

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Pest Management

625 Broadway, 9th Floor, Albany, New York 12233-7257

P: (518) 402-8768 F: (518) 402-9024

www.dec.ny.gov ppr@dec.ny.gov

December 12, 2017

**VIA E-MAIL** (Company # 62719)

Mr. Jamey Thomas  
Dow AgroSciences, LLC  
9330 Zionsville Road  
Indianapolis, Indiana 46268-1054

**Re: Registration of Milestone (EPA Reg. No. 62719-519) Which Contains the New Active Ingredient Aminopyralid, Triisopropanolamine Salt (Chemical Code 005209)**

Dear Mr. Thomas:

The New York State Department of Environmental Conservation (Department) has reviewed the application and data package for the above-referenced product received on October 27, 2017. The above referenced product contains the active ingredient aminopyralid, triisopropanolamine salt which has not been previously registered for use in New York State. Dow AgroSciences, LLC withdrew this product application from review as acknowledged by Department letter dated February 7, 2007. At that time, the human health and non-target organism impact assessments and analytical methods review were completed with no objections to registration. However, pertinent information was lacking from the environmental fate data in order to conduct an assessment. The current application contained sufficient data to complete the environmental fate review and combined with the previous human health assessment and non-target organism assessment, the Department finds the new active ingredient application for aminopyralid, triisopropanolamine salt and the Milestone product (EPA Reg. No. 62719-519) acceptable for **registration** in New York State.

Milestone (EPA Reg. No. 62719-519) is labeled for control of susceptible broadleaf weeds, including invasive and noxious weeds in non-crop sites such as rangeland, permanent grass pastures, conservation reserve program (CRP) acres, non-cropland areas (such as roadsides), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites, without injury to most grasses. The label allows applications in seasonally dry flood plains, deltas, marshes, prairie potholes, or vernal pools which is defined as wetland areas in New York State. The label states that Milestone may be applied foliarly with all types of spray equipment normally used for ground and aerial applications. The maximum single application rate for all sites is 7 fluid ounces of product per acre or 0.11 lb. acid equivalent (aminopyralid) per acre per season.

Milestone contains 40.6% of the triisopropanolamine salt of aminopyralid which acts as a systemic post-emergence herbicide. Aminopyralid belongs to the pyridine carboxylic acid class of herbicides including picloram and clopyralid. Aminopyralid's



mode of action toward target weeds is not completely understood. However, the principle action of this group of compounds appears to effect cell wall plasticity and nucleic acid metabolism. Like clopyralid containing products, the Milestone label warns the user of impacts to susceptible broadleaf plants from use of aminopyralid treated compost or contact with manure or urine from animals that have grazed on treated areas.

The environmental fate review did conclude that the active ingredient had the potential to migrate to groundwater in sensitive areas with single source aquifers such as Nassau and Suffolk Counties in New York State. Therefore, Dow AgroSciences, LLC agreed to mitigate these concerns by prohibiting use of aminopyralid formulations in these counties. The Milestone product is also for use in designated wetland areas and as such can only be applied by a certified applicator in accordance with NYS wetlands regulations and Article 24 of the New York State Conservation Law. Therefore, the following items will be required in order to register aminopyralid formulations:

- 1) All products that contain aminopyralid or aminopyralid salts are to be registered as “restricted use” in New York State to ensure that only certified (trained) applicators apply the product in designated wetlands and comply with labeled restrictions for managing transport and use of the active ingredient in livestock manure and compost.
- 2) Labeling states “Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.”

Pursuant to the review time frame specified in ECL ' 33-0704.2, a registration decision date of April 6, 2018 was established. However, less time was required to complete the environmental fate assessment. The Department has completed review of all submitted documentation and the final assessments for impacts to human health, ecotoxicology, and environmental fate are included in the Appendix.

Enclosed for your record are copies of the Certificate of Pesticide Registration and stamped “Accepted for Registration” label for Milestone (EPA Reg. No. 62719-519). Please note the “yes” under the “restriction” column on the enclosed Certificate of Pesticide Registration and the “Classified for Restricted Use in New York State” stamp on the attached product labeling. As such, these products are restricted in their purchase, distribution, sale, use and possession in New York State. Furthermore, these products may only be purchased and used by a certified applicator in New York State.

