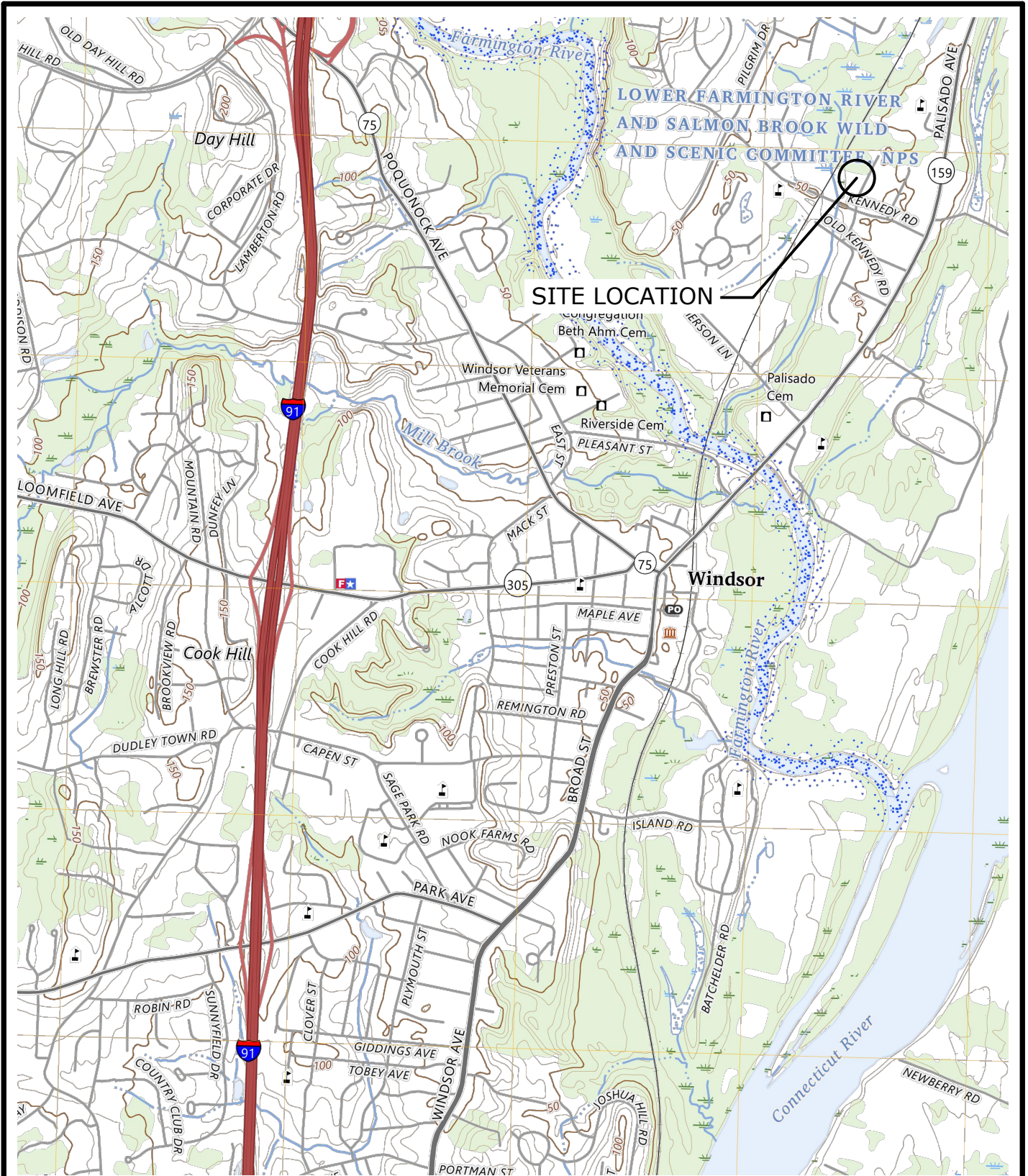
Drainage Area	Location of Potential Pollutant Source	Activity Generating Potential Pollutant	Pollutants Associated With Source	Method of Storage/Extent of Exposure	Control Measures	Method of Disposal, if Applicable	Outfall(s) Affected by Potential Spills or Leaks
003, 005, 006	Between Building #1 and Building #2, south side of Building #2, west side of Building #3	Transformers	O&G	Transformer reservoir (Low)	<ul style="list-style-type: none"> • Monthly inspections • Concrete pad 	N/A	SWD-003, SWD-005, SWD-006
003	Loading dock between Building #1 and Building #2	Material handling/transfer of waste coolant and oil	O&G, Metals, Organics	Transfer hoses and steel drums (high)	<ul style="list-style-type: none"> • Transfer procedures • Spill response procedures and equipment 	N/A	SWD-003
003	Shed between Building #1 and Building #2	Storage of virgin oil and chemicals	O&G, TSS	Chemical storage shed (low)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping • Secondary containment • Spill response procedures and equipment 	N/A	SWD-003
003	Building #1 loading dock	Storage and transfer of scrap metal and chips	Metals, O&G, TSS	Transfer hoses (high)	<ul style="list-style-type: none"> • Monthly inspections • Good housekeeping • Loading dock is covered • Transfer procedures • Spill response procedures and equipment 	N/A	SWD-003
005	Roof areas	Process vents associated with metal finishing operations	Metals, TSS	N/A (Medium)	<ul style="list-style-type: none"> • Monthly inspections 	N/A	SWD-005

