pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Office
NPDES PERMITTING DIVISION

NPDES PERMIT FACT SHEET PESTICIDES

Application Type	**Renewal**	Application No.	**PA0270792**
Facility Type	**Pesticides**	APS ID	**1010214**
Permit Type	**Individual**	Authorization ID	**1303374**

Applicant and Facility Information

Applicant Name	**Penndot Hwy Admin**	Facility Name	**Statewide Highway and Maintenance Facilities Row Weeds Control**
Applicant Address	Commonwealth Keystone Building 400 North Street, 6th Floor Harrisburg, PA 17120	Facility Address	Commonwealth Keystone Building 400 North Street, 6th Floor Harrisburg, PA 17120
Applicant Contact	Jonathan Fleming	Facility Contact	Jonathan Fleming
Applicant Phone	(717) 772-1771	Facility Phone	(717) 772-1771
Client ID	315661	Site ID	787825
SIC Code	4959	Municipality	Harrisburg City
SIC Description	Trans. & Utilities - Sanitary Servics, Nec	County	Dauphin
Date Application Received	January 28, 2020	WQM Required	No
Date Application Accepted	February 4, 2020	EPA Waived	Yes

Purpose of Application: HERBICIDE APPLICATION WITHIN STATE ROW STATEWIDE.

Internal Review and Recommendations

The Pennsylvania Department of Transportation (PennDOT), Highway Administration, Bureau of Maintenance and Operations, Maintenance Technical Leadership Division (MTLD) has applied on January 31, 2020 for the renewal of an individual NPDES Permit for Discharges from the Application of Pesticides. The use of pesticides within state Rights of Way throughout the Commonwealth is managed by the MTLD, whose office is located in the Commonwealth Keystone Building at the address above. This permit authorizes PennDOT to use pesticides to control a variety of weeds and vegetation in and along state Rights of Way. The application of such pesticides is necessary for public safety and to maintain a roadway free of obstructing vegetation. A Pesticides Discharge Management Plan (PDMP) was submitted with the application and includes the required elements listed in the instructions for the Individual Pesticides permit. In the PDMP, PennDOT states that the spraying of herbicide chemicals typically accounts for no more than 25% of the total vegetation management program, which also includes mowing, manual trimming, and removal of trees. The primary target species include “pioneer” plants such as thistles and sumac, as well as noxious weeds such as Canadian thistle, giant hogweed and poison ivy.

To meet the requirements of the PNDI Environmental Review, PennDOT provided copies of correspondence sent to the Pennsylvania Game Commission, Department of Conservation and Natural Resources, Fish and Boat Commission, and the U.S. Fish and Wildlife Service regarding their permit renewal application. DCNR responded with concerns regarding the protection of pollinator species in treatment areas. PennDOT provided copies of their Highway Maintenance Manual and the Voluntary Prelisting Pollinator Conservation Program, which provides for conservation projects to offset affects to species that are likely to become protected under the Endangered Species Act in the future. No further agency responses were received by the Permittee.

A query for any open violations was completed for Client ID# 315661 and returned no results.

Approve	Deny	Signatures	Date
		/s/ Zachary Steckler, EIT / Project Manager	June 9, 2020
		/s/ Sean M Furjanic, PE / Division of NPDES Permitting	June 9, 2020

Internal Review and Recommendations

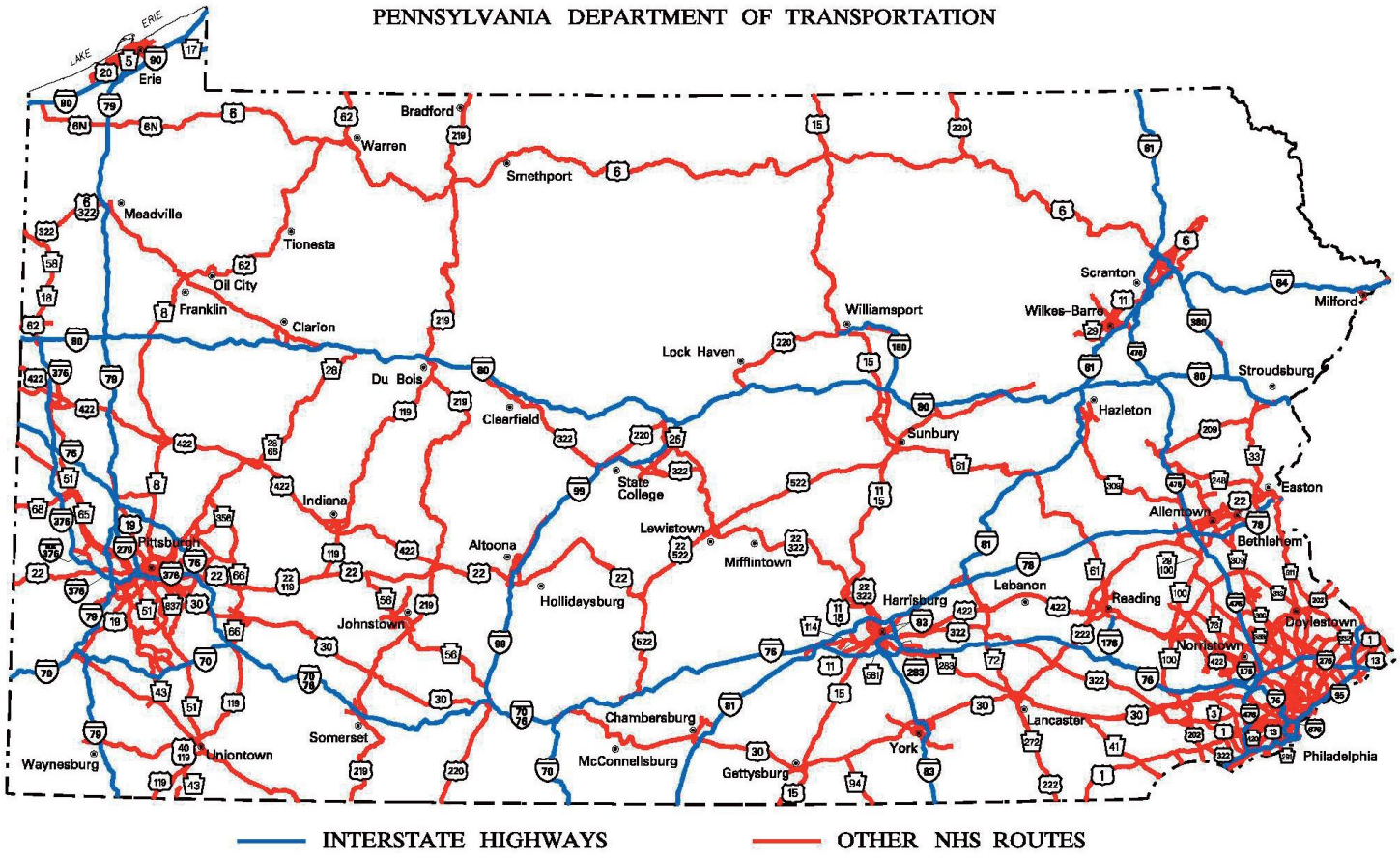
Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Proposed Treatment Areas, Waterbodies, and Pesticides

Since the MTLD is tasked with the maintenance of roadside vegetation across the entire Commonwealth and is also a Commonwealth agency, it is subjected to zero thresholds and required to obtain coverage under an NPDES permit regardless of annual treatment area size.

PennDOT's Central Headquarters are in Harrisburg and 11 engineering districts, and it has facilities in all 67 counties.