The New York State Department of Environmental Conservation Regulations 6 NYCRR 326.3(a) state: “It shall be unlawful for any person to distribute, sell, offer for sale, purchase for the purpose of resale, or possess for the purpose of resale, any restricted pesticide unless said person shall have applied for, and been issued a commercial permit.” Should you require information to obtain a commercial permit, please contact the Pesticide Reporting and Certification Section, at (518) 402-8748.

The Pesticide Reporting Law within Environmental Conservation Law Article 33 Title 12 requires all certified commercial pesticide applicators to report information annually to the Department regarding each pesticide application they make. **Commercial pesticide retailers are required to report all sales of restricted pesticide products and sales of general use**

**pesticide products to private applicators for use in agricultural crop production.** If no sales are made within New York State, a report must be filed with the Department indicating this is the case.

If you need information relating to the Pesticide Reporting Law, or annual report forms, please visit the Department's website at: <http://www.dec.ny.gov/chemical/27506.html>, or call (518) 402-8748.

Please note that a proposal by Dow AgroSciences, LLC or any other registrant, to register a product that contains aminopyralid or salts of aminopyralid, and whose labeled uses are likely to increase the potential for significant impact on humans, non-target organisms, or the environment, would constitute a major change in labeling. Such an application must be accompanied by a new application fee and meet the requirements listed on our website. This information, as well as forms, can be accessed at: <http://www.dec.ny.gov/chemical/8528.html>.

Please contact the Pesticide Product Registration Section at (518) 402-8768, if you have any questions regarding this letter.

Sincerely,

/s/

Scott Menrath, P.E.  
Director  
Bureau of Pest Management

Enclosures

## **APPENDIX**

### **HUMAN HEALTH RISK ASSESSMENT:** (per Department Letter dated February 7, 2007)

The New York State Department of Health (DOH) Bureau of Toxic Substance Assessment reviewed the application and supporting data submitted by Dow AgroSciences LLC for aminopyralid and the formulated product Milestone. On an acute basis, the formulated product Milestone was not very toxic to laboratory animals by the oral, dermal or inhalation routes of exposure. This pesticide product was not very irritating to the eyes or skin (tested on rabbits) nor was it a skin sensitizer (tested on guinea pigs).

Because the active ingredient triisopropanolammonium salt of aminopyralid (also referred to as triisopropanolamine salt of aminopyralid) readily dissociates in an aqueous environment to aminopyralid, which is the herbicidally active component, toxicological studies conducted with aminopyralid (which are most of the studies discussed in this review) are relevant for the toxicological evaluation of this active ingredient salt. The acute toxicity studies on aminopyralid indicated that this active ingredient was not very toxic by the oral, dermal or inhalation exposure routes. This chemical was also neither a skin irritant nor a sensitizer. However, it was a severe eye irritant.

Aminopyralid caused some toxicity in chronic animal feeding studies. In a one-year dog feeding study, histopathological changes of the stomach characterized by slight diffuse hyperplasia and hypertrophy of the mucosal epithelium of the stomach, slight lymphoid hyperplasia of the gastric mucosa and slight mucosal inflammation were observed at doses of 967 milligrams per kilogram body weight per day (mg/kg/day) and 1,038 mg/kg/day for males and females, respectively. The respective no-observed-effect levels (NOELs) were 99.2 and 93.2 mg/kg/day. In a chronic mouse feeding study, no effects were reported at up to the highest dose tested, which was 1,000 mg/kg/day. In a chronic feeding study in rats, enlargement of the cecum portion of the large intestine and decreased body weights were observed at 500 mg/kg/day; the NOEL was 50 mg/kg/day. The USEPA Office of Pesticide Programs calculated an oral reference dose (RfD) for aminopyralid of 0.5 mg/kg/day, based on the NOEL of 50 mg/kg/day in the chronic feeding study in rats and an uncertainty factor of 100. This RfD value has not yet been adopted by the USEPA Integrated Risk Information System (IRIS).

