



---

2018

---

Bureau of Agrichemical  
Management  
Annual Report

---



September 2018



# Table of Contents

- Bureau Highlights.....3**
  - Financial Overview ..... 3
  - Agrichemical Management Fund (ACM Fund)..... 3
  - Agricultural Chemical Cleanup Program Fund (ACCP Fund) ..... 4
  - Revenue Collected for Other Agencies and Programs ..... 4
  - Direction for the Coming Year..... 4
- Strategic Planning .....5**
  - Goal: Operational Excellence..... 5
  - Goal: Stakeholder Collaboration..... 5
  - Goal: Workforce and Employee Development ..... 6
- RevEx Implementation ..... 6**
  - Agricultural Chemical Cleanup Program (ACCP)..... 6
  - Pesticide Product Registration ..... 6
  - Fertilizer ..... 6
  - Soil and Plant Additives ..... 6
  - Commercial Animal Feed ..... 7
  - 2018 ACM Organization Chart..... 7
- Pesticide Special Registrations and Use Authorizations ..... 8**
  - Program Activities..... 8
- Targeted Sampling ..... 9**
  - Program Activities..... 9
- Program Updates .....11**
  - Feed Tonnage Project..... 11
  - Operational Excellence Updates..... 11
  - Groundwater Research Program ..... 12
  - Neonicotinoids Report..... 13
  - School Integrated Pest Management (IPM) Program ..... 14
  - Fertilizer Research Council..... 14
- Compliance and Enforcement ..... 16**
  - Program Activities..... 16
  - Interesting Cases 2018..... 17

<b>Program Activity Data</b> .....	<b>18</b>
<b>ACM Programs</b> .....	<b>20</b>
ACCP - Remediation .....	20
ACCP – Reimbursement.....	20
ACCP – Spills .....	20
Environmental Quality Protection Programs.....	20
Containment.....	22
Pesticide Manufacturer and Labeler Licensing, Fees, Records, and Reporting .....	22
Pesticide Product Special Registrations and Use Authorizations .....	22
Commercial Pesticide Applicator Business Licensing, Records, and Notifications .....	22
Pesticide Restricted Use Dealers and Distributors Licensing and Sales Records .....	22
Individual Commercial Pesticide Applicator Licensing and Inspections .....	23
Commercial and Private Pesticide Applicator Certification .....	23
Reciprocal Certification.....	23
Temporary Certification.....	23
Private Pesticide Applicator Records.....	23
Associated Certification and Licensing Programs:.....	23
Agricultural Worker Protection .....	24
Clean Sweep Program.....	24
Feed License and Tonnage .....	24
Feed Certificates of Free Sale.....	24
Feed Inspections and Sampling .....	24
Fertilizer License .....	24
Fertilizer Tonnage.....	24
Fertilizer Permits .....	25
Fertilizer sampling.....	25
Investigation and Compliance Section.....	25
Bureau of Laboratory Services (Support Service) .....	25

## Bureau Highlights

The Agrichemical Management (ACM) Bureau administers Wisconsin's regulatory and enforcement programs associated with commercial animal feeds, fertilizers, pesticides and other plant production and pest control materials used in agricultural, urban and industrial settings.

During 2018, the Bureau's high priority work included implementing its strategic plan and changes to programs as a result of the revenue and expenditure (RevEx) project, undertaking targeted well sampling, conducting a feed tonnage outreach effort and implementing a new licensing system for three pesticide licenses in addition to its routine regulatory, environmental and enforcement work. These projects are highlighted, among others, in this annual report. The report also provides a financial overview, program statistics, and enforcement and compliance actions.

### FY2018 FINANCIAL HIGHLIGHTS

#### REVENUES

\$7,871,635 – ACM Fund  
 \$659,379 – Grants  
 \$759,467 – ACCP Fund

#### EXPENSES

\$5,936,313 – ACM Programs  
 \$677,400 – Other Programs  
 \$513,625 – ACCP Fund

### Financial Overview

This financial overview covers the state fiscal year 2017-2018, which ran from July 1, 2017 through June 30, 2018. Federal grants operate on a different cycle (October 1, 2017 through September 30, 2018) than the state fiscal year; this report covers those portions of the federal grants that occurred during the state fiscal year. The Department of Natural Resources (DNR) Environmental Fund supports Clean Sweep grants to local governments (\$750,000 annually) and the revenue and expenditures for these grants are not included in any of the five tables found below.