The MTLD Vegetation Management program comes under Highway Administration and is responsible for vegetation (weeds) controls along the roadways and its Rights of Way.

The state is divided into 11 engineering districts, and each district has responsibility for the state highways in its respective region. Roadside vegetation management is intended to provide safety, utility, economy and aesthetic value to the roadside area for both residents and visitors to the Commonwealth. Utility is provided by stabilizing roadside soils and preventing erosion and by growing and encouraging desirable vegetation in place of undesirable and future problem vegetation.

Internal Review and Recommendations

Economy is provided by the selection and propagation of desirable vegetation which needs little mowing or fertilization, such as low maintenance grasses or other types of vegetation which can withstand roadside environmental contaminants such as salt, ozone, etc. Aesthetics are provided by green and well maintained turf, Wildflowers, the propagation of native plants (Mt. Laurel, Rhododendron, Dogwood, etc), the screening of department facilities and through the planting of trees and shrubs.

The division follows its Publication 23 (Maintenance Manual) Chapter 13 (Roadside Management) in maintaining the clear and obstruction free travel way throughout the Commonwealth. Roadside management activities and responsibilities involve vegetation establishment and maintenance within the highway right-of-way, safety rest areas, parking areas, scenic views and roadside litter pickup/ disposals. Safety rest areas, picnic areas and scenic views provide the motoring public with facilities designed and managed to increase safety and provide areas from which to view the state's natural beauty.

Detailed objectives for vegetation management are provided in Chapter 13. These are to identify the various methods by which roadside vegetation successional development can be managed to accomplish the purposes of the activities mentioned above. Methods available can be broadly classified as biological/cultural, chemical and mechanical/manual. This is collectively identified as an Integrated Vegetation Management (IVM) program. The major actions taken to control roadside vegetation as identified in Chapter 13 are:

1. Mowing;
2. Herbicide vegetation control; and
3. Mechanical and manual vegetation control (trimming and removal activities)

Procedural details with restrictions/limitations due to safety concerns (such as no mowing on surfaces steeper than 3:1) are also specified in Section 13.3 (Mowing), 13.4 (Herbicide vegetation control, and 13.5 (Tree Trimming, Selective Thinning and Removal, Mechanically and Manually). As stated in PennDOT' s documents PennDOT indicates that herbicide spraying accounts for no more than 25% of the total vegetation management program and is based on legal, moral, administrative and financial dictates.

The certified applicators contracted/hired by MTLD of PennDOT use vehicles with mounted sprayers, hand sprayers and other mechanisms to target vegetation (weeds) to minimize pesticides requirements and optimize controls. In 2020, the program proposes to use a variety of pesticides as provided in the following table titled "PennDOT Herbicide List (2020) – STATEWIDE," see Attachment A.

Herbicides with SAP Material Description are procured though the current or past Department of General Services (DGS) Pesticides Contracts. The number in the SAP Material Description after the word "HERBICIDES" represents the Pennsylvania Commercial Item Description (PCID). PennDOT personnel and contractors use herbicide products that meet the following PCID specifications: 1091 (Growth Retardants), 1092 (Aquatic Herbicides), 1093 (Non-selective Herbicides), and 1094 (Weed and Brush Control). Full specifications for each PCID are available in Attachment B.

Anti-Degradation Analysis

PennDOT's MTLD has submitted an anti-degradation analysis that pertains to all HQ (High Quality) and EV (Exceptional Value) watersheds in which their treatment areas may be located. Due to the statewide and as-needed nature of PennDOT's Integrated Vegetation Management program, the application does not list specific affected surface waters. The module adequately addresses the consideration of non-discharge alternatives and the minimization of toxic discharges. EPA has previously evaluated the registered pesticide(s) in accordance with FIFRA for usage as aquatic or non-aquatic pesticides, taking into account human health and ecological risk assessment, and determined that usage following the most recent pesticide label was protective. Therefore, the requirements of §93.4a and §93.4c(b)(1)(i) have been met. The permit will contain a Part C condition stating to avoid spraying of non-aquatic pesticides directly over any surface water by switching off the instrumentation/equipment when the applicator comes in close proximity to any Waters of the Commonwealth.

Recommendation

PennDOT has applied for coverage under an NPDES Individual Pesticides discharge permit for the use of pesticides to control roadside vegetation (weeds). Chapter 13 of PennDOT Publication 23 has detailed methodologies to control such vegetation. Based on a review of the application and supporting documents, it is recommended that a draft permit be issued. Upon final issuance of the permit PennDOT will have authorization to use the pesticides at the maximum usage rates listed in the permit application (see Attachment A). A request for approval will be necessary under the following circumstances:

Internal Review and Recommendations

- A change in the pesticide use pattern for an authorized treatment area;
- A change in the pesticide (active ingredient) that will be used for a treatment area; and
- An increase in the total amount (dosage) of pesticide that will be used in a treatment area.

A Part C condition will be included in the permit to outline this requirement. In addition, the condition outlines the materials that must be submitted as a part of the request for approval:

1. The permittee shall submit requests at least 30 days in advance of anticipated changes. Requests may also be submitted as a part of the Annual Report.

2. All requests must include the following:

   a. Pesticide application method

   b. Pesticide use pattern (Mosquito and Other Flying Insect Pest Control, Weeds and Algae Pest Control, Weeds and Algae Pest Control, Animal Pest Control, Forest Canopy Pest Control)

   c. Area or length of the treatment area

   d. Treatment frequency

   e. Latitude and longitude of the treatment area (at the geographic center)

   f. A list of all surface waters in the treatment area and their designated or existing uses

   g. Application type (General, Direct, Water's Edge)

   h. Product label

3. PNDI Results shall be submitted where a new pesticide(s) or an increased amount of a previously approved pesticide(s) will be used in a treatment area in which the permittee previously consulted with the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, or the U.S. Fish and Wildlife Service. The permittee shall submit all documentation of consultation with the appropriate party as required by the results of the PNDI.

4. If the treatment area is in an HQ or EV watershed the permittee will submit the Antidegradation Module of the NPDES Permit Application for Discharges from Pesticides Application (3800-PM-BCW0025e).

Attachment A

Proposed Pesticides and Maximum Usage Rates

1/10/2020

PennDOT Herbicide List (2020) - STATEWIDE

Herbicides with SAP Material Descriptions are procured through the current or past Department of General Services (DGS) Pesticide Contracts. The numbers in the SAP Material Description after the word "HERBICIDE" are the Pennsylvania Commercial Item Description (PCID). PennDOT personnel and contractors use herbicide products that meet the following PCID specifications. Hyperlinks for each PCID are provided below. Items with SAP Material Descriptions show the brand name of the product used in past contracts. PennDOT may use herbicide products with other brand names that meet the same PCID specifications. Additional herbicides not procured through a DGS Pesticide Contract do not have an associated SAP Material Description.