TABLE 7-1 SUMMARY OF SECTOR AB MONITORING REQUIREMENTS

All Monitoring Requirements for Sector AB (Transportation Equipment, Industrial, or Commercial Machinery Facilities)				
MONITORING TYPE	INDUSTRIAL ACTIVITY	SCHEDULE	PARAMETER	THRESHOLD OR LIMIT
BENCHMARK GP, Section 4.5.1	Applies to all Sector AB facilities	Semiannually until requirements for benchmark monitoring exemption are met ¹	Chemical Oxygen Demand (COD)	75 mg/L
			Total Oil and Grease (O&G)	5.0 mg/L
			pH	5.0 - 9.0 s.u.
			Total Suspended Solids (TSS)	90 mg/L
			Total Phosphorus (TP)	0.40 mg/L
			Total Kjeldahl Nitrogen (TKN)	2.30 mg/L
			Nitrate as Nitrogen (NO ₃ -N)	1.10 mg/L
			Total Copper (Cu)	0.059 mg/L
			Total Lead (Pb)	0.076 mg/L
			Total Zinc (Zn)	0.160 mg/L
ADDITIONAL GP, Section 4.5.2	Applies to all Sector AB facilities	No additional monitoring for Sector AB		
EFFLUENT LIMITS GP, Section 4.5.3	Applies to all Sector AB facilities	No effluent limits for Sector AB		
AQUATIC TOXICITY GP, Section 4.5.4	Applies to all Sector AB facilities	Once in the permit term ³	LC ₅₀ for <i>Daphnia pulex</i>	None
			LC ₅₀ for <i>Mysidopsis bahia</i> (saltwater only)	
IMPAIRED WATERS GP, Section 4.5.5	Applies to all Sector AB facilities	Annually	None (no direct discharges to impaired waters)	
¹ Facilities may qualify for benchmark exemptions for a maximum of 2 years at a time (see also GP Section 4.5.1)). ² Aquatic toxicity testing shall be performed in the first year after receiving the Notice of Coverage from the Commissioner and the results shall be reported in NetDMR.				

FIGURE 1

USGS Site Location Map



Loureiro Engineering Associates, Inc.
 100 Northwest Drive • Plainville, Connecticut 06062
 Phone: 860-747-6181 • Fax: 860-747-8822
 An Employee Owned Company • www.Loureiro.com

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SITE LOCATION MAP

Stormwater Pollution Prevention Plan

PREPARED FOR:

BARNES AEROSPACE

169-170 KENNEDY ROAD, WINDSOR, CONNECTICUT

SCALE

1" = ±2,000'

COMM. NO.

04WH312

DATE

04/01/2026

FIGURE 1

DRAWING 1

Site Plan

LEGEND

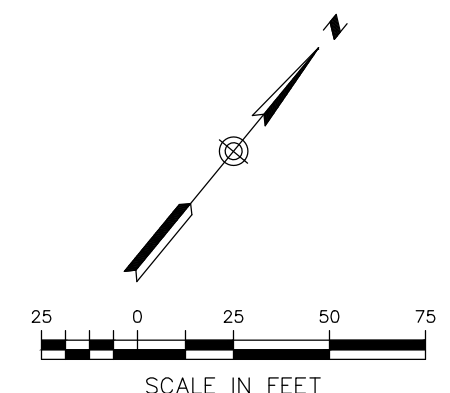
- PROPERTY BOUNDARY
- BUILDING/STRUCTURE
- ROAD/PAVEMENT
- FENCE
- 001 DRAINAGE DIVIDE AND AREA NUMBER
- > STORM DRAIN & DIRECTION OF FLOW
- > STORM DRAIN BENEATH BUILDING
- > STORMWATER RUNOFF FLOW DIRECTION
- RD ROOF DRAIN
- DS DOWNSPOUT DRAINING INTO STORMWATER PIPE
- DS DOWNSPOUT DRAINING ONTO GROUND SURFACE
- ET ELECTRIC TRANSFORMER
- HVAC HVAC UNIT
- SV PROCESS VENT
- SWD STORMWATER DISCHARGE
- ENDANGERED SPECIES AREA

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
001	13,758	11,437	25,195
002	12,800	0	12,800
003	96,109	38,684	134,793
004	25,146	27,841	52,987
005	147,198	78,665	225,862
006	44,395	8,896	53,291
007	8,589	3,547	12,136
008	27,304	13,937	41,241
TOTAL	375,229	183,007	558,306

NOTE: VALUES ARE SQUARE FEET

MAP REFERENCES:

- "SITE PLAN WINDSOR MANUFACTURING, 169 KENNEDY ROAD, WINDSOR, CONNECTICUT" HRP ASSOCIATES, INC. 167 NEW BRITAIN AVENUE, PLAINVILLE, CT 06062. FIG. 1. MARCH 1993.
- "SITE PLAN (ATTACHMENT TO EMERGENCY RESPONSE PLAN)", WINDSOR DIVISION, BARNES GROUP, INC. 2-24-93.



SITE PLAN

STORMWATER POLLUTION PREVENTION PLAN

BARNES AEROSPACE

169 KENNEDY ROAD, WINDSOR, CONNECTICUT

SCALE 1"=50'

DRAWING NO. 042WH1312

DATE 04/01/2026

DRAWN BY A.C.L.

APPROVED BY G.F.A.

DATE 04/01/2026

NO. OF SHEETS 1

SHEET NO. 1

DESCRIPTION OF REVISION

REV. DATE

APPR.

STAMP

Loureiro

Loureiro Engineering Associates, Inc.
100 Main Street, Suite 200, Plainville, CT 06062
Phone: 860-747-6161 • Fax: 860-747-8822
An Employee Owned Company • www.loureiro.com
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PROJECT: 169 KENNEDY ROAD, WINDSOR, CONNECTICUT

DATE: 04/01/2026

SCALE: 1"=50'

DRAWING NO.: 042WH1312

DATE: 04/01/2026

DRAWN BY: A.C.L.

APPROVED BY: G.F.A.

DATE: 04/01/2026

NO. OF SHEETS: 1

SHEET NO.: 1

DESCRIPTION OF REVISION:

REV. DATE

APPR.

APPENDIX A

**National Pollutant Discharge Elimination System General Permit for the Discharge of
Stormwater Associated with Industrial Activities**

National Pollutant Discharge Elimination System General Permit for the Discharge of Stormwater Associated with Industrial Activities

At the time of the certification of this SWPPP, the GP is available at https://portal.ct.gov/-/media/deep/water_regulating_and_discharges/stormwater/industrial/2025-permit-documents/2025-industrial-stormwater-general-permit-part-1--2erc.pdf?rev=e07e4c0e8e9942cfb424954fe5bc89e5&hash=CFF6E87399495EA4981CB0C8949F43CD

A copy of the GP is also included in a separate document to be kept with this Plan. This copy of the GP only includes the sector-specific requirements for Sector AB.