The primary sources of revenue for the ACM Bureau are industry fees for licenses, permits, registrations and tonnage under the feed, fertilizer, soil and plant additive (SPA), lime, and pesticide programs. In addition, federal grants provide some funding to cover annual program expenses. The ACM Bureau recognizes these important partnerships with industry and the federal government and works hard to maximize the use of this funding for the benefit of the industry, consumers, and the environment.

### Agrichemical Management Fund (ACM Fund)

The ACM Fund is the primary source of funding for all the regulatory, investigative and enforcement aspects of the ACM Bureau, including staff, supplies and services, and the regulatory laboratory. Table 1 shows the ACM Fund balance sheet resulting from industry fee revenue and ACM Bureau expenditures. Revenue decreased by over \$1 million in FY2018, as expected, as a result of implementing RevEx fee changes.

**Table 1: ACM Fund Balance Sheet, FY 18**

	Revenue	Expenses	Total
Opening Balance	\$10,625,325		
Revenue Total	\$7,871,635		
Available Funds	\$18,496,870		
Expenditures			
ACM Program		\$5,936,313	
Other Programs		\$677,400	
Expenditures Total		\$6,613,713	
FY 18 Ending Balance			\$11,883,157

In addition to industry fees, the ACM Bureau programs are also supported by federal grants from the United States Environmental Protection Agency (EPA) and the United States Food and Drug Administration (FDA). The EPA pesticide grant is the largest grant and is for implementing, investigating and enforcing federal pesticide use laws and regulations. Our cooperative efforts with FDA provide funds for inspecting certain establishments producing higher risk medicated

feed and allows for monitoring the affected industries, including feed manufacturers, ingredient transporters and ruminant animal feeders. Table 2 is a summary of the total grant revenues collected to operate the programs within the ACM bureau.

**Table 2: Grant Revenue, FY 18**

Source	Revenue
EPA Pesticide Grant	\$643,975
FDA Medicated Feed Grant	\$13,404
Total	\$657,379

### Agricultural Chemical Cleanup Program Fund (ACCP Fund)

The ACCP Fund is used to make reimbursement payments for agricultural chemical spill cleanups. Table 3 shows the money collected and deposited into the ACCP Fund from industry surcharges. As can be seen in Table 3, the fund balance is growing as revenues continue to outpace expenditures. However, revenue did decrease significantly as a result of implementing the ACCP fee holiday.

**Table 3: ACCP Fund, FY 18**

	Revenue	Expenditures	Total
Opening Balance	\$6,305,219		
Total Revenue	\$759,467		
Reimbursements		\$513,625	
Other		\$0	
Closing Balance			\$6,551,061

### Revenue Collected for Other Agencies and Programs

The ACM Fund is statutorily required to support several programs that are not part of the ACM Bureau. Table 4 shows non-ACM Bureau programs that are supported by fees paid into the ACM Fund.

**Table 4: ACM Fund Expenditures for Non-ACM Programs, FY 18**

Non-ACM Program	Amount
Animal Health Division	\$333,700
Discovery Farms	\$249,800
Ag in the Classroom	\$93,900
Total FY16-17 Non-ACM Program Expenditures	\$677,400

The ACM Bureau is also directed by statute to collect fees for several other agencies and distribute the funds to them each year. Table 5 shows the fee revenue collected on behalf of – and transferred to – other agencies.

**Table 5: Non-ACM Program Revenue, FY 18**

Program	Revenue
DNR-- Environmental Fund	\$1,574,032
UW – Fertilizer Research Council	\$314,772
UW – Nutrient Management Program	\$185,137
UW – Lime	\$11,763
DATCP Weights and Measures	\$153,088

### Direction for the Coming Year

As shown in Table 1, the ACM Fund's annual revenues continued to exceed expenditures. Several consecutive years of revenue surpluses have resulted in a large fund balance. To help minimize large annual surpluses and ongoing fund balances in the future, the Bureau undertook its RevEx project to comprehensively review and adjust revenues and expenditures to ensure in the future fee levels and revenues are appropriate and properly aligned with bureau expenditures. During 2018, the initial changes to the fees and surcharges took effect and as expected, revenue did drop in multiple accounts. The ACCP fund balance will diminish over time as the fee holiday was extended for another year. The ACM fund balance will build more slowly as a result of those fee changes. More information about the status of the implementation of RevEx changes is provided later in this report.

## Strategic Planning

From May through August 2015, the ACM Bureau management team undertook a planning process to identify strategic goals and objectives that will help guide and focus the Bureau's activities over the next three years. The strategic plan helps the Bureau use its limited financial and human resources in the most critical areas and on the most important tasks as it strives to meet its mission even more efficiently and effectively in the future.