Pennsylvania Commercial Item Descriptions (PCID)					
Specification #	Description	Effective Date		Last Updated	PDF Document
1091	Growth Retardants	1/4/2013		1/4/2013	1091.pdf
1092	Herbicides (Aquatic)	2/22/2019		2/22/2019	1092.pdf
1093	Herbicides (Non-Selective)	12/20/2016		12/20/2016	1093.pdf
1094	Herbicides (Weed and Brush Control)	4/24/2017		4/24/2017	1094.pdf

In 2019, PennDOT use the following herbicides procured through DGS Pesticide Contracts:

A [1]	SAP #	SAP Material Description	Name of Pesticide	Manufacturer	Aquatic	EPA Registration #	Max. Annual Dose/Acre	Usage Unit	# Treatments/ Year **	Target
	312008	HERBICIDE,1091,C,REF,EMBARK,1GAL	Embark 2-S	PBI/Gordon		2217-759	8	pts	1	Weeds
	301471	HERBICIDE,1091,D,REF,STRONGHOLD,1GAL	Stronghold	Gordon's		2217-802	88	oz	1	Weeds
c	330032	HERBICIDE, 1092, 19, DMA 4, 2.5 GAL	DMA 4 IVM	Dow AgroSciences *	X	62719-3	8.42	pts	1	Weeds
c	330032	HERBICIDE, 1092, 19, DMA 4, 2.5 GAL	2,4-D Amine	Alligare	X	81927-38	8.42	pts	1	Weeds
	312032	HERBICIDE,1092,15,REF,AQUANEAT,2.5GAL	Rodeo	Corteva	X	62719-324	7.5	qts	1	Weeds
	312006	HERBICIDE,1092,20,REF,GLYPHOMAT41,2.5GAL	GlyphoMate 41	Gordon's	X	2217-847	10.6	pts	1	Weeds
	322634	HERBICIDE,1092,24,HABITAT,2.5 GAL	Habitat	SePRO	X	241-426-67690	6	pts	1	Weeds
	301458	HERBICIDE,1093,13,REF,KROVAR1DF,6LB	Krovar I DF	Bayer		432-1551	30	lbs	1	Weeds
	301456	HERBICIDE,1093,14,REF,VELPAR,4LB	Velapr DF VU	Bayer		432-1575	10.66	lbs	1	Weeds
a	322632	HERBICIDE,1093,16,ACCORD XRT 15 GAL	Accord XRT	Dow AgroSciences *		62719-517	8	qts	1 or 2	Weeds
a	322632	HERBICIDE,1093,16,ACCORD XRT II 15 GAL	Accord XRT II	Corteva		62719-556	7	qts	1	Weeds
b	322630	HERBICIDE,1093,19,2,ARSENAL POW 15 GAL	Arsenal Powerline	BASF		241-431	6	pts	1	Weeds
b	315056	HERBICIDE,1093,19,2,REF,ARSENALPL,2.5GAL	Polaris	Nufarm	X	228-534	6	pts	1	Weeds
b	315056	HERBICIDE,1093,19,2,REF,ARSENALPL,2.5GAL	Polaris SP	Nufarm		228-536	6	pts	1	Weeds
	311997	HERBICIDE,1093,21,1,REF,PENDULUM,2.5GAL	Pendulum AquaCap	BASF		241-416	6.3	pts	1	Weeds
	312003	HERBICIDE,1093,18,REF,OUST XP,4LB	Oust XP	Bayer		432-1552	8	oz	1	Weeds
	312004	HERBICIDE,1093,23,REF,OUST,EXTRA,4LB	Oust Extra	Bayer		432-1557	10.66	oz	1	Weeds
	312033	HERBICIDE,1093,25,REF,SNAPSHOT,50LB	Snapshot 2.5 TG	Dow AgroSciences *		62719-175	600	lbs	1	Weeds
	312035	HERBICIDE,1093,27-B,REF,SPIKE20PAPP,5LB	Spike 20P	Dow AgroSciences *		62719-121	20	lbs	1	Weeds
	315055	HERBICIDE,1093,29,REF,THROTTLEXP,3.9LB	Throttle XP	DuPont		352-725	12.5	oz	1	Weeds
	327290	HERBICIDE,1093,3,ESPLANADE 2.5 GAL	Esplanade 200 SC	Bayer		432-1516	10	oz	1 or 2	Weeds
	311232&311993	HERBICIDE,1094,10,A REF GARLON 3A,2,5&15GAL	Garlon 3A	Corteva		62719-37	3	gals	1	Weeds
	349368&355790	HERBICIDE,1094,10,D,REF, VASTLAN, 2.5&15GAL	Vastlan	Dow AgroSciences *		62719-687	9	qts	1	Weeds
d	330033&346888	HERBICIDE,1094,1,C, DMA 4 IVM,2.5 GAL	DMA 4 IVM	Dow AgroSciences *	X	62719-3	8.42	pts	1	Weeds
d	330033	HERBICIDE, 1092, 19, DMA 4, 2.5 GAL	2,4-D Amine	Alligare	X	81927-38	8.42	pts	1	Weeds
	350298&355788	HERBICIDE,1094,1,D, Freelexx, 2.5&15GAL	Freelexx	Dow AgroSciences *	X	62719-634	8.42	pts	1	Weeds
	312014	HERBICIDE,1094,10,C,REF,PATHFIND2,2.5GAL	Pathfinder II	Corteva		62719-176	10.7	gals	1	Weeds
	349369	HERBICIDE,1094,10-E,REF,GARLON4ULTRA,2.5GAL	Garlon 4 Ultra	Dow AgroSciences *		62719-527	8	qts	1	Weeds

A [1]	SAP #	SAP Material Description	Name of Pesticide	Manufacturer	Aquatic	EPA Registration #	Max. Annual Dose/Acre	Usage Unit	# Treatments/ Year **	Target
	312000	HERBICIDE,1094,12,A,REF,ESCORTXP,16OZ	Escort XP	Bayer		432-1549	4	oz	1	Weeds
	311994&322631	HERBICIDE,1094,14,A,REF,PLATEAU,1GAL&15 GAL	Plateau	BASF		241-365	12	oz	1	Weeds
	301449	HERBICIDE,1094,16,A,CLEANSLATE,2.5 GAL	Clean Slate	Nufarm		228-491	1.3	pts	1	Weeds
	301455	HERBICIDE,1094,19-A,REF,OVERDRIVE,7.5LB	Overdrive	BASF		7969-150	10	oz	1	Weeds
e	315053&322633	HERBICIDE,1094,20,REF,MILESTONE,2.5&15GAL	Milestone VM	Dow AgroSciences		62719-537	7	oz	1	Weeds
e	315053&322633	HERBICIDE,1094,20,REF,MILESTONE,2.5&15GAL	Milestone	Corteva		62719-519	7	oz	1	Weeds
	325769	HERBICIDE,1094,21,A STREAMLINE	Streamline	Bayer		432-1570	11.5	oz	1	Weeds
	325770	HERBICIDE,1094,21,B PERSPECTIVE	Perspective	Bayer		432-1569	11	oz	1	Weeds
	325768	HERBICIDE,1094,21,C,12,A CUSTOM BLEND	Method 50SG/ Excort XP	DuPont		352-787/ 352-439	9	oz	1	Weeds
	344704	HERBICIDE,1094,21,C,METHOD50SG, 4LB BT	Method50SG	Bayer		432-1566	9	oz	1	Weeds
	349358&355789	HERBICIDE,1094,21,D,METHOD 240SL, 2.5&15GAL	Method 240 SL	Bayer		432-1565	18	oz	1 or 2	Weeds
	330034	HERBICIDE,1094,22,A, AQUASWEEP,2.5 GAL	Aquasweep	Nufarm	X	228-316	5.5	pts	1	Weeds
	301441&312001	HERBICIDE,1094,5-B,REF,KRENITE,S,2.5&15GAL	Krenite S	Albaugh		42750-247	6	gals	1	Weeds
	311992	HERBICIDE,1094,6,A,REF,VANQUISH,2.5GAL	Vanquish	Riverdale		228-397	4	pts	1	Weeds
	301443	HERBICIDE,1094,7,C,REF,TRIPLETTSF,2.5GAL	Triplet SF	NuFarm		228-312	1.5	gals	1	Weeds
	301494	HERBICIDE,1094,7,E,REF,TRIPLETTLO,2.5GAL	Triplet Low Odor	NuFarm		228-409	13.0	pts	1	Weeds
	349370	HERBICIDE,1093,32,REF,ESPLANADEEZ,2.5GAL	Esplanade EZ	Bayer		432-1528	5.4	gal.	1	Weeds