APPENDIX B

General Permit Registration & NDDB Letter

Draft Comments and Best Management Practices

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
Yellow lampmussel	<i>Lampsilis cariosa</i>	<p><i>Habitat: Larger streams and rivers, typically found in sand and gravel where good current exists.</i></p> <p><i>Host Fish: white perch (Morone americana), and yellow perch (Perca flavescens). Potential species: banded killifish (Fundulus diaphanus), chain pickerel (Esox niger), white sucker (Catostomus commersonii), smallmouth bass (Micropterus dolomieu), largemouth bass (Micropterus salmoides) and striped bass** (Morone saxatilis).</i></p>	<p><i>Freshwater mussels are aquatic animals that play an important role in our environment. These sedentary organisms live in sediments on the bottom of streams and rivers and provide a service to all by filtering water and removing bacteria and phytoplankton. It is because they are filter-feeding animals that they are very susceptible to sediments and pollutants in the water in which they live. The greatest diversity of freshwater mussels in the world is found in Eastern North America. Freshwater mussels are one of the most endangered groups of animals with almost three-quarters of the native mussels in North America imperiled. The disappearance of freshwater mussels is a reliable indicator of chronic water pollution. The following considerations will help protect and benefit these species.</i></p> <ul style="list-style-type: none"> • <i>Adhere strictly to water quality standards at your project site.</i> • <i>Pay special attention and address specific monitoring targets for sediment, water temperature, copper, and ammonia (TAN).</i> • <i>Protect the 100ft buffer of waterways from additional impervious surface or additional discharge, including unfiltered stormwater.</i> • <i>Turf grass and impervious surface should be minimized in the surrounding watershed.</i> • <i>Reconnect waterways that are disconnected by perched, undersized, or shallow stream culverts.</i>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
		<p><i>https://portal.ct.gov/deep/water/watershed-management/low-impact-development-and-green-infrastructure</i></p>	<ul style="list-style-type: none"> • <i>Ensure precautions are taken to avoid direct kill of freshwater mussels during any instream construction or modification.</i> • <i>Employ precautions to prevent the introduction and spread of invasive plants and bivalves.</i> • <i>Take action to reduce non-point source pollution and educate the surrounding community about how to reduce non-point source pollution. More information can be found in our resources for Low Impact Development here:</i> <ul style="list-style-type: none"> o
Blueback herring	<i>Alosa aestivalis</i>	<p><i>Contact a DEEP Fisheries Biologist for more information. Do not contact NDDB with questions regarding fish species.</i></p> <p><i>https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Common_Forms/fisheriesconsultation</i></p>	<p><i>DEEP Fisheries Biologists review permit applications submitted to DEEP regulatory programs as well as other aquatic activities to determine whether projects might adversely affect listed species. You do not need to follow up with NDDB regarding fish protection. Please complete the DEEP Fisheries consultation form and submit to: Deep.inland.fisheries@ct.gov for your consultation.</i></p>
Tidewater mucket	<i>Leptodea ochracea</i>	<p><i>Habitat: Slow-moving sections of rivers and canals in a variety of substrates, including silt, sand, gravel, cobble, and occasionally clay. This species, more so than many other species in the Connecticut River, migrates deeper into the sediment in early autumn and becomes difficult to detect without excavation.</i></p>	<p><i>Freshwater mussels are aquatic animals that play an important role in our environment. These sedentary organisms live in sediments on the bottom of streams and rivers and provide a service to all by filtering water and removing bacteria and phytoplankton. It is because they are filter-feeding animals that they are very susceptible to sediments and pollutants in the water in which they live. The greatest diversity of freshwater mussels in the world is found in Eastern North America. Freshwater mussels are one of the most endangered groups of animals with almost three-quarters of the</i></p>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
			<p><i>native mussels in North America imperiled. The disappearance of freshwater mussels is a reliable indicator of chronic water pollution. The following considerations will help protect and benefit these species.</i></p> <ul style="list-style-type: none"> • <i>Adhere strictly to water quality standards at your project site.</i> • <i>Pay special attention and address specific monitoring targets for sediment, water temperature, copper, and ammonia (TAN).</i> • <i>Protect the 100ft buffer of waterways from additional impervious surface or additional discharge, including unfiltered stormwater.</i> • <i>Turf grass and impervious surface should be minimized in the surrounding watershed.</i> <ul style="list-style-type: none"> • <i>Reconnect waterways that are disconnected by perched, undersized, or shallow stream culverts.</i> • <i>Ensure precautions are taken to avoid direct kill of freshwater mussels during any instream construction or modification.</i> • <i>Employ precautions to prevent the introduction and spread of invasive plants and bivalves.</i> • <i>Take action to reduce non-point source pollution and educate the surrounding community about how to reduce non-point source pollution. More information can be found in our resources for Low Impact Development here:</i> <ul style="list-style-type: none"> ○ <p><i>https://portal.ct.gov/deep/water/watershed-management/low-impact-development-and-green-infrastructure</i></p>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
Eastern pondmussel	<i>Ligumia nasuta</i>	<p><i>This freshwater mussel inhabits a wide variety of habitats including small to large rivers and lakes in a variety of substrates, depths, and flow conditions.</i></p>	<p><i>Freshwater mussels are aquatic animals that play an important role in our environment. These sedentary organisms live in sediments on the bottom of streams and rivers and provide a service to all by filtering water and removing bacteria and phytoplankton. It is because they are filter-feeding animals that they are very susceptible to sediments and pollutants in the water in which they live. The greatest diversity of freshwater mussels in the world is found in Eastern North America. Freshwater mussels are one of the most endangered groups of animals with almost three-quarters of the native mussels in North America imperiled. The disappearance of freshwater mussels is a reliable indicator of chronic water pollution. The following considerations will help protect and benefit these species.</i></p> <ul style="list-style-type: none"> • <i>Adhere strictly to water quality standards at your project site.</i> • <i>Pay special attention and address specific monitoring targets for sediment, water temperature, copper, and ammonia (TAN).</i> • <i>Protect the 100ft buffer of waterways from additional impervious surface or additional discharge, including unfiltered stormwater.</i> • <i>Turf grass and impervious surface should be minimized in the surrounding watershed.</i> <ul style="list-style-type: none"> • <i>Reconnect waterways that are disconnected by perched, undersized, or shallow stream culverts.</i> • <i>Ensure precautions are taken to avoid direct kill of freshwater mussels during any instream construction or modification.</i>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
		<p data-bbox="1244 529 2682 565">https://portal.ct.gov/deep/water/watershed-management/low-impact-development-and-green-infrastructure</p>	<ul style="list-style-type: none"> <li data-bbox="1795 191 2542 256">• <i>Employ precautions to prevent the introduction and spread of invasive plants and bivalves.</i> <li data-bbox="1763 289 2575 461">• <i>Take action to reduce non-point source pollution and educate the surrounding community about how to reduce non-point source pollution. More information can be found in our resources for Low Impact Development here:</i> <ul style="list-style-type: none"> <li data-bbox="2161 500 2182 522">o <p data-bbox="1768 591 2569 873"><i>Should a chemical or hazardous substance spill/release occur, contact the CT DEEP Emergency Response Unit immediately at 860-424-3338 for spill response guidance. Additionally, the Wildlife Division would appreciate notification of any chemical/pollutant releases given the sensitivity of freshwater mussels in the area. Please contact Laura Saucier (laura.saucier@ct.gov or 860-424-3101) within 48 hours of any spill.</i></p> <p data-bbox="1800 906 2537 971"><i>Water quality targets for waterways that contain this species:</i></p> <ul style="list-style-type: none"> <li data-bbox="2096 1003 2236 1036">• <i>Turbidity</i> <ul style="list-style-type: none"> <li data-bbox="1774 1068 2564 1133">o <i>Turbidity should not increase 8 NTU over background levels</i> <li data-bbox="1994 1166 2338 1198">• <i>Suspended sediments</i> <ul style="list-style-type: none"> <li data-bbox="1774 1230 2564 1328">o <i>Maximum induced suspended sediments in any 24 hr period should be less than 25mg/L over background levels</i> <li data-bbox="1757 1360 2575 1425">o <i>Induced suspended sediments averaged over 30 day period should be less than 5mg/L over background levels</i>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
			<ul style="list-style-type: none"> • <i>Water temperature</i> <ul style="list-style-type: none"> o <i>Water temperature should not increase 1° C (~1.8°F)</i> • <i>Ammonia</i> <ul style="list-style-type: none"> • <i>To be protective of Freshwater Mussels, Ammonia levels should remain below targets outlined in the EPA Aquatic Life Criteria (https://www.epa.gov/wqc/aquatic-life-criteria-ammonia).</i> • <i>Or State standard:</i> <ul style="list-style-type: none"> o <i>Acute 1-hour average TAN should remain below 17mg/L (at pH 7, 20°C)</i> o <i>Chronic 30 day rolling average TAN should remain below 1.9mg/L (at pH 7, 20°C)</i> • <i>Chlorine</i> <ul style="list-style-type: none"> o <i>Maximum level over 24 hr period should be less than 19 microg/L</i> o <i>Chronic continuous concentration (4 day average) should be less than 11 microg/L</i> • <i>Herbicides</i> <ul style="list-style-type: none"> o <i>Copper containing products are toxic to freshwater mussels and snails. Ensure that for waterways that serve as habitat for these animals: the 24hr average and the 4 day average concentrations of copper do not respectively exceed the acute and chronic criteria concentrations calculated by the Biotic Ligand Model (BLM).</i> <p style="text-align: center;"># <i>State of CT Water Quality targets:</i></p> <ul style="list-style-type: none"> • <i>Acute: 14.3 micrograms/L</i>