As a result of the planning process, the ACM Bureau adopted three strategic goals. All staff, programs, sections, and management in the Bureau will use the annual work planning process to help align their work activities to meet these goals over the next three years. Progress was made towards each strategic goal in 2018. Several activities are highlighted later in this report. The goals are repeated here for reference.

### Goal: Operational Excellence

The ACM Bureau staff will enhance its operational functions through effective programs, efficient use of resources, expanded use of technology, and process improvements.

- TIN – Technology Infrastructure Needs: Project to continue to make administrative processes more efficient and to ensure programs are meeting statutory and rule requirements. The Bureau has identified an IT Committee who meet once a month to review technology needs and provide information and recommendations to the management team. Technology updates are distributed biweekly, addressing system updates and program solutions such as the WILMS-accessible Clean Sweep applications and the Tablet Pilot testing tablets for completing Dealer Records inspections in the field.
- Technology: Implement technology effectively in the office and the field by identifying and deploying the most appropriate tools for each function and providing adequate training on how to use them. The Bureau continues to work more in SharePoint and has launched a forward-facing site for counties to submit grant applications for Clean Sweep online. A pilot test was started to complete the Dealer Records inspection in the field, with forms that auto-populate fields across a number of documents and pull compliance language from a list to ensure consistency and allow efficient completion of the inspection.
- Work Planning and Program Evaluations: Continue the work planning and program evaluation processes to identify and implement key program and process improvements. The Bureau's management team met in December 2018 to review work planning. The Bureau continues to emphasize planning for IT, outreach, legal and Bureau of Lab Services in annual work plans. Program staff added program evaluation, rule revisions and training to individual work plans.

### Goal: Stakeholder Collaboration

The ACM Bureau will increase its collaboration with its internal staff, partners and external stakeholders to maintain credibility and enhance program success.

- Relevancy: Strengthen the relevancy of the ACM Bureau's programs and activities
- Communication: Enhance communication with internal and external stakeholders
- Collaboration: Identify new and enhance existing collaborative initiatives with industry and other partners.

The Bureau continued to work extensively with industry in 2018 related to responding to information needs for RevEx recommendations in the biennial budget process. Following the signing of the 2017 budget bill, which included virtually all RevEx recommendations, the Bureau has provided outreach to industry on implementation of the budget changes.

## ACM BUREAU MISSION

*Protect human health and the environment, promote agriculture and assure a fair marketplace by mitigating risks and preserving the benefits of regulated products.*

## Goal: Workforce and Employee Development

The ACM Bureau will recruit, invest in, develop and manage its workforce to ensure skilled, adaptable employees who can lead critical programs and who have opportunities to grow professionally.

- **Training:** Identify training needs and pursue opportunities to enhance skills, improve knowledge and develop staff professionally. The Division of Agricultural Resource Management has added Training to our internal SharePoint site, expediting training request routing in response to staff requests. ACM staff continue to attend local and national training opportunities.
- **Recruitment:** Partner with human resources and use every available resource to identify, recruit and hire the most qualified people. In addition, the Bureau evaluates all vacant positions to determine if the position needs to be restructured to ensure current and future needs are met. Nearly all vacant positions were restructured before recruitment and hiring. In total three positions were hired in 2018. Additionally, one staff was able to move into a new supervisory position within the Division.
- **Retention:** Foster a culture where it is expected and advantageous for employees to identify and pursue personal and professional growth and enrichment opportunities.

## RevEx Implementation

The 2017-19 state budget contained changes to Wisconsin's pesticide, fertilizer and feed licensing fees and structures. These changes resulted from the RevEx Project, the ACM Bureau's effort to align the Bureau's revenues and expenditures to be more fair, efficient and effective. Staff provided significant outreach to the pesticide, feed and fertilizer industries and licensees on the law changes affecting them prior to the changes taking effect. Outreach in 2018 included direct mailings, webinars, news articles, website updates and presentations at industry conferences. The status of implementation of the major changes to law are summarized below. More information and a complete list of current fees is available online at

[https://datcp.wi.gov/Pages/Programs\\_Services/RevEx.aspx](https://datcp.wi.gov/Pages/Programs_Services/RevEx.aspx).