PennDOT also use the following herbicides not procured through DGS Pesticide Contracts:

			Name of Pesticide	Manufacturer		EPA Registration #	Max. Annual Dose/Acre	Usage Unit		Target
			Diuron 80DF	Allgare		81927-12	15	lbs	1	Weeds
			Razor Pro	NuFarm		228-366	10.6	qts	1	Weeds
			Bromicil/Diuron 40/40	Allgare		81927-3	30	lbs	1	Weeds
			Spyder	NuFarm		228-408	6	oz	1	Weeds
			MSM 60	Allgare		81927-7	4	oz	1	Weeds
			Lontrel	Dow AgroSciences *		62719-305	1.33	pts	1	Weeds
			Viewpoint	Bayer		432-1580	20	oz	1	Weeds
			Fusilade DX	Syngenta		100-1070	72	oz	1	Weeds
			Fusilade II	Syngenta		100-1084	72	oz	1	Weeds
			Procilpse 65 WDG	Nufarm		228-434	2.3	lbs	1	Weeds
			Weedestroy AM-40	Nufarm	X	228-145	8.00	pts	1	Weeds
			Barrier	PBI/Gordon's		2217-675	200	lbs	1	Weeds
			Pindar	Dow AgroSciences *		62719-611	4.5	pts	1	Weeds
			Assure II	DuPont		352-541	16	oz	1	Weeds
			Opensight	Dow AgroSciences *		62719-597	3.3	oz	1	Weeds
			Final	Bayer		432-1229	6	qts	1	Weeds
			Garlon XRT	Corteva		62719-553	5	qts	1	Weeds
			Arsenal	BASF	X	241-346	96	oz	1	Weeds
			Poast Plus	BASF		7969-88	3.75	pts	1	Weeds

NOTES:

[1] Items with the same letters in column A have the same PCID specification but not necessarily the same brand name.

* current registered label in Pennsylvania shows Dow AgroScience. Dow AgroScience is now Corteva.

** see herbicide usage report for actual herbicides applied in a given year.

Attachment B

Pennsylvania Commercial Item Descriptions

Growth Retardants **PCID NO. 1091**

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

PCID NO. 1091 **Growth Retardants**
Eff. 01/4/2013

(Supercedes PCID 1091, eff. 02/27/2008)

This Pennsylvania Commercial Item Description covers requirements for various growth retardants to be used on grass, trees, shrubs and vines. Product shall conform to the following requirements unless otherwise noted on the request for proposals or invitation for bids.

1.0 Classification - The growth retardants shall be of the following types meeting the requirements specified herein.

Type C – Mefluidide
Type D - Mefluidide-imazethapyr-imazapyr

2.0 Requirements - The products shall be clean, uniform and free from any defects, which might impair their utility.

2.1 Type C – Mefluidide containing 28% diethanolmaine salt of mefluidide (2 lbs. acid/gal.) and 72% inert ingredients.

2.2 Type D – Mefluidide-imazethapyr-imazapyr containing 21.45% diethanolmaine salt of mefluidide, 4.09% ammonium salt of imazethapyr, 0.15% ammonium salt of imazapyr and 74.31% inert ingredients.

3.0 Sampling, Inspection and Testing - Sampling for prior to/post-award testing, if required, will be as defined in the Invitation to Bid Proposal. Inspection may be made at place of manufacture at the option of the Commonwealth after an award has been made. Inspection for final acceptance shall be made at the place of delivery and/or after laboratory testing to determine whether product or service meet the specification requirements. Samples for inspection and after-delivery testing shall be selected by simple random sampling. If defects are detected during the course of delivery, or after the product has been delivered, the Commonwealth reserves the right to reject the defective product and require replacement at no cost to the Commonwealth, or cancel the contract and surcharge the contractor for any expense incurred by the cancellation of the contract and in securing satisfactory materials, if the vendor fails to apply timely and corrective measures. When necessary, tests shall be made in accordance with the applicable test methods as described in the current edition of the Official Methods of Analysis of the Association of Official Analytical Chemists (A.O.A.C.). (Consideration may be given to the manufacturer's standard test methods.)

4.0 Packaging -Unless otherwise specified, formulations shall be packaged in new containers according to manufacturer's standard commercial practice. Cans shall be of a nature to resist corrosion from the time of delivery to a minimum of twelve (12) months in storage. Liquid and flowable formulations shall be packaged in new, unused, non-returnable, corrosion-resistant cans, drums, pails or product-compatible plastics, in the sizes as specified. Wettable powders and granular formulations shall be packaged in sift-proof, odor-proof, bags, sacks, or fiber drums, in the sizes as specified. Shipping containers shall be standard commercial containers acceptable by all common carriers.

5.0 Marking - Each container shall have a current label, which includes directions for its use. Statements of liquid measure shall be in terms of the United States gallon @ 68 ° F. Each shipping container shall be clearly marked with the name of contents, the amount contained, the batch or lot number, the contract or order number or numbers, and the name of the receiving party as shown on the face of the contract or order.

Growth Retardants PCID NO. 1091

6.0 Material Masters – This PCID encompasses requirements for the following material masters:

SAP Material No.	Description
312008	Mefluidide Type C Ref: Embark

7.0 Registration - The product offered shall be registered with the Federal Government. The EPA registration number must be included with the label submitted by the bidder at bid opening time. The product must also be registered with the Pennsylvania Department of Agriculture.

8.0 Documents Sources –

Association of Analytical Chemists
481 North Frederick Avenue
Suite 500
Gaithersburg, MD 20877-2417

Quality Assurance Specialist
Brian Vulgaris

Quality Assurance Supervisor
Edward Myslewicz

Director, Quality Assurance
Janice Pistor

Herbicides (Aquatic) **PCID NO. 1092**

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

PCID NO. 1092 **Herbicides (Aquatic)**
Eff. 22 February 2019

(Supersedes PCID 1092 eff. 30 April 2018)

This Pennsylvania Commercial Item Description covers requirements for various aquatic herbicides to be used for aquatic plant and algae control in public waters. Product shall conform to the following requirements unless otherwise noted on the request for proposals or invitation for bids.

1.0 Classification - The herbicides shall be of the following types meeting the requirements specified herein.

Type 15 - Glyphosate Liquid

Type 16 - Fluridone, Aqueous Suspension

Type 17 - Fluridone, Pellet

Type 18 – Diquat Dibromide Liquid, 37.3%

Type 19 – 2,4-D Dichlorophenoxyacetic acid

Type 20 – Glyphosate Liquid

Type 21 – Copper-Ethanolamine Liquid, 9%

Type 22 – Copper as Elemental Liquid

Type 23 - Copper Sulfate Pentahydrate Crystals

Type 24 - Isopropylamine Salt of Iamazapyr Liquid

Type 25 – Copper as Elemental Granular

Type 26 – Ammonium Salt of Imazamox Liquid

Type 27 – Triclopyr Liquid

Type 28 – Dipotassium salt of endothall

Type 29-Sodium Carbonate Peroxyhydrate (SCP) Granular

2.0 Requirements - The products shall be clean, uniform and free from any defects, which might impair their utility.

2.1 Type 15 - Glyphosate Liquid, containing a minimum of 2.8 lbs. of glyphosate acid per US gallon labeled for aquatic and no-crop right-of-way areas without a surfactant.