The weight of evidence from developmental toxicity studies conducted on pregnant rats and rabbits indicates that aminopyralid caused limited toxicity to the offspring of rabbits but not rats. In rats, neither developmental nor maternal toxicity was reported at doses up to 1,000 mg/kg/day, the highest dose tested. In rabbits, one developmental toxicity study showed no developmental effects at the highest dose of aminopyralid tested, which was 500 mg/kg/day. Maternal toxicity, characterized by a decrease in body weight and food consumption as well as the appearance of ulcers/erosions in the glandular mucosa of the stomach, was reported at a maternal dose of 500 mg/kg/day; the NOEL was 250 mg/kg/day. In a second developmental toxicity study conducted on rabbits, a decrease in fetal body weight occurred at a dose of 520 mg/kg/day with a NOEL of 260 mg/kg/day. Maternal toxicity (decreased body weight, food consumption, mild uncoordinated gait) was reported at a dose of 260 mg/kg/day; the NOEL was 104 mg/kg/day. In a rat multi-generation reproduction study, neither reproductive toxicity nor parental toxicity was observed up to the highest dose tested, which was 1,000 mg/kg/day.

Aminopyralid did not cause oncogenic effects either in rat or mouse chronic feeding/oncogenicity studies. This chemical gave negative results in several genotoxicity studies. Based on the lack of evidence for carcinogenicity in rats and mice, the USEPA classified aminopyralid as “not likely to be a carcinogen.”

The USEPA established tolerances for aminopyralid residues in or on wheat grain at 0.04 parts per million (ppm) and wheat bran at 0.1 ppm. The chronic population adjusted dose (cPAD) for aminopyralid is 0.5 mg/kg/day and has the same basis as the RfD. The USEPA estimated that the chronic dietary exposure to aminopyralid would be less than 1% of the cPAD for each of the following population subgroups: general U.S. population; infants less than one year old; children one to two years old; children six to twelve years old. This chronic exposure analysis is based on the conservative assumptions that 100% of the crops would be treated with aminopyralid and that all treated crops would have aminopyralid residues at the respective tolerance levels.

The USEPA conducted an occupational risk assessment for exposure of pesticide handlers to aminopyralid as used in the Milestone product according to this product's label directions. For these workers, only exposure to the active ingredient through the inhalation route was assessed. The USEPA noted that no dermal toxicity endpoint was selected since no systemic toxicity from this exposure route was observed in a 28-day dermal toxicity study conducted on rats at the limit dose of aminopyralid, which was 1,000 mg/kg/day. For short- and intermediate-term inhalation exposures to these workers, the estimated margins of exposure (MOEs) ranged from 40,000 to 700,000. For these estimates, a 100% absorption from inhalation exposure was assumed. The NOEL used for estimating these MOEs was 104 mg/kg/day obtained from a rabbit developmental toxicity study on aminopyralid. Since no dermal toxicity endpoints were selected, the USEPA did not require an occupational risk assessment from potential post-application exposures of workers to aminopyralid. The USEPA, however, did conduct a post-application exposure assessment of children who could play in areas (e.g., recreational areas) that were treated with the Milestone product. The USEPA's estimated MOEs for children from hand-to-mouth transfer of aminopyralid residues, as well as from ingestion of pesticide-treated turfgrass and soil, were 61,000, 250,000 and 19,000,000, respectively. Generally, the USEPA considers MOEs of 100-fold or greater to provide adequate protection.

There are no chemical specific federal or New York State drinking water/groundwater standards for the triisopropanolammonium salt of aminopyralid, triisopropanolammonium itself or aminopyralid. Based on their chemical structures, these compounds fall under the 50 microgram per liter ( $\mu\text{g/L}$ ) New York State drinking water standard for “unspecified organic contaminants” (10 NYCRR Part 5, Public Water Systems). The New York State drinking water standard for the sum of “unspecified organic contaminants” and “principal organic contaminants” is 100  $\mu\text{g/L}$ .

The available information on aminopyralid and Milestone indicates that neither the active ingredient nor the formulated product was overall very acutely toxic in laboratory animal studies. Furthermore, aminopyralid was not carcinogenic in rats or mice, nor was it genotoxic. Although data from some chronic and developmental toxicity studies showed that this chemical has the potential to cause some toxicity at relatively high doses, the estimated risks to workers and the general public from use of the Milestone product are within the range that is generally considered acceptable. In addition, dietary exposure of the general public to aminopyralid is not expected to pose significant health risks.

**ECOLOGICAL RISK ASSESSMENT:** (per Department Letter dated February 7, 2007)

The following Ecological Risk Assessment of the new active ingredient aminopyralid was prepared by Department staff in the Division of Fish & Wildlife Bureau of Habitat. Aminopyralid exhibits low toxicity to virtually all test organisms for which data were submitted. With the exception of vascular plants, it is classified as practically nontoxic on an acute basis to all terrestrial and aquatic organisms used in the standard suite of pesticide toxicity testing. As with nearly any substance, chronic effects can be produced with extended exposure to high levels of aminopyralid. Eight mammalian genotoxicity and/or mutagenicity studies were submitted, seven of which produced negative results. The eighth showed induced chromosomal aberrations but only at concentrations toxic to the cells themselves.