## Agricultural Chemical Cleanup Program (ACCP)

- Fee holiday
  - There was no surcharge on pesticide products and pesticide & fertilizer license fees in 2018, or the ACCP portion of fertilizer tonnage sales beginning on July 1, 2018.
  - The ACCP fund balance remained above \$1.5 million on May 1, 2018 and the surcharge holiday continued into 2019.
- Facilities and farmers were able to take advantage of the **lifetime reimbursement** increase to \$650,000 for any costs incurred in 2018. Several ACCP participants began exploring this option with the program.
- All agribusiness facilities are eligible for ACCP reimbursement.

## Pesticide Product Registration

- In 2018, **pesticide product registration** successfully moved from fees based on sales and product types to a flat \$500/product. This transition process included one final fee reconciliation under the old fee structure. Feedback from pesticide registrants was very positive about the change to the fee structure.
- The department collected a \$250 penalty for 2 **unregistered 25(b) products** found in the marketplace.

## Fertilizer

- Fertilizer licenses were issued on the October 1-September 30 cycle for the first time.
- Product permits were added, maintained or discontinued when the licenses were renewed.

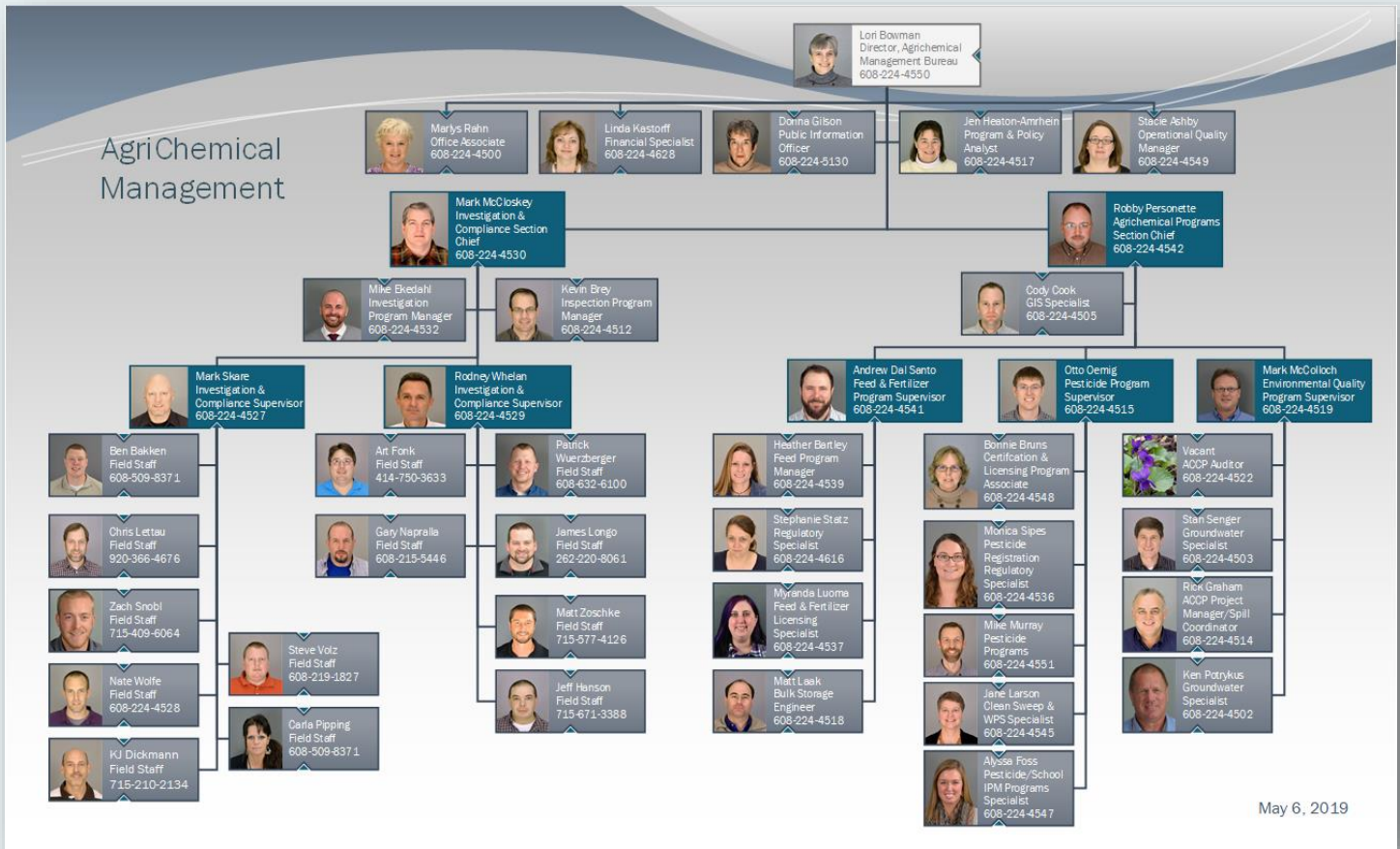
## Soil and Plant Additives

- Soil and Plant Additive licenses were issued on the October 1-September 30 cycle for the first time.
- Tonnage reporting year changed from Jan. 1-Dec. 31 to July 1-June 30
- Product permits were added, maintained or discontinued as needed when licenses were renewed.