2.2 Type 16 - Fluridone, Aqueous Suspension, containing 41.7% active ingredient as 1-methyl-3-phenyl-5-[3-(trifluoromethyl) phenyl]-4(1H)-pyridinone. Contains four (4) pounds active ingredient per gallon.

2.3 Type 17 - Fluridone, Pellet

2.3.1 Type 17, Class 1 - Fluridone, Pellet, containing 5% active ingredient as 1-methyl-3-phenyl-5-[3-(trifluoromethyl) phenyl]-4(1H)-pyridinone. Contains two (2) pounds active ingredient per 40-lb. container.

2.3.2 Type 17, Class 2 - Fluridone, Pellet, containing 2.7% active ingredient as 1-methyl-3-phenyl-5-[3-(trifluoromethyl) phenyl]-4(1H)-pyridinone. Contains 1.08 pounds active ingredient per 40-lb. container.

2.3.3 Type 17, Class 3 - Fluridone, Pellet, containing 5% active ingredient 1-methyl-3-phenyl-5-[3- (trifluoromethyl)phenyl]-4(1H)-pyridinone. Contains one (1) pound active ingredient per 20-lb container.

Herbicides (Aquatic) **PCID NO. 1092**

2.4 Type 18 – Diquat Dibromide, liquid containing 37.3% active ingredients as 6,7-dihydrodipyrido (1,2-a: 2',1'-c) pryazinedilum dibromide. Contains two (2) pounds of diquat cation per gallon. For use an aquatic herbicide.

2.5 Type 19 - Class 1 – Dimethylamine salt as active ingredient for use as an aquatic herbicide. Minimum concentration of active ingredient equivalent to 3.74 lbs/gal 2,4-Dichlorophenoxyacetic Acid.

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2.5 Type 19 - Class 2 – Butoxyethyl Ester as active ingredient for use as an aquatic herbicide. Minimum concentration of active ingredient equivalent to 19% 2,4-Dichlorophenoxyacetic Acid.

2.6 Type 20 - Glyphosate Liquid, containing a minimum of 2.8 lbs. of glyphosate acid per US gallon labeled for aquatic and non-crop right-of-way areas with a surfactant.

2.7 Type 21 – Copper-Ethanolamine Liquid, 9%.

2.7.1 Type 21, Class 1 – Shall contain copper as elemental 9% and 91% inert ingredients.

2.7.2 Type 21, Class 2 – Shall contain copper as elemental 9% and 91% inert ingredients in a non-ionic emulsified surfactant. Contains 0.909 lbs. of elemental copper per gallon.

2.8 Type 22 – Copper as elemental liquid, 22.9% active ingredient as derived from copper-ethylenediamine complex and copper sulfate pentahydrate and 77.1% inert ingredients.

2.9 Type 23 – Copper sulfate pentahydrate crystals, 99% active ingredient.

2.10 Type 24 – Isopropylamine Salt of Iamazapyr two (2) lbs/gal.

2.11 Type 25 – Copper as Elemental 3.7% and 96.3% inert ingredients.

2.12 Type 26 – Ammonium Salt of Imazamox as active ingredient to include one (1) lb of acid/gal.

2.13 Type 27 – Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine salt 3 lbs acid /gal.

2.13 Type 28 – Dipotassium salt of endothall 40.3% and 59.7% inert ingredients. Contains 4.23 lbs. dipotassium endothall per gallon.

2.14 Type 29- 85% Sodium Carbonate Peroxyhyrate*, 15% other ingredients, *contains 27.60% Hydrgen Dioxide by weight.

3.0 Sampling, Inspection and Testing - Sampling for prior to/post-award testing, if required, will be as defined in the Invitation to Bid Proposal. Inspection may be made at place of manufacture at the option of the Commonwealth after an award has been made. Inspection for final acceptance shall be made at the place of delivery and/or after laboratory testing to determine whether product or service meet the specification requirements. Samples for inspection and after-delivery testing shall be selected by simple random sampling. If defects are detected during the course of delivery, or after product has been delivered, the Commonwealth reserves the right to reject the defective product and require replacement at no cost to the Commonwealth, or cancel the contract and surcharge the supplier for any expense incurred by the cancellation of the contract and in securing satisfactory materials, if the supplier fails to apply timely and corrective measures. When necessary, tests shall be made in accordance with the applicable test methods as described in the current edition of the Official Methods of Analysis of the Association of Official Analytical Chemists (A.O.A.C.). (Consideration may be given to the manufacturer's standard test methods.)

4.0 Packaging - Unless otherwise specified, formulations shall be packaged in new containers according to manufacturer's standard commercial practice. Cans shall be of a nature to resist corrosion from the time of delivery to a minimum of twelve (12) months in storage. Liquid and flowable formulations shall be packaged in new, unused, non-returnable, corrosion-resistant cans, drums, pails or product-compatible plastics, in the sizes as specified. Wettable powders and granular formulations shall be packaged in sift-proof, odor-proof, bags, sacks, or fiber drums, in the sizes as specified. Shipping containers shall be standard commercial containers acceptable by all common carriers.

Herbicides (Aquatic) **PCID NO. 1092**

5.0 Marking - Each container shall have a current label, which includes directions for its use. Statements of liquid measure shall be in terms of the United States gallon @ 68 ° F. Each shipping container shall be clearly marked with the name of contents, the amount contained, the batch or lot number, the contract or order number or numbers, and the name of the receiving party as shown on the face of the contract or order.

6.0 Registration - The product offered shall be registered with the Federal Government. The EPA registration number must be included with the label submitted by the bidder at bid opening time. The product must also be registered with the Pennsylvania Department of Agriculture.

7.0 Documents Sources –

Association of Analytical Chemists
481 North Frederick Avenue
Suite 500
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Quality Assurance Specialist
Bill Hugendubler

Quality Assurance Supervisor
Brian Vulgaris

Herbicides (Non-Selective) **PCID NO. 1093**

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

PCID NO. 1093 **Herbicides (Non-Selective)**
Eff. 12/20/2016

(This Item Description supercedes PCID 1093, eff. 1/24/12)

This Pennsylvania Commercial Item Description covers requirements for various non-selective herbicides to be used in areas where vegetation is to be eliminated. Product shall conform to the following requirements, unless otherwise noted on the request for proposals or invitation for bids.

1.0 Classification - The herbicides shall be of the following types and classes meeting the requirements in section 2.0.

Type 1 – Diuron, Dry Flowable (DF)	Type 3 – Bromacil	Type 13 – Bromacil Diuron
Type 14 – Hexazinone (DF)	Type 16 – Glyphosate	Type 17 – Oryzalin
Type 18 – Sulfometuron methyl	Type 19 – Imazapyr	Type 20 – Prodiamine
Type 21 – Pendimethalin	Type 22 – Imazapyr Diuron	Type 23 - Sulfometuron methyl Metsulfuron methyl
Type 24 – Hexazinone	Type 25 – Trifluralin Isoxaben	Type 26 – Diuron (XP)
Type 27 - Tebuthiuron Formulations	Type 28 - Sulfometuron Methyl and Chlorsulfuron Formulation	
Type 29 - Sulfometuron Methyl, Chlorosulfuron, and Sulfentrazone Formulation		Type 30 - Imazapic and Glyphosate
Type 31 – Indaziflam	Type 32 – Indaziflam, Diquat dibromide, Glyphosate formulation	

2.0 Requirements - The products shall be clean, uniform and free from any defects, which might impair their utility.

2.1 Type 1 – Diuron, Dry Flowable (DF) - containing 80% active as diuron and 20% inert ingredients.

2.2 Type 3 – Bromacil

2.2.1 Class 2 – Water soluable liquid: 21.9% active ingredient as lithium salt of bromacil and 78.1% inert ingredients.

2.3 Type 13- Bromacil Diuron (reference: Krovar 1 DF), dry flowable, 80% active ingredient as 40% bromacil and 40% diuron, and 20% inert ingredients.