Common Name	Scientific Name	General Ecology	Impact Avoidance Measures
			<ul style="list-style-type: none"> • <i>Chronic: 4.8 micrograms/L</i> o <i>All herbicides directed at aquatic vegetation should be applied during low-flow times of the year to minimize the potential for flushing of these chemicals downstream.</i> # <i>If pesticides cannot be administered during low-flow times of year because treatment of the pest species requires different timing:</i> <ul style="list-style-type: none"> • <i>Delineate an appropriate set back buffer of the water outlet where no pesticide will be applied.</i> • <i>Sandbag the outlet to contain the water for the appropriate time period to eliminate flushing downstream.</i>

APPENDIX C

Certification of Non-Stormwater Discharges Supporting Information

Certification of Non-Stormwater Discharges Supporting Information

A site visit was conducted by Loureiro on October 1, 2024, during dry weather conditions. All stormwater outfalls were visually assessed for discharges. The only non-stormwater discharge observed was in SWD-005, which was confirmed by the Site to be HVAC condensate. Uncontaminated HVAC condensate is an allowable non-stormwater discharge.

APPENDIX D

Log of Significant Spills and Leaks (≥ 5 gallons)

Log of Significant Spills and Leaks (≥ 5 gallons)

Date and Time	Location	Description				Response Procedures	Corrective Measures Taken
		Type of Material	Quantity	Source	Reason		

APPENDIX E

Spill Response Procedures

9. EMERGENCY RESPONSE

9.1 General Spill Response Procedures

In order to minimize hazards to the environment caused by any release of oil, Barnes management has established emergency response procedures. Immediate actions and notifications to be employed in the event of an emergency are provided in the following sections. Employees are only authorized to respond to and cleanup releases of oil which are incidental in nature as defined by the Occupational Safety and Health Administration (OSHA) in 29 CFR 1910.120.

9.2 Discovery of Release

Any person discovering a release of oil products to the soil or surface water should immediately notify the Primary Emergency Coordinator. If the Primary Emergency Coordinator is not available, then an Alternate Emergency Coordinator and/or other responsible personnel should be notified.

9.3 Recovery Clean-Up and Disposal

Certain procedures apply to the responses required for any spill. These include timely and proper notifications and appropriate immediate actions by the initial observer of the incident to minimize potential adverse effects. The primary goal of the initial response will be to protect human health and safety followed by protection of the environment. Secondary goals of emergency response will be to identify, contain, and/or dispose of wastes in accordance with the appropriate state and federal regulations. Consequently, the initial observer will not take undue risks with his or her own personal safety or endanger others in any attempts to limit releases to the environment. Decisions regarding any responses beyond the initial efforts by the observer will be made after the Primary/Alternate Emergency Coordinator identifies and assesses the hazards.

9.3.1 Clean-up of Spill Area

Surfaces which are contaminated by oil from a spill or release shall be cleaned by using an appropriate cleaning agent. All materials used in the clean-up effort must be containerized and managed for proper disposal. In the event that porous material such as wood, concrete or soil becomes contaminated, special consideration should be taken to minimize the risk of oil pollution migrating to groundwater. All tools and equipment used in clean-up and during a spill

response should be properly decontaminated. Spill kits are available throughout the facility for immediate use.