Aerobic microbial metabolism and runoff and/or leaching will be the primary routes of aminopyralid dissipation from application sites. Many of the submitted fate studies were classified supplemental for a variety of reasons during USEPA review. The general conclusion based on the uncertainty in the fate and transport assessment, is that aminopyralid will be moderately persistent and mobile.

Aminopyralid is stable to hydrolysis and anaerobic metabolism. It degraded rapidly in laboratory aquatic photolysis studies with a half-life,  $T_{1/2}$ , of 0.6 days, it will likely do the same in shallow clear natural waters. Its soil surface photolysis  $T_{1/2}$  is 72 days. The single aerobic soil metabolism study submitted yielded useable results for only one of the five soils studied. In the soil yielding useable data, a silt loam, aminopyralid had a nonlinear  $T_{1/2}$  of 42 days. The observed time to 50% dissipation or  $DT_{50}$  was 50 to 60 days. The single submitted aerobic aquatic study, a water/sediment system study design, was classified supplemental because the sediment compartment became anaerobic shortly after study initiation.  $T_{1/2}$ s in the water layers ranged from 126 to 433 days. Aminopyralid is stable to anaerobic microbial metabolism. Terrestrial field dissipation  $T_{1/2}$ s for the entire sampled soil profile were 26 and 34 days at the California and Mississippi sites, respectively.  $DT_{90}$  for the same sites were 85 and 114 days. No degradation products were detected in either study.

**EXPOSURE MODELING:** Conservative screening assessments were conducted to estimate potential terrestrial and aquatic non-target organism aminopyralid exposures. Avian and mammalian terrestrial food item aminopyralid residues were estimated for six different food groups following use of Milestone at the highest label rate. Aminopyralid water concentrations were estimated from direct inadvertent aerial application of Milestone to surface waters and from a runoff event immediately following application. Aminopyralid toxicity values, basic chemical characteristics, and environmental fate  $T_{1/2}$ s derived in various studies were used as direct inputs in the Department's computer models. Comparisons of terrestrial food item residues and water concentrations to test organism toxicity thresholds were determined using AVTOX, MAMTOX, DIRECT APPLICATION, and PONDTOX (the runoff simulation) computer models.

**RISK ASSESSMENT:** As determined by the modeling results, no non-target organism toxicity thresholds were exceeded in the highly conservative scenarios simulated by the Department's computer modeling programs. There is the potential for secondary effects through habitat modification or damage with Milestone but the label includes extensive use precautions and warnings which, if followed, should prevent such effects.

## **ENVIRONMENTAL FATE RISK ASSESSMENT:**

The following groundwater environmental fate technical review was conducted by technical staff in the Bureau of Pest Management, for the new active ingredient application for aminopyralid. In each section that follows, the corresponding USEPA study Guideline number, the title of the study, and the EPA MRID No, will be included for reference.

### **1. Guideline No. 835.1220, Sediment and Soil Adsorption/Desorption Isotherm, MRID 46235732**

The adsorption/desorption study using aminopyralid was performed using the eight soils listed in the following table (M546 – M617). There were additional supplemental experiments performed to study the aminopyralid adsorption/desorption characteristics at different temperatures but because these supplemental experiments were non-guideline, the corresponding findings will not be discussed.

Soil Type	pH	% OC	Average Adsorption Koc
Silt loam (M546), Greece	7.8	1.0	4.49
Clay (M549), UK	7.5	3.2	1.05
Silty clay loam (M568), Manitoba, Canada	7.8	3.9	7.39
Sand (M579), Bedfordshire, England	6.6	1.6	4.59
Loam (M584), Charentilly, France	6.1	1.0	7.54
Clay (M599), Mississippi	6.9	1.5	2.33
Clay loam (M616), North Dakota	4.8	3.6	19.95
<b>Loamy sand (M617), North Carolina</b>	<b>4.5</b>	<b>0.6</b>	<b>24.3</b>

Because the loamy sand (M617) from North Carolina (bolded in table) has pH and %OC values more similar to Riverhead soil, the corresponding Koc (24.3) will be used in subsequent LEACHP modeling.