2.4 Type 14- Hexazinone (DF), 75% dry flowable hexazinone and 25% inert ingredients.

2.5 Type 16- Glyphosate, Water soluble, containing a minimum of 2.8 lbs. of glyphosate acid per US gallon without a surfactant

2.6 Type 17- Oryzalin, 40.4% active ingredient as oryzalin and 59.6% inert ingredients.

2.7 Type 18- Sulfometuron methyl, Extruded Pellet (XP), 75% active as sulfometuron methyl and 25% inert ingredients.

2.8 Type 19 - Imazapyr

2.8.1 Class 1- Imazapyr liquid, 28.7 active as Imazapyr. Isopropylamine salt equivalent of 28.7% or acid equivalent of 22.6% (2 lbs./gal) and 71.3% inert ingredients

2.8.2 Class 2- Imazapyr liquid, 26.7 active as Imazapyr. Isopropylamine salt equivalent of 26.7% or acid equivalent of 21.8% (2 lbs./gal) and 73.3% inert ingredients.

2.9 Type 20- Prodiamine, water dispersible, 65% active ingredient as prodiamine and 35% inert ingredients.

2.10 Type 21- Pendimethalin emulsifiable concentrate, 37.4% (3.3 lbs.) active ingredient as pendimethalin and 62.6% inert ingredients.

Herbicides (Non-Selective) **PCID NO. 1093**

2.10.1 Class 1- Pendimethalin emulsifiable concentrate, 38.7% (3.8 lbs.) active ingredient as pendimethalin and 61.3% inert ingredients.

2.11 Type 22 - Imazapyr Diuron, dry flowable, 7.78% active ingredient as imazapyr, 62.22% active ingredient as diuron and 30% inert ingredients.

2.12 Type 23 – Sulfometuron methyl and Metsulfuron methyl Formulation, dispersible granule, shall contain 56.25% Sulfometuron methyl, 15% Metsulfuron methyl, and 28.75% inert ingredients.

2.13 Type 24 – Hexazinone, liquid, shall contain 25% Hexazinone and 75% inert ingredients.

2.14 Type 25 – Trifluralin Isoxaben, granule, 2.0% trifluralin, 0.5% isoxaben, and 97.5% inert ingredients.

2.15 Type 26 - Diuron, Extruded Paste (XP) - containing 80% active as diuron and 20% inert ingredients.

2.16 Type 27 - Tebuthiuron Formulations

2.16.1 Class A - Dry Flowable (DF) (80% Active): Shall contain 80% active ingredient as tebuthiuron with 20% inert ingredients.

2.16.2 Class B - Pellets (20% Active): Shall contain 20% active ingredient as tebuthiuron with 80% inert ingredients.

2.17 Type 28 – Sulfometuron methyl and Chlorsulfuron Formulation

2.17.1 Class B – Dispersible Granule: Shall contain 50% Sulfometuron methyl, 25% Chlorsulfuron, and 25% inert ingredients.

2.18 Type 29 – Sulfometuron methyl, chlorosulfuron, and sulfentrazone formulation containing 18% sulfometuron methyl, 9% chlorsulfuron, 48% sulfentrazone, and 25% inert ingredients.

2.19 Type 30 - Imazapic and Glyphosate, .75 lbs of Imazapic and 1.5 lbs of Glyphosate per U.S. Gallon labeled for right of way applications.

2.20 Type 31 – Indaziflam Suspension Concentrate, 19.05% active ingredient as Indaziflam and 80.95% inert ingredients.

2.21 Type 32 – Indaziflam, Diquat dibromide, Glyphosate formulation containing 0.089% Indaziflam, 0.890% Diquat dibromide, 20.46% Glyphosate isopropylamine salt, and 78.561% inert ingredients.

3.0 Sampling, Inspection and Testing - Sampling for prior to/post- award testing, if required, will be as defined in the Invitation to Bid Proposal. Inspection may be made at place of manufacture at the option of the Commonwealth after an award has been made. Inspection for final acceptance shall be made at the place of delivery and/or after laboratory testing to determine whether product or service meet the specification requirements. Samples for inspection and after delivery testing shall be selected by simple random sampling. If defects are detected during the course of delivery, or after product has been delivered, the Commonwealth reserves the right to reject the defective product and require replacement at no cost to the Commonwealth, or cancel the contract and surcharge the supplier for any expense incurred by the cancellation of the contract and in securing satisfactory materials, if the supplier fails to apply timely and corrective measures. When necessary, tests shall be made in accordance with the applicable test methods as described in the current edition of the Official Methods of Analysis of the Association of Official Analytical Chemists (A.O.A.C.). (Consideration may be given to the manufacturer's standard test methods.)

4.0 Packaging -Unless otherwise specified, formulations shall be packaged in new containers according to manufacturer's standard commercial practice. Cans shall be of a nature to resist corrosion from the time of delivery to a minimum of 12 months in storage. Liquid and flowable formulations shall be packaged in new, unused, non-returnable, corrosion resistant cans, drums, pails or product-compatible plastics, in the sizes as specified. Wettable powders and granular formulations shall be packaged in sift proof, odor proof, bags, sacks, or fiber drums, in the sizes as specified. Shipping containers shall be standard commercial containers acceptable by all common carriers.

5.0 Marking - Each container shall have a current label, which includes directions for its use. Statements of liquid measure shall be in terms of the United States gallon @ 68 ° F. Each shipping container shall be clearly marked with the name of contents, the amount

Herbicides (Non-Selective) **PCID NO. 1093**

contained, the batch or lot number, the contract or order number or numbers, and the name of the receiving party as shown on the face of the contract or order.

6.0 Registration - The product offered shall be registered with the Federal Government. The EPA registration number must be included with the label submitted by the bidder at bid opening time. The product must also be registered with the Pennsylvania Department of Agriculture.

7.0 Material Masters – This PCID encompasses requirements for the following material masters:

SAP Material Master	Product Description	**SAP Material** Master	Product Description
N/A	Diuron, Dry Flowable (DF) Type 1	311997	Pendimethalin, emulsifiable concentrate Type 21 Class 1
N/A	Bromacil Type 3	N/A	Imazapyr Diuron, dry flowable Type 22
301458	Bromacil and Diuron Type 13 Ref: Krovar I DF	312004	Sulfometuron Methyl and Metsulfuron Methyl Type 23 Ref: Oust Extra In a measurable non-segragating blend
301456	Hexazinone DF Ref: Velpar DF Type 14	301463	Hexazinone Type 24 Ref: Velpar Liquid
N/A	Glyphosate, Water soluble Type 16	312033	Trifluralin Isoxaben Granule Type 25 Ref: Snapshot
N/A	Oryzalin Type 17	311224	Karmex XP Type 26 Ref: Karmex XP
312003	Sulfometuron Methyl Extruded Paste Type 18 Ref: Oust XP	312035	Tebuthiuron 20P Type 27, Class B Ref: Spike 20P 5 LB. Container
N/A	Imazapyr Type 19, Class 1	N/A	Sulfometuron methyl and Chlorsulfuron Formulation Type 28
315056	Imazapyr Type 19, Class 2 Ref: Arsenal Powerline	315055	Sulfometuron Methyl, Clorsulfuron, and Sulfentrazone Type 29 Ref: Throttle XP
N/A	Prodiamine, water dispersible Type 20	317679	Imazapic and Glyphosate Type 30 Ref: Journey No Substitution

Herbicides (Non-Selective) **PCID NO. 1093**

8.0 Documents Sources –

Association of Analytical Chemists
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Chief, Quality Assurance
Janice Pistor

PCID NO. 1094 Herbicides (Weed and Brush Control) **PCID NO. 1094**

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

PCID NO. 1094 Herbicides (Weed and Brush Control)
Eff. 4/24/2017

(Supercedes PCID 1094, eff. 12/20/16)

This Pennsylvania Commercial Item Description covers requirements for various selective herbicides to be used in controlling or eradicating specific broad-leaved weeds and herbaceous and woody plants. Product shall conform to the following requirements, unless otherwise noted on the request for proposals or invitation for bids.