9.3.2 **Recovered Spill Material**

All spill clean-up material shall be recovered in appropriate containers which are compatible with the volume and type of material to be contained. Appropriate personal protective equipment and clean-up procedures are typically delineated in a Safety Data Sheet (SDS) for each type of material which may be encountered. Care should be taken to minimize the generation of additional and unnecessary waste volumes. Combining incompatible material, such as an oxidizer to oil, can cause potentially dangerous chemical and or physical reactions and/or severely limit disposal options and raise disposal costs. Compatibility information can be found on a SDS.

Once a container is filled it shall be secured and appropriately labeled identifying container contents, the fill date of the container and the facility name and street location. If the material meets the definition of a hazardous waste, the container must be labeled in accordance with Connecticut Hazardous Waste Regulations found in 22a-449 of the Regulations of the Connecticut State Agencies (RCSA).

9.3.3 **Disposal of Waste Materials**

Waste material generated during clean-up activities must be characterized in accordance with Connecticut Hazardous Waste Regulations found in RCSA 22a-449. Material that meets the definition of a hazardous waste in Connecticut must be managed and disposed of as a hazardous waste. Representative sampling and analysis may be required to complete the necessary determination of the waste. Material subject to RCSA 22a-449 must be transported by a licensed Hazardous Waste Transporter and in accordance with DOT regulations. Disposal of all wastes as a result of oil spills must be coordinated with the primary emergency coordinator.

The following general guidelines should be followed when responding to a spill:

- Always ensure that proper personal protection measures are taken including wearing protective clothing, not smoking, etc.
- Stop the leak or spill by taking the following actions as appropriate.
- Shut off valves.
- Discontinue tank filling to stop tank overflow.
- Transfer liquid from a leaking tank to another tank or containers.

- Move containers into a containment area.
- Turn containers upright.
- Empty leaking containers.
- Use sealing material to plug holes in tanks or containers.
- Contain the leak or spill using the following as appropriate:
 - Absorbent pads and pigs.
 - Use of earth moving equipment to create dikes.
 - Speedi-Dri[®] absorbent (or equivalent).
 - Pumps.
- Attempt to prevent materials from entering drains, conduits, or sewers which lead to surface waters.
- Cleanup the spill and contaminated soil, and handle/dispose of in accordance with state and federal regulations. Contract services of a licensed oil spill cleanup contractor or an environmental engineering consultant if guidance is required.
- Small amounts of oil on a water surface can be removed with an oil absorbent sheet or skimming device. Recovered oil should then be removed using a skimming pump. Small amounts of oil on concrete or asphalt surface can be removed by spreading Speedi-Dri[®] or oil absorbent pads.
- The cleanup of oils spilled on soil surfaces may require special arrangements for excavation of contaminated soil and/or other remedial actions. Careful planning and/or consultation with the regulatory agencies will be required under these circumstances.

9.4 **Spill Control Equipment**

Emergency spill control kits are located in the shipping dock in Building 1 and the oil storage area in Building 2. The locations of the spill response kits are depicted on Drawing 1. Mobile response spill kits are located throughout Buildings 1 and 2. Also, rubber mats used to cover catch basin in an event of a spill are hung on the walls of Building 1 and 2. Equipment is available in each kit as follows:

- Speedi-Dri[®] (Trusorb F).
- Absorbent Pads (Pigs[®]).

- Shovel and pan for cleanup.
- Protective clothing including goggles, gloves, boots, aprons

A spare 55gal drum is located in the Controlled Hazardous Waste Storage area for the collection of absorbed materials. The portable spill kits can also be used to transport the used absorbent materials to the Controlled Hazardous Waste Storage Area.

In addition to the kit materials described above, tools found in the facility Maintenance Department may be used to plug a leak or to fix faulty equipment contributing to the release of oil products. Emergency coordinators are responsible for ensuring that spill control equipment is maintained.

9.5 **Remediation and Corrective Action**

Barnes is responsible for ensuring that the appropriate corrective measures are implemented to minimize the potential for reoccurrence. Examples of corrective action include purchasing upgrading or reengineering equipment, installation of secondary containment, and increased detail and/or frequency of SPCC training. Incidents which require continued remediation will be the responsibility of the HSE Manager or his/her delegate. Corrective action measures may result in a material change to the risk of a discharge as defined in 40 CFR Part 112. This material change may require recertification of the SPCC Plan. Barnes is responsible for determining the requirement to recertify the Plan.

APPENDIX F

Training Records

APPENDIX G

Monthly Inspection Form

BARNES AEROSPACE
Windsor, Connecticut
Monthly Inspection Form

Date, Time: _____

Weather Conditions*: _____

Inspector's Name(s). Note which Inspector(s) are Pollution Prevention Team Members:

Inspector's Signature(s):

Check the following items that were inspected:

- | | |
|--|----------------------------------|
| <input type="checkbox"/> Paved areas | <input type="checkbox"/> SWD-001 |
| <input type="checkbox"/> HVAC units | <input type="checkbox"/> SWD-002 |
| <input type="checkbox"/> Process vents (metal machining & finishing) | <input type="checkbox"/> SWD-003 |
| <input type="checkbox"/> HVAC cleaning chemicals on roof | <input type="checkbox"/> SWD-004 |
| <input type="checkbox"/> Cardboard dumpster | <input type="checkbox"/> SWD-005 |
| <input type="checkbox"/> Trash compactor | <input type="checkbox"/> SWD-006 |
| <input type="checkbox"/> Dust collectors | |
| <input type="checkbox"/> Transformers | |
| <input type="checkbox"/> Chemical/oil storage shed | |
| <input type="checkbox"/> Loading docks | |

*At least one monthly inspection per calendar year must be performed while stormwater discharge is occurring.

Did you observe any of the following (check Yes or No)

Yes No

Industrial materials, residue, or trash that may have or could come into contact with stormwater.		
Leaks or spills from industrial equipment, drums, tanks, and other containers.		
Offsite tracking of industrial or waste materials, or sediment, where vehicles enter or exit the site.		
Tracking/blowing of materials from areas of no exposure to exposed areas.		
Soil erosion; channel and streambank erosion and scour in the immediate vicinity of discharge points.		
Non-authorized non-stormwater discharges (e.g. vehicle wash-waters, boiler blowdown, sanitary wastes).		
Control measures needing replacement, maintenance, or repair.		