# Commercial Animal Feed

- Tonnage fee structure changed
  - New minimum \$50 fee for production or distribution less than 200 tons/year, beginning with tonnage reporting for Jan. 1, 2018-Dec. 31, 2018
  - Tonnage fees now required for sales into or within Wisconsin
  - No longer need to indicate on sales receipt or invoices whether the tonnage fee was paid
- Exempt buyers and exempt buyers credit eliminated
- Out-of-state sales credit eliminated

## 2018 ACM Organization Chart





## Pesticide Special Registrations and Use Authorizations

Pesticide products are registered and labeled for specific uses and must be used according to label directions. Ch. ATCP 30, Wis. Admin. Code provides additional restrictions for certain pesticide products, which include prohibited pesticides; special use permits for pesticides; and pesticide use restrictions and reporting. Under the Pesticide Special Registration Program included in ATCP 29, the department processes various types of requests for pest control: Federal Section 18 emergency exemptions, Wisconsin emergency use permits and special local need (SLN) registrations. DATCP also receives requests to conduct experimental research with pesticides in Wisconsin. If a request is authorized, pesticide users must obtain, and have in their possession at the time of application, authorized special use directions to legally use pesticide products for the requested purposes.

### Program Activities

In 2018, Wisconsin issued nine special local need registrations. Eight were continuing registrations and one was a new registration. The nine special local need registrations issued are below:

<i>Product Name</i>	<i>Active Ingredient(s)</i>	<i>FIFRA Section</i>	<i>Labeling ID Number</i>	<i>Company</i>	<i>Site(s) of application</i>	<i>Pest Problem(s)</i>	<i>Start Date</i>	<i>Expiration Date</i>
Avipel Dry (Hopper Box)	9, 10-Anthraquinone	24(c)	WI-150005	Arkion Life Sciences	Field and Sweet Corn	Sand Hill Cranes	08/20/2018	07/30/2019
Bravo Ultrex	Chlorothalonil	24(c)	WI-180003	ADAMA	Potatoes	Late blight, Early blight, Botrytis vine rot, Black dot	04/13/2018	12/31/2022
Bravo WeatherStik	Chlorothalonil	24(c)	WI-180004	ADAMA	Potatoes	Late blight, Early blight, Botrytis vine rot, Black dot	04/13/2018	12/31/2022
Bravo WeatherStik	Chlorothalonil	24(c)	WI-180006	ADAMA	Ginseng	Alternaria and gray mold	04/19/2018	12/31/2022
Bravo ZN	Chlorothalonil	24(c)	WI-180005	ADAMA	Potatoes	Late blight, Early blight, Botrytis vine rot, Black dot	04/13/2018	12/31/2022
Dual Magnum	S-Metolachlor	24(c)	WI-180001	Syngenta	Multi-Vegetables	Broadleaf and grass weeds	03/27/2018	12/31/2022
Mustang Maxx	Zeta-Cypermethrin	24(c)	WI-180008	FMC Corporation	Tart Cherries	Spotted Wing Drosophila	06/18/2018	12/31/2020
Stinger	Clopyralid	24(c)	WI-180002	Dow AgroSciences	Cranberries	Broadleaf weeds	04/13/2018	12/31/2022
Topsin M WSB	Thiophanate-methyl	24(c)	WI-180007	United Phosphorus Inc	Ginseng	White mold, Rhizoctonia root and Crown rot, Cyindrocapon root rot	05/10/2018	12/31/2022

In 2018, EPA authorized one Section 18 emergency exemption. This is a continuing registration. The Section 18 emergency exemption is below:

<i>Product Name</i>	<i>Active Ingredient(s)</i>	<i>FIFRA Section</i>	<i>Labeling ID Number</i>	<i>Company</i>	<i>Site(s) of application</i>	<i>Pest Problem(s)</i>	<i>Start Date</i>	<i>Expiration Date</i>
Tough 5 EC	Pyridate	18	18WI01	Belchim Crop Protection	Double-Cut Spearmint, Peppermint	Broadleaf weeds	05/18/2018	08/31/2018

In 2018, the Pesticide Special Registration Program received six requests for conducting experimental research with pesticides in Wisconsin. All six of the requests were authorized by the EPA to conduct research in Wisconsin.