Based on the results of this study, the study author concluded that aminopyralid is potentially mobile in all soil types tested. Under the McCall Classification (Swann et al., 1983), based on Koc values ranging from 1.05 to 24.3, aminopyralid is expected to be highly mobile in all soils tested.

This study was found to be supplemental because no soil was used that had its organic matter at < 1%.

### **2. Guideline No. 835.2120, Aqueous Hydrolysis, MRID 46235726**

Aminopyralid was found to be stable in water with no transformation products detected at pH 5, 7, and 9, which are at environmentally relevant acidic, neutral and alkaline pH. This indicates that hydrolysis is not a significant pathway for the environmental transformation of aminopyralid in water. The study was found to be acceptable.

### **3. Guideline No. 835.2240, Aqueous Photolysis, MRID 46235727**

The photolytic half-life of aminopyralid was estimated to be 0.6 days at 40° N. latitude. Oxamic acid, malonamic acid, which, together with four or more unidentified acid amides (two or three carbons in length) in total reached a maximum concentration of 68.8% of the initially applied parent on day 12 post treatment. As a result, aminopyralid should be regarded as being susceptible to phototransformation in water at environmentally relevant wavelengths of light. This study was classified as supplemental because not all degradation products over 10% were individually identified and quantified in all sampling intervals.

### **4. Guideline No. 835.2410, Photodegradation in Soil, MRID 46235728**

The soil used in this study was a silt loam from Germany with pH 7.7 and at 1.0 %OC. The predicted environmental photolytic half-life of aminopyralid in soil, which was derived from the measured half-life in the laboratory under the xenon arc lamp, was calculated to be 72.2 days. With the exception of non-extractable residues and volatiles such as CO<sub>2</sub>, there were no major transformation products detected. This study indicates that the photodegradation of aminopyralid on soil is slow and would not be a significant pathway in the overall environmental degradation of aminopyralid. This study was classified as supplemental because of loss in material balance of the irradiated samples and concurrent loss and variability in material balance in the dark control samples.

### **5. Guideline No. 835.4100, Aerobic Soil Metabolism, MRID 46235729**

Five North American soils were used in this study and the properties of these soils are listed in the following table. The amount of aminopyralid that was applied to the soils, which correspond to the listed half-lives ( $t_{1/2}$ ) was equivalent to the maximum label rate of 0.11 lbs/ai/acre/season, and with the exception of CO<sub>2</sub>, there were no major or minor transformation products detected.

Soils Type	pH	%OC	$t_{1/2}$	$r^2$
<b>Holdrege silt loam, Kansas</b>	<b>4.6</b>	<b>1.5</b>	<b>38.7</b>	<b>0.9839</b>
Regent loam, Manitoba Canada	7.5	3.4	17.0	0.9951
Manning sandy loam, North Dakota	7.3	1.2	19.4	0.9829
Barnes clay loam, North Dakota	4.8	3.6	330.1	0.7952
Houston black clay, Texas	7.5	3.4	6.1	0.9481

This study was classified as supplemental and it is noted in the EPA DER that, "...only the Holdrege silt loam provides a useable half-life." The other soils' material mass balances were either low or variable and the data from those soils cannot be used quantitatively. It is also noted that the method used for extraction was not harsh enough to ensure with certainty that the chemicals (radioactivity) that were not extracted, and left behind in the soils, were truly non-extractable residues. As a result, that half-life (38.7 days, bolded text) will be used in subsequent LEACHP modeling.

### 6. Guideline No. 835.4400, Anaerobic Aquatic Metabolism, MRID 46235730

The anaerobic biotransformation of aminopyralid was studied in two pond water/sediment systems as listed in the following table:

Water Soil Type and Origin	Water PH	Water %OC (ppm)	Sediment pH	Sediment %OC	t½ Water and System
Pond water/sediment (sandy loam), North Dakota	7.9	37.2	8.1	4.9	Stable
Flooded soil system (Cuckney soil, sand), Bedfordshire, England	7.0	0.0	6.0	1.3	Stable

Aminopyralid was stable in each entire system and no major transformation products were observed, and observed minor transformation products were CO<sub>2</sub> and unextracted residues. This indicates that the transformation of aminopyralid in an anaerobic water/sediment system will not be a major environmental pathway for aminopyralid. This study was classified as acceptable.