If you answered "Yes" to any of the above, provide comments below.

APPENDIX H

Semiannual Comprehensive Compliance Evaluation Form

BARNES AEROSPACE
Windsor, Connecticut
Semi-Annual Comprehensive Compliance Evaluation Form

Instructions: This Semi-Annual Comprehensive Compliance Evaluation Form must be completed by, or along with, a Pollution Prevention Team (PPT) Member. If remedial action(s) are required, the issue(s) must also be noted in the Remedial Action Log. This Form should be filed in Appendix H of the Stormwater Pollution Prevention Plan (SWPPP).

While completing this form, please review, at minimum, the following items:

- SWPPP including, but not limited to, items such as best management practices (BMPs), control measures, spill response equipment, etc.;
- Site Map;
- Monthly Inspection Forms;
- Quarterly Visual Assessment Reports;
- Discharge Monitoring Reports (DMRs); and,
- Preventive Maintenance (PM) Records.

Name, Title, and Signature of Inspector: _____

Date, Time: _____

Weather Conditions: _____

Name, Title, and Signature of PPT Member: _____

Date of the Last Semi-Annual Comprehensive Compliance Evaluation: _____

Documentation Review		
Evaluation Criteria	Responses, Observations, and/or Comments	Is Remedial Action Required? (Yes/No)
Are the names and telephone numbers of the PPT Members listed in Section 3 of the SWPPP up-to-date and accurate?		
Have there been any changes to the outside of the facility since the last semi-annual evaluation that could affect stormwater? Review Table 4-2 of the SWPPP to verify that the potential pollutant sources listed are accurate compared to current conditions. <ul style="list-style-type: none"> • Have any new potential pollutant sources been added or removed? • If sources have been added, do the new sources add non-stormwater discharges to stormwater (e.g. vehicle wash-waters, boiler blowdown, sanitary wastes)? • Does the Site Plan need to be updated as a result of the aforementioned update(s)? 		
Were there any spills or leaks since the last semi-annual evaluation that impacted stormwater? <ul style="list-style-type: none"> • If so, were the spills or leaks documented in Appendix D? 		

BARNES AEROSPACE
Windsor, Connecticut
Semi-Annual Comprehensive Compliance Evaluation Form

Documentation Review		
Evaluation Criteria	Responses, Observations, and/or Comments	Is Remedial Action Required? (Yes/No)
<p>Have the PM activities outlined in the SWPPP (i.e., catch basin cleaning, equipment maintenance, sweeping, etc.) been performed at the specified frequencies?</p> <ul style="list-style-type: none"> • Were maintenance records retained in the location specified in the SWPPP? 		
<p>Review the Monthly Inspection Forms that were completed since the date of the last Semi-Annual Comprehensive Compliance Evaluation.</p> <ul style="list-style-type: none"> • Are the completed Monthly Inspection Forms filed in Appendix G of the SWPPP? • Were any unsatisfactory conditions corrected and was documentation retained to demonstrate this? 		
<p>Were Quarterly Visual Assessment Forms completed during each quarter since the date of the last Semi-Annual Comprehensive Compliance Evaluation?</p> <ul style="list-style-type: none"> • Are the completed Quarterly Visual Assessment Forms filed in Appendix K of the SWPPP? • Were any unsatisfactory conditions corrected and was documentation retained to demonstrate this? 		
<p>Were semiannual stormwater samples collected during the last monitoring period?</p> <ul style="list-style-type: none"> • If so, were monitoring results submitted to the Connecticut Department of Energy and Environmental Protection (CT DEEP) within 90 days of sampling? • Were there any benchmark exceedances? • If so, were corrective actions taken and was documentation retained to demonstrate this? 		
<p>Are there any issues that were identified in the previous Semi-Annual Comprehensive Compliance Evaluation that have not been addressed?</p>		
<p>Review stormwater training records.</p> <ul style="list-style-type: none"> • Has annual training been performed? <ul style="list-style-type: none"> ○ If yes, document the date(s). • Have newly hired employees been provided with stormwater training within 90 days of beginning a position that involves activities that could potentially affect stormwater? 		

BARNES AEROSPACE
Windsor, Connecticut
Semi-Annual Comprehensive Compliance Evaluation Form

Site Inspection		
Evaluation Criteria	Responses, Observations, and Comments	Is Remedial Action Required? (Yes/No)
<p><i>Interior Facility Walk-Through:</i> Inspect interior material and chemical storage areas including raw, intermediate, final, and waste materials that have the potential to be released outside of the confines of the facility and come in contact with stormwater.</p>		
<p><i>Roof Inspection:</i> Inspect the roof for signs of contamination, discoloration, etc. as well as sediment build-up in gutters, roof drains, downspouts, etc.</p>		
<p>Make a visual inspection of material handling areas, and material storage areas, and other potential sources of pollution identified in the SWPPP for evidence of, or the potential for, pollutants entering the stormwater drainage system.</p>		
<p>Determine whether structural stormwater management measures, erosion control measures, control measures and other structural pollution prevention measures identified in the SWPPP are implemented and maintained properly.</p>		
<p>Inspect all outfalls. Describe any discharges occurring at the time of the inspection.</p>		

BARNES AEROSPACE
Windsor, Connecticut
Semi-Annual Comprehensive Compliance Evaluation Form

Remedial Action Log

Instructions:

After completion of the Semi-Annual Comprehensive Compliance Evaluation Form, if any unsatisfactory condition(s) were observed, they shall be documented on this Remedial Action Log along with the corresponding remedial actions. This Log should be filed in Appendix H of the Stormwater Pollution Prevention Plan (SWPPP).

Date of Evaluation	Category	Description of Unsatisfactory Condition(s)	Remedial Action(s)		
			Description	Completion Date	Completed By

APPENDIX I

Summary of Monitoring During Previous Permit Term

Summary of Monitoring During Previous Permit Term

Semiannual benchmark monitoring was completed prior to the beginning of the previous permit term (October 2021).