1.0 Classification - The herbicides shall be of the following types and classes meeting the requirements in section 2.0.

Type 1 - 2,4-D Formulations
Type 4 - 2,4,D/2,4-DP Liquid Low-Volatile Ester Formulations
Type 5- Fosamine Ammonium Formulations, Liquid, containing Ammonium Ethyl Carbamoylphosphonate
Type 6 - Dicamba Liquid Amine Salt Formulations
Type 7 - Dicamba/2,4-D/MCPP Formulations
Type 8 - Picloram Combination Formulations
Type 10 - Triclopyr Liquid Formulations
Type 12 - Metsulfuron Methyl Formulations
Type 13 - Chlorsulfuron
Type 14 – Imazapic-ammonium Formulations
Type 15 – Fluroxypr
Type 16 – Clopyralid
Type 19 Dicamba and diflufenzopyr Formulation
Type 20- Aminopyralid Formulations
Type 21 – Aminocylopyrachlor
Type 22 – 2, 4-D and Triclopyr Formulation

2.0 Requirements - The products shall be clean, uniform and free from any defects, which might impair their utility.

2.1 Type 1 - 2,4-D Formulations

2.1.1 Class C - Liquid Amine Salt Formulations (Dimethylamine): The liquid amine salt form for 2,4-dichlorophenoxyacetic acid shall contain a minimum of 3.8 pounds of 2,4-D acid per gallon of formulation at 68°F. The product shall be soluble in hard or soft water at the concentrations specified in the directions for use, non-foaming, and disperse easily, making a dilution that contains no ingredients which will inhibit the application of the material at the concentrations normally used for weed control. The product shall contain no ingredients which will coagulate with water. The material shall contain sequestering agents, which facilitate its application in hard or soft water. The product shall remain free of solid material when held at a temperature of 25°F. for a period of five (5) days.

2.1.2 Class D – Liquid Choline Salt Formulations: The liquid choline salt form for 2,4-dichlorophenoxyacetic acid shall contain a minimum of 3.8 pounds of 2,4-D acid per gallon of formulation.

2.2 Type 4 - 2,4,D/2,4-DP Liquid Low-Volatile Ester Formulations

2.2.1 Class A - 2.00 lbs. of each active/gallon: Shall contain 2 lbs. 2,4-dichlorophenoxyacetic acid and 2 lbs. 2,4-dichlorophenoxypropionic acid per gallon as low volatile butoxy ethanol esters. The inert ingredients including emulsifiers, surfactants, solvents and wetting agents must not contain any chlorine atoms. The formulation shall be readily miscible with oil, emulsifiable in water and form a stable emulsion in water when extended with 10% additional oil. The product shall be a clear solution, non-foaming and shall include the necessary solvents and emulsifying agents, such that the emulsion formed with water requires a minimum of agitation to maintain intimate mixture with the diluent during the mixing and application period. Formulations shall be stable at temperatures of 0° F., with no visible precipitate or solids. Formulations shall produce stable emulsions after repeated freeze/thaw cycles.

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2.2.2 Class B - 0.66 lbs. of each active/gallon: Ready-to-Use form of Class A having 0.66 lbs. of both actives/gallon. **2.3**

Type 5- Fosamine Ammonium Formulations,Liquid, containing Ammonium Ethyl Carbamoylphosphonate.

2.3.1 Class B - Water-soluble liquid with a surfactant. Contains 4.00 lbs. active ingredient/gallon.

2.4 Type 6 - Dicamba Liquid Amine Salt Formulations

2.4.1 Class A - 4.00 lbs. of active/gallon: Diglycolamine salts of 3,6 Dichloro-o-anisic acid and related acids in water containing 4.00 lbs. per gallon acid equivalent.

2.5 Type 7 - Dicamba/2,4-D/MCPP Formulations

2.5.1 Class C - Liquid Dimethanolamine Salts of 2,4-D, Dicamba and MCPP: Liquid, containing the dimethylamine salts of 2, 4-D (30.56%), dicamba (2.77 %) and 2-2-methyl-4-chlorophenoxy propionic acid (8.17 %) and 58.5% inerts.

2.5.2 Class D - Liquid Dimethanolamine Salts of 2,4-D, Dicamba and MCPP: Liquid, containing the dimethylamine salts of 2, 4-D (30.56%), dicamba (2.77 %) and 2-2-methyl-4-chlorophenoxy propionic acid (16.34 %) and 50.33% inerts.

2.5.3 Class E - Liquid Triisopropanolamine Salts of 2,4-D, Dicamba and MCPP: Liquid, containing the triisopropanolamine salts of 2, 4-D (2.38 lbs. Acid/Gal., dicamba (.22 lbs. acid/gal.) and 2-2-methyl-4-chlorophenoxy propionic acid (.63 lbs. acid/gal.) and remainder inerts.

2.6 Type 8 - Picloram Combination Formulations

2.6.1 Class A - With 2,4-D Amine: Formulations containing picloram and an amine form of 2,4-D. Contains 0.268 lbs. of (4- amino-3,5,6-trichloropicolinic acid) as the triisopropanolamine salt of picloram/gallon and 1.00 lbs. of the triisopropanolamine salt of the 2,4-D. This formulation is a Ready-to-Use form and requires no dilution. Inert ingredients will comprise 73.7% by wt. Product shall contain ethylene glycol as one of the inerts.

2.7 Type 10 - Triclopyr Liquid Formulations.

2.7.1 Class A - Triethylamine Salt: Shall contain 3.00 lbs. /gal. of the triethylamine salt of triclopyr.

2.7.2 Class B - Butoxyethyl Ester - 4 lb./gal.: Shall contain 4.00 lbs. of the butoxyethyl ester of triclopyr/gallon and 38.4% inerts. Product shall contain petroleum distillates as part of the inerts.

2.7.3 Class C - Butoxyethyl Ester - .75 lb/gal.(ready-to-use): This formula is in a Ready-to-Use form and requires no dilution. This product shall contain .75 lbs. of the acid equivalent of triclopyr/gallon and 86.4% inerts.

2.7.4 Class D – Triclopyr Choline: Shall contain 54.72% of Triclopyr Choline and 45.28% inert ingredients. Shall contain 4 pounds acid/gallon.

2.7.5 Class E - Butoxyethyl Ester: Shall contain 60.45% butoxyethyl ester of triclopyr and 39.55% inert ingredients. Shall contain 4 pounds acid/gallon.

2.8 Type 12 - Metsulfuron Methyl Formulations.

2.8.1 Class A – Dispersible Granule (60% Active): shall contain 60% active ingredient as Metsulfuron Methyl with 40% inert ingredients.