For a list of active Section 18 emergency exemptions and Section 24(c)/SLN registrations currently authorized in Wisconsin, visit the agency [web page](#).

## Targeted Sampling

The Targeted Sampling Program tests private wells located in or near agricultural areas around the state to assess the occurrence of pesticides in private drinking water. A targeted sampling approach is used to select private drinking water wells that are at an elevated risk of being impacted by agricultural chemicals. Testing is free of charge to homeowners and results are provided to homeowners upon receipt of the data. Data is evaluated and the occurrence of pesticides in private water supplies statewide is shared with other ACM Bureau regulatory programs, and other regulatory agencies (DHS, EPA, and DNR).

## Program Activities

During 2018, ACM staff collected samples from private wells located within or near agricultural areas to evaluate impacts to drinking water. Samples are collected using standard protocols and hand delivered to the DATCP Bureau of Laboratory Services (BLS) for analysis of pesticides and nitrate. Between June and August, staff collected a total of 101 samples from agricultural areas spanning 10 counties. Approximately half of the samples were from areas not sampled in prior years, and half were from wells tested five years earlier. Figure 1 shows all well locations sampled under the program since 2010 and wells sampled in 2018.

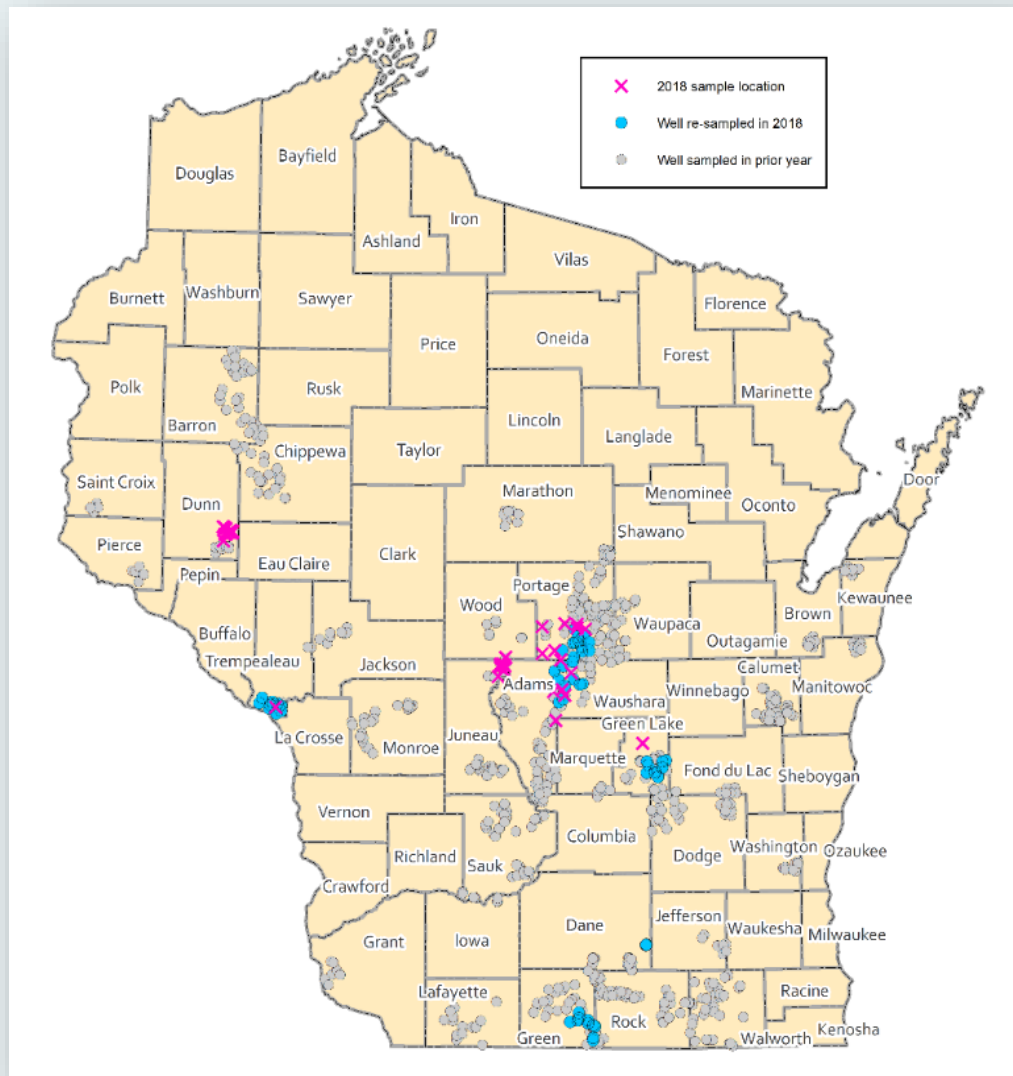


Figure 1 - Locations of wells sampled for the first time in 2018 (pink X) and wells sampled a second time in 2018 after five years (●). Grey dots (●) show all historic locations since 2010.

Nitrogen (as nitrate and nitrite) was found in 91 percent of samples collected for the 2018 targeted sampling program, and exceeded the 10 mg/L ES in 80 of the 101 samples. Because wells within agricultural areas were selected for testing, nitrogen exceeded the drinking water quality standard in the majority of wells sampled. Comparatively, results from the 2017 statewide random sampling survey found that approximately 8 percent of wells exceeded the ES for nitrate statewide (Wisconsin DATCP, 2017).

A total of 30 different pesticide compounds (parent compound and metabolites) were detected in one or more of the 101 wells sampled in 2018. The four most frequently detected compounds are metolachlor ESA, alachlor ESA, de-ethyl atrazine, and metolachlor OA. These compounds are metabolites of metolachlor, alachlor and atrazine. The most frequently detected parent compounds include atrazine, metribuzin, clothianidin, imidacloprid, metalaxyl, thiamethoxam, and metolachlor. Results for the most frequently detected compounds are summarized below.