APPENDIX J

Deviations from Monitoring Schedule

APPENDIX K

Quarterly Visual Assessment Form

BARNES AEROSPACE
Windsor, Connecticut
Sampling Period: Quarter , Sampling Year

Quarterly Visual Assessment Form

Instructions:

- A visual sample can only be collected during a storm event that occurs at least 72 hours after any previous storm events generating a discharge at the sampling location.
- A sample must be collected within the first 30 minutes of discharge at the sampling location. If it was not, please indicate why: _____
- The visual assessment must be made in a clean, colorless plastic or glass container and conducted in a well-lit area.
- If unsatisfactory water quality characteristics are observed, the cause(s) of contamination must be investigated and corrected. This information should be documented on the Remedial Action Log.

Sampling Date: _____ Stormwater Source (Rain/Snowmelt): _____

Discharge Start Time (am/pm): _____ Sampling Time (am/pm): _____

Sampling Location: _____

Sampler's Name, Title, Signature: _____

Water Quality Characteristics	Observations	Satisfactory (No further action required)	Unsatisfactory (Remedial action needed)
Color			
Odor			
Clarity			
Floating Solids			
Settled Solids			
Suspended Solids			
Foam			
Oil Sheen			
Other Obvious Indicators of Stormwater Pollution			

BARNES AEROSPACE

Windsor, Connecticut

Sampling Period: Quarter , Sampling Year

Remedial Action Log

Instructions:

If unsatisfactory water quality characteristics are observed, the probable sources of stormwater contamination must be noted below along with documentation of the completed remedial actions. This Log should be filed in Appendix K of the Stormwater Pollution Prevention Plan (SWPPP).

Sampling Date	Unsatisfactory Water Quality Characteristics Observed	Probable Sources of Stormwater Contamination	Completed Remedial Actions		
			Description	Completion Date	Completed By

APPENDIX L

Annual Report Template

APPENDIX M

Semiannual Monitoring Records

APPENDIX N

Corrective Action Measure Documentation

Appendix G

Corrective Action Measure Requirements & Waiver Request

Purpose:

A qualified professional, as defined in the general permit, trained and designated by the permittee, will complete this form as soon as they are made aware of a condition triggering a Corrective Action Measure (CAM). The permittee must keep this form and any related documentation in the Stormwater Pollution Prevention Plan.

Violation of an Effluent Limitations Guideline:

Violation of an Effluent Limit Guideline (ELG) requires immediate reporting in accordance with the permit terms and conditions. The permittee may attach this form when completing the online notification of noncompliance. See Sections 4.6 and 4.7 of the general permit for further reporting requirements. The Noncompliance Reporting portal is located at:

<https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements>

Request for an Extension or Waiver:

The permittee may also use this form to request an extension to timelines for implementing Corrective Action Measure Level 1, 2, or 3 as needed, or to request a Waiver from further Corrective Action Measures and/or monitoring. A request, and copy of the this form along with supporting documentation may be submitted to DEEP at Stormwater Staff DEEP.Stormwaterindustrial@ct.gov. Retain a copy of all requests and communication in the SWPPP.

Appendix G

Corrective Action Measure Requirements & Waiver Request

Section 1. Corrective Action Measure Documentation Submission Type	
General Corrective Action Measure Documentation	<input type="checkbox"/>
Violation of an Effluent Limitations Guideline	<input type="checkbox"/>
Unauthorized spill, leak, release, or discharge	<input type="checkbox"/>
Request for an Extension to CAM Timelines	<input type="checkbox"/>
Request for a Waiver from Further Corrective Action Measures and/or Monitoring ²	<input type="checkbox"/>

Section 2. Corrective Action Measure General Information		
Permittee Information	Permittee Name	
	Site Name	
	Site Address	
	Site City/State/Zip	
	Permit Number (CTR05)	
Site Contact (Person Filling out this Form)	Name (first & last)	
	Title	
	Email Address	
	Phone Number	
Date/ Time/ Location	Location of Incident on Site	
	Time of Condition Started	
	Date of Condition Started	

Appendix G

Corrective Action Measure Requirements & Waiver Request

Section 3. Corrective Action Triggering Condition Information		
Triggering Condition	Description	Condition Occurring? (Check Box)
4 Event Average Exceeds the Benchmark Threshold (or Mathematical Equivalent)	A discharge exceeds an applicable benchmark threshold after 4 consecutive semi-annual measurements	<input type="checkbox"/>
Effluent Limit Exceedance	A discharge exceeds a numeric effluent limitation guideline	<input type="checkbox"/>
Unauthorized release or discharge	Spill, leak, release, or discharge of non-stormwater not authorized by this permit or another permit	<input type="checkbox"/>
Inconsistency with an Applicable Total Maximum Daily Load and Wasteload Allocation	A discharge is inconsistent with the assumptions and requirements of an Applicable Total Maximum Daily Load and its Wasteload Allocation	<input type="checkbox"/>
Control Measure Not Stringent Enough to Meet Water Quality Standards	A required control measure is not stringent enough for a stormwater discharge to be controlled as necessary such that the receiving water will meet applicable water quality standards	<input type="checkbox"/>
Control Measure Never Designed, Installed, Implemented, or Maintained	A required control measure was never designed, installed, or implemented	<input type="checkbox"/>
Change in Design, Operation, or Maintenance at a Facility	Construction or a change in the design, operation, or maintenance at a facility that significantly changes the nature or increases the quantity of pollutants discharged	<input type="checkbox"/>
Visual Assessment Shows Evidence of Pollution	Color, odor, floating solids, settled solids, suspended solids, or foam observed in discharge water	<input type="checkbox"/>
Other Corrective Actions (as Required by the Commissioner)	The Commissioner may utilize enforcement discretion to require additional corrective actions in response to permit violations	<input type="checkbox"/>

Appendix G
Corrective Action Measure Requirements & Waiver Request

Please provide a description of the event or the request being made to the Commissioner:

Appendix G
Corrective Action Measure Requirements & Waiver Request

Section 4. Corrective Action Measure		
Select the appropriate level and describe the actions taken		
<input type="checkbox"/> Corrective Action Level 1	Immediate Actions (Within 1-2 Days)	
	Subsequent Actions (Within 14-60 Days)	
	Extension (Greater than 60 Days)	
	Follow-up sample, if applicable (include date, discharge location, and parameter)	
<input type="checkbox"/> Corrective Action Level 2	Immediate Actions (Within 1-2 Days)	
	Subsequent Actions (Within 14-60 Days)	
	Extension (Greater than 60 Days)	
	Follow-up sample, if applicable (include date, discharge location, and parameter)	
<input type="checkbox"/> Corrective Action Level 3	Immediate Actions (Within 1-2 Days)	
	Subsequent Actions (Within 14-60 Days)	
	Extension (Greater than 60 Days)	
	Follow-up sample, if applicable (include date, discharge location, and parameter)	