2.9 Type 13 - Chlorsulfuron Dry Flowable Formulations.

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2.9.1 Class A - Dry Flowable (DF) (75% Active): Shall contain 75% active ingredient as 2-Chloro-N-[(4-methyl-1 ,3,5-triazin-2- yl) aminocarbonyl] benzenesulfonamide with 25% inert ingredient.

2.10 Type 14 - Imazapic-ammonium Formulation.

2.10.1 Class A – Liquid: Shall contain active ingredients as (±) 2-[4,5-dihydro-4methyl-4-(1-methylethyl)-5-oxo-1Himidazol-2yl]-5-methyl-3pyridinecarboxylic acid, (ammonium salt of). One gallon contains 2.0 pounds of active ingredient as the free acid. Odorless and non-emulsion.

2.11 Type 15 – Fluroxypr Formulation.

2.11.1 Class A – Liquid: Shall contain 26.2% active ingredients as 1-methylheptyl (4-amino-3,5-dichloro-6-fluoro-2-pyridyloxyl) acetate with 73.8% inert ingredients.

2.12 Type 16 – Clopyralid Formulation.

2.12.1 Class A – Liquid: Shall contain 3 lbs./gal. active ingredients as 3,6-dichloro-2-pyridinecarboxylic acid, monoethanolamine salt

2.13 Type 17 – Sulfometuron methyl and Chlorsulfuron Formulation

2.13.1 Class B – Dispersible Granule: Shall contain 50% Sulfometuron methyl, 25% Chlorsulfuron, and 25% inert ingredients.

2.14 Type 19 – Dicamba and diflufenzopyr Formulation

2.14.1 Class A – Dispersible Granule: Shall contain 0.20 lbs acid/gal. of sodium salt of diflufenzopyr, 0.50 lbs acid/gal. of sodium salt of dicamba, 3,6-dichloro-o-anisic acid.

2.15 Type 20 – Aminopyralid Formulations containing 2 lbs./gal. of triisopropanolammonium salt of 2-pyridine carboxylic acid, 4-amino-3, 6-dichloro.

2.16 Type 21- Aminocylopyrachlor Formulations.

2.16.1 Class A – Dispersible Granule: Shall contain 39.5% Aminocylopyrachlor, 12.6% Metsulfron Methyl, and 47.9% inert ingredients.

2.16.2 Class B – Dispersible Granule: Shall contain 39.5% Aminocylopyrachlor, 15.8% Chlorsulfuron, and 44.7% inert ingredients.

2.16.3 Class C – Dispersible Granule: Shall contain 50% Aminocylopyrachlor and 50% inert ingredients.

2.16.4 Class D – Liquid: Shall contain 25% Aminocylopyrachlor and 75% inert ingredients. Shall contain 2 pounds of acid/gallon.

2.17 Type 22 – 2, 4-D and Triclopyr Formulation.

2.17.1 Class A – Liquid Amine salt formulation of 2, 4-D (as Diethylamine salt) and Triclopyr (as Triethylamine salt); Shall contain 2.78 lbs/gal. of 2, 4-Dichlorophenoxyacetic acid and 1.07 lbs/gal. of Triclopyr acid.

3.0 Sampling, Inspection and Testing - Sampling for prior to/post-award testing, if required, will be as defined in the Invitation to Bid Proposal. Inspection may be made at place of manufacture at the option of the Commonwealth after an award has been made. Inspection for final acceptance shall be made at the place of delivery and/or after laboratory testing to determine whether the product or service meets the specification requirements. Samples for inspection and after-delivery testing shall be selected by simple random sampling. If defects are detected during the course of delivery, or after product has been delivered, the Commonwealth reserves the right to reject the defective product and require replacement at no cost to the Commonwealth, or cancel the contract and surcharge the supplier for any expense incurred by the cancellation of the contract and in securing satisfactory materials, if the supplier fails to apply timely and corrective measures. When necessary, tests shall be made in accordance with the applicable test methods as described in the

PCID NO. 1094 Herbicides (Weed and Brush Control) **PCID NO. 1094**

current edition of the Official Methods of Analysis of the Association of Official Analytical Chemists (A.O.A.C.). (Consideration may be given to the manufacturer's standard test methods.)

4.0 Packaging - Unless otherwise specified, formulations shall be packaged in new containers according to manufacturer's standard commercial practice. Cans shall be of a nature to resist corrosion from the time of delivery to a minimum of twelve (12) months in storage. Liquid and flowable formulations shall be packaged in new, unused, non-returnable, corrosion-resistant cans, drums, pails or product-compatible plastics, in the sizes as specified. Wettable powders and granular formulations shall be packaged in sift-proof, odor-proof, bags, sacks, or fiber drums, in the sizes as specified. Shipping containers shall be standard commercial containers acceptable by all common carriers.

5.0 Marking - Each container shall have a current label, which includes directions for its use. Statements of liquid measure shall be in terms of the United States gallon @ 68 ° F. Each shipping container shall be clearly marked with the name of contents, the amount contained, the batch or lot number, the contract or order number or numbers, and the name of the receiving party as shown on the face of the contract or order.

6.0 Registration - The product offered shall be registered with the Federal Government. The EPA registration number must be included with the label submitted by the bidder at bid opening time. The product must also be registered with the Pennsylvania Department of Agriculture.

7.0 Material Masters – This PCID encompasses requirements for the following material masters:

SAP Material Master	Product Description	SAP Material Master	Product Description
N/A	2,4-D Formulations Type 1	311995	Triclopyr 4 lb. Active Butoxyethl Ester Type 10, Class B Ref: Garlon 4
N/A	2,4,D/2,4-DP Liquid Low-Volatile Ester Formulations Type 4	312014	Triclopyr ready to use 1 lb. active Butoxyethyl Ester Type 10, Class C Ref: Pathfinder
301441	Fosamine Ammonium with Surfactant Type 5, Class B Ref: Krenite S 2.5 GAL. Container	312000	Metsulfuron Methyl Type 12, Class A Ref: Escort XP
312001	Fosamine Ammonium with Surfactant Type 5, Class B Ref: Krenite S 15 GAL. Container	N/A	Chlorsulfuron Dry Flowable Formulations. Type 13
311992	Dicamba Liquid Amine Salt Type 6, Class A Ref: Vanquish	311994	Imazameth Liquid Type 14, Class A Ref: Plateau
N/A	Dicamba/2,4-D/MCPP Formulations Type 7 Class C	N/A	Fluroxypr Formulation Type 15

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N/A	Dicamba/2,4-D/MCPP Formulations Type 7 Class D	301449	Clopyralid Liquid Post Emergent Type 16, Class A Ref: Transline
301494	Dicamba / 2, 4-D, Liquid Amine and Dicamba / 2, 4-D / MCPP Liquid Dimethylamine Type 7, Class E	N/A	Sulfometuron methyl and Chlorsulfuron Formulation Type 17
N/A	Picloram Combination Formulations Type 8	301455	Dicamba and Diflufenzopyr Formulation Type 19, Class A Ref: Overdrive
311993	Triclopyr Triethylamine Salt Type 10, Class A Ref: Garlon 3A No Substitution Brand name Garlon 3A only,	315053	Aminopyralid Type 20 Ref: Milestone VM 2.5 GAL. Container
311232	Triclopyr Triethylamine Salt Type 10, Class A Ref: Garlon 3A No Substitution Brand name Garlon 3A only,	315054	Aminopyralid Type 20 Ref: Milestone VM 32 OZ. Container

8.0 Documents Sources –

Association of Analytical Chemists 481
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