Compound Detected	Range Detected (µg/l)*	Detections			NR 140
		Total	>=PAL	>=ES	PAL / ES
Nitrogen (NO3+NO2 as N)	0.543 – 52.2 mg/l	92	89	80	2 / 10 mg/l
Metolachlor ESA	0.053 – 20	88	0	0	260 / 1,300 **
Alachlor ESA	0.0812 – 9.08	80	8	0	4 / 20
De-Ethyl Atrazine	0.051 – 2.25	64	***	***	***
Metolachlor OA	0.28 – 18.3	53	0	0	260 / 1300
Atrazine	0.0514 – 0.514	34	34	1	0.3 / 3.0 ***
Metribuzin	0.086 - 0.0785	34	0	0	14 / 70
Clothianidin	0.056 – 2.04	33	--	--	Not Established
Imidacloprid	0.0556 – 2.19	33	--	--	Not Established
Metalaxyl	0.0527 – 0.749	31	--	--	Not Established
Thiamethoxam	0.057 – 2.78	31	--	--	Not Established
Metolachlor	0.0601 – 5.61	27	0	0	10 / 100

\* µg/l (micrograms per liter, equivalent to parts per billion)

\*\* The NR 140 PAL and ES for the sum of metolachlor ESA + OA is 260 and 1,300 µg/l

\*\*\* The NR 140 PAL and ES for the sum of parent atrazine and three breakdown products is 0.3 and 3 µg/l.

The ES was exceeded for atrazine in one sample based on the sum of atrazine plus atrazine metabolites.

Though nitrogen frequently exceeded the groundwater quality standard for the 2018 targeted samples, few exceedances were observed for pesticides. Potential health effects for pesticide compounds with no established drinking water quality standards are unknown. Additionally, potential health effects from the combination of nitrogen and multiple pesticide compounds are unknown. Pesticides detections for the Targeted Sampling program are reported to DNR, and DATCP works with DNR and DHS to periodically establish drinking water standards for constituents of concern.

Ch. NR 140 = Chapter NR 140, Wis. Administrative Code

ES = Enforcement Standard (per ch. NR 140)

PAL = Preventative Action Limit (per ch. NR 140)

## Program Updates

### Feed Tonnage Project

Wisconsin's 2018-19 biennial budget included statutory changes to the annual commercial feed tonnage and inspection fee reporting requirements. The changes included:

- A minimum inspection fee adjustment from \$0.25/ton, to \$50.00 for 0-200 tons or \$0.25/ton for 201 or more tons, whichever is greater;
- Elimination of the exempt buyer status licenses applicable to entities distributing large quantities of commercial feed out of state which would have otherwise been reportable;
- More clearly identifying the responsible entity for reporting as the first to distribute a commercial feed in or into Wisconsin;
- Elimination of all credit reporting (prepaid purchases, exempt buyer sales/purchases, and out of state distributions), by way of the less ambiguous responsibility requirement; and
- Removal of the requirement for invoices to display whether the inspection fees were or were not paid.