Appendix G

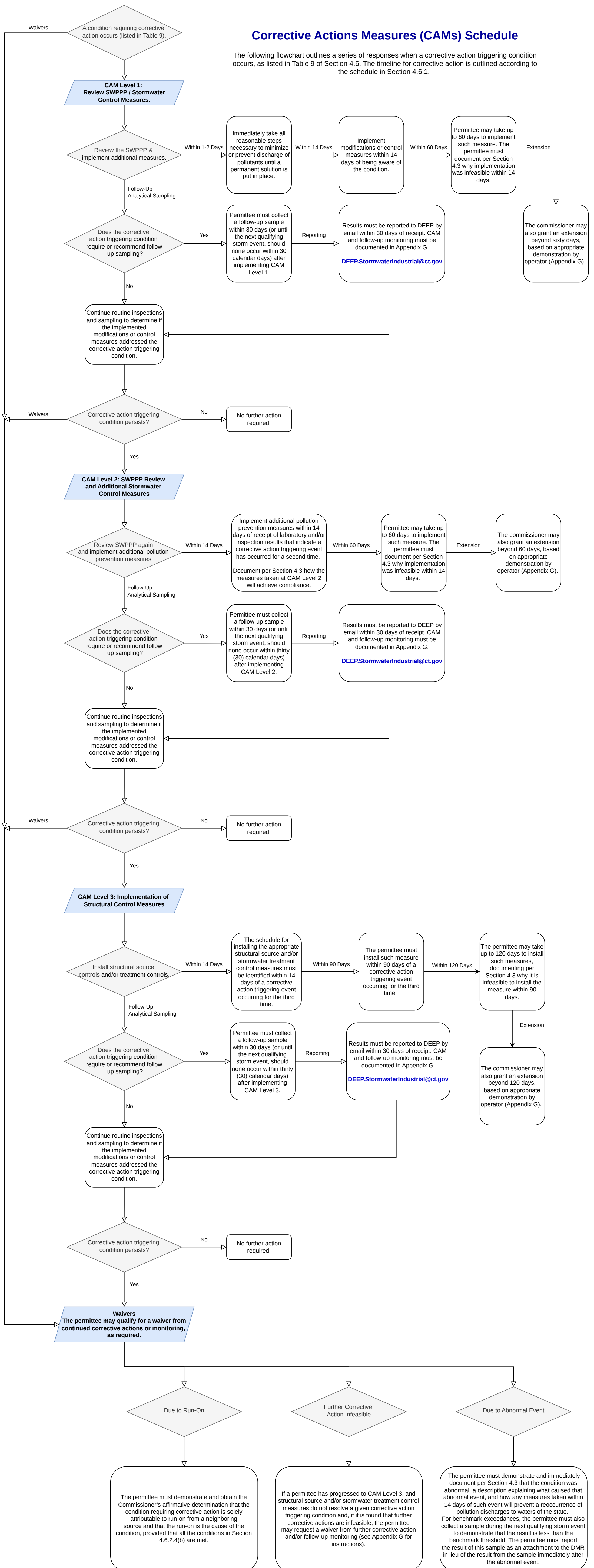
Corrective Action Measure Requirements & Waiver Request

Section 5. Additional Information (check all that apply)

<input type="checkbox"/> Follow-up photographs	<p>Please describe any photographs taken and attach them to the end of this document.</p>												
<input type="checkbox"/> Request for an extension	<p>Please describe the request for an extension for CAM implementation. Please see the permit for criteria applicable to exemptions.</p>												
<input type="checkbox"/> Request for a waiver	<p>Please describe the request for a waiver from further corrective action measures and/ or monitoring. Please see the permit for criteria applicable to waivers.</p>												
Certification	<p>I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate, and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the Regs. Conn. State Agencies, pursuant to section 53a-157b of the Regs. Conn. State Agencies, and in accordance with any other applicable statute.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 25%; padding: 5px;">Certifier Name:</td> <td style="width: 30%; padding: 5px;">Click or tap here to enter text.</td> <td style="width: 25%; padding: 5px;">Certifier Title:</td> <td style="width: 20%; padding: 5px;">Click or tap here to enter text.</td> </tr> <tr> <td style="padding: 5px;">Certifier Signature:</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">Date:</td> <td style="padding: 5px;">Click or tap here to enter text.</td> </tr> <tr> <td style="padding: 5px;">Site/Facility Name and Address:</td> <td style="padding: 5px;">Click or tap here to enter text.</td> <td style="padding: 5px;">General Permit No.:</td> <td style="padding: 5px;">Click or tap here to enter text.</td> </tr> </table>	Certifier Name:	Click or tap here to enter text.	Certifier Title:	Click or tap here to enter text.	Certifier Signature:		Date:	Click or tap here to enter text.	Site/Facility Name and Address:	Click or tap here to enter text.	General Permit No.:	Click or tap here to enter text.
Certifier Name:	Click or tap here to enter text.	Certifier Title:	Click or tap here to enter text.										
Certifier Signature:		Date:	Click or tap here to enter text.										
Site/Facility Name and Address:	Click or tap here to enter text.	General Permit No.:	Click or tap here to enter text.										

Corrective Actions Measures (CAMs) Schedule


The following flowchart outlines a series of responses when a corrective action triggering condition occurs, as listed in Table 9 of Section 4.6. The timeline for corrective action is outlined according to the schedule in Section 4.6.1.



APPENDIX O

SWPPP Revision Log

SWPPP Revision Log

Amendment Number	Description of the Amendment	Recertification Required?*(Yes/No)	Date of Amendment	Amendment Prepared by [Name(s) and Title(s)]	Signature(s)
0	Complete reissuance of the SWPPP in accordance with the GP issued on November 1, 2025.	Yes	March 2026	Jared Shapiro	
1					
2					
3					
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* If significant changes are made to the site or to the SWPPP in accordance with Section 4.3 of the GP, the SWPPP must be re-certified in accordance with Section 4.3.2.9 of the GP.