### 7. Guideline No. 835.4300, Aerobic Aquatic Metabolism, MRID 46235731

The aerobic biotransformation of aminopyralid was studied in three pond water/sediment systems and the properties of these systems are listed in the following table:

Water Soil Type and Origin	Water PH	Water %OC (ppm)	Sediment pH	Sediment %OC	Water t½	r <sup>2</sup>	System t½	r <sup>2</sup>
Sediment (sand)/water system, Haut Languedoc, France	5.9	2.4	6.1	0.8	126.0	0.6865	866.4	0.6017
Sediment (silt loam)/water system, Altogarda, Italy	8.2	1.5	7.9	12.0	239.0	0.6423	462.1	0.6704
Sediment (sandy loam)/water system, North Dakota	7.9	37.2	8.1	6.2	433.2	0.5961	990.2	0.6560

Aminopyralid degraded extremely slowly to form non-extractable residue from 3 to 15% of the original applied at 101 days (study termination) post application. A few minor degradates (< 1% with an exception of one at 3% in one replicate) were detected. From 82.6 to 90.5% of the originally applied parent compound was present at study termination. This study was classified as supplemental because the three systems were anaerobic (mostly to strongly reducing water and sediment phases) throughout most of the study.

### 8. Guideline No. 835-6100, Terrestrial Field Dissipation, MRID 46235734

The soil dissipation of aminopyralid was conducted in bare plots at two sites in Mississippi and California. Approximately 25% more than the maximum labeled amount of the aminopyralid was used in this study (0.136 vs 0.11 lbs/ai/acre/year). Soil samples were taken at 0, 7, 14, 30, 60, 90, 120, and 180 days post-treatment to a depth of 0 – 90 cm. The following table lists the study findings:

Soil Type and Location	t½ in Surface Soil (Days)	t½ in Total Soil Profile (Days)	Major Transformation Products	Dissipation Routes
Boscket silty loam, Mississippi	32.1	34	na	Microbial degradation
Hisperia sand loam, California	20.0	85	na	Microbial degradation

The residues of aminopyralid were primarily detected in the top 0 -15 cm soil layers at Mississippi and in the top 0 – 30 cm soil layers, with detections through the 75 – 90 cm layer at California. It was noted in the DER that, “This study was classified as supplemental. Both temporal and inter-replicate data variability (especially at times 0, 15, and 57 days at the Mississippi site and 9 days at the California site) make the half-lives of questionable value. Also, the storage stability study was in progress at the time of this report, and those samples were not stored for a length of time equal to or exceeding the length of storage for test samples.”

Aminopyralid primarily detected in top 0 -15 cm.						
Site	Day 0	Day 8	Day 15	Day 29	Day 183	t½ (Days)
Mississippi	77.9	47.4	92.6	35.8	< LOQ	32.1

Aminopyralid primarily detected in top 0 – 30 cm.					
Site	Day 0	Day 9	Day 22	Day 91	t½ (Days)
California	64.8	86.2	48.3	< LOQ	20

It is noted in the DER that both temporal and inter-replicate data variability make the half-lives of questionable value but the Mississippi half-life does agree with what was determined to be the best half-life from the aerobic soil metabolism study (38.7 days), which will be used in the following LEACHP modeling section.

### 9. LEACHP Modeling of Aminopyralid

As was noted in the previous relevant sections, the following inputs will be used for the LEACHP modeling. There were no major degradates in the aforementioned sections so only the parent aminopyralid will be modeled.

New Active	Water Solubility <sup>1</sup> (mg/L)	Maximum Seasonal Application Rate (lbs ai/acre/yr)	Aerobic Soil Half-Life (Days)	Adsorption Koc (ml/g)
Aminopyralid	212	0.11	38.7	24.3

Aminopyralid was LEACHP modeled using the Riverhead, NY soil series and the upstate Howard soil series. According to the two LEACHP model profiles, there is a maximum output from the modeling using the Riverhead soil series at 6.32 µg/L (ppb). On the other hand, the maximum model output for the Howard soil series is at 5.35E-2 µg/L. As a result of this LEACHP modeling output, and concerns about possible Long Island groundwater impact, this reviewer finds that aminopyralid should not be registered for use on Long Island.

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<sup>1</sup> The water solubility of aminopyralid at pH 5 (pH of Riverhead soil) is listed in the table that is found on page 5 of 21 in the DER under MRID 46235727.