To make licensees aware of the above changes, the Feed Program created a series of new outreach materials, and updated the existing documents. In November 2017, the program kicked off the efforts with a mailing identifying the statute revisions, and that more information would soon be available. Next, the program initiated a number of communications including in-person visits, conference calls, mailings, and a webinar to share the changes and seek additional insight into what types of outreach materials, if any, would need to be developed.

The Feed Program also updated the Tonnage and Inspection Fee Report form to capture the new requirements, while utilizing fillable form and auto-calculating capabilities of Microsoft® Excel®. Licensees were instrumental in testing out the form and providing feedback to ensure the new report would not break, and would be helpful to the users. The electronic form remains optional to use, with a standard hard-copy form as the primary version available.

As the license renewal and tonnage reporting season wraps up, the Feed Program is compiling feedback from licensees, and will assemble it for sharing with a workgroup compiled of DATCP staff, industry association representatives, and commercial feed licensees. Over the next 18 months, the workgroup will assess the reporting challenges, consider new outreach opportunities to combat challenges, and deliberate on a need to propose clarifying statutory changes.

### Operational Excellence Updates

The ACM Bureau Staff will enhance its operational functions through effective programs, efficient use of resources, expanded development and use of technology, and process improvements.

1. TIN - Technology Infrastructure Needs: Project to continue to make administrative processes more efficient and to ensure programs are meeting statutory and rule requirements.
  - a. Fully staff the TIN team throughout the project's phases.
    - i. Staff identified for the IT Team.
  - b. Implement a TIN communication plan.
    - i. Technology Updates biweekly for bureau staff.
    - ii. Division Administrator kept up-to-date on technology needs.
  - c. Update the analysis and documentation of current state, as changes are implemented.
    - i. Will be updated with program evaluations, as scheduled.
  - d. Update future state analyses developed in the BAM-IT Project and document additional operational business requirements, processes, and procedures.
    - i. Will be updated with program evaluations, as scheduled.
  - e. Develop and implement new system(s), including documentation and training of procedures and processes.
    - i. WILMS-accessible site for Clean Sweep grant applications.
    - ii. Tablet Pilot Project testing tablets with SharePoint/InfoPath forms to complete Dealer Records Inspections (DLR) in the field. (March 2019)
  - f. Develop and implement plan to manage TIN long term, including staff resources needed.

- g. Plan for possible case-tracking failure prior to TIN finalization.
    - i. Paper on technology infrastructure needs emphasizing end-of-support for Case Tracking and Pesticide Applicator Certification System (PACS).
  - h. Continue to train (recruit) staff on data mining and analytical skills.
2. Technology: Implement technology effectively in the office and the field by identifying and deploying the most appropriate tools for each function and providing adequate training on how to use them.
    - a. Purchase and install relevant and current software on staff computers and devices.
      - i. Working within current systems allowed by BITS.
    - b. Support field staff and mobile office staff by equipping them with portable devices, as needed.
      - i. Pilot tablet test. Three field staff are currently testing tablets. While these will not be the tablets that will be used in the future, the project allows programs and staff to gain experience with the tool. (March 2019)
    - c. Identify, create or purchase and deploy useful applications.
      - i. Working within current applications allowed by BITS.
    - d. Complete and maintain the ACM bureau documentation system in SharePoint websites as part of the 2018-2019 SharePoint Adoption Lean Projects.
      - i. Document migration to SharePoint will be a full-year project in 2019.
  3. Work planning and Program Evaluations: Reinvigorate the work planning and program evaluation processes to identify and implement key program and process improvements.
    - a. Review all programs and regulations at least every other year. Schedule needed.
      - i. Program evaluations in progress.
    - b. Staff will collaborate during the annual work planning process to ensure the development of meaningful and achievable work plans, which use data obtained from the programs to make informed decisions.
      - i. Continue to address data vs. information within the parameters of programs available to use.
    - c. Streamline the enforcement penalty process.
    - d. Develop a policy for disseminating work plan progress throughout the year and a procedure for maintaining data related to work plans.
      - i. SharePoint inspection/investigation status lists allow Investigation and Compliance supervisors to review compliance progress throughout the year and offers visual cues (stoplights) of progress in relation to statutory deadlines.

## Groundwater Research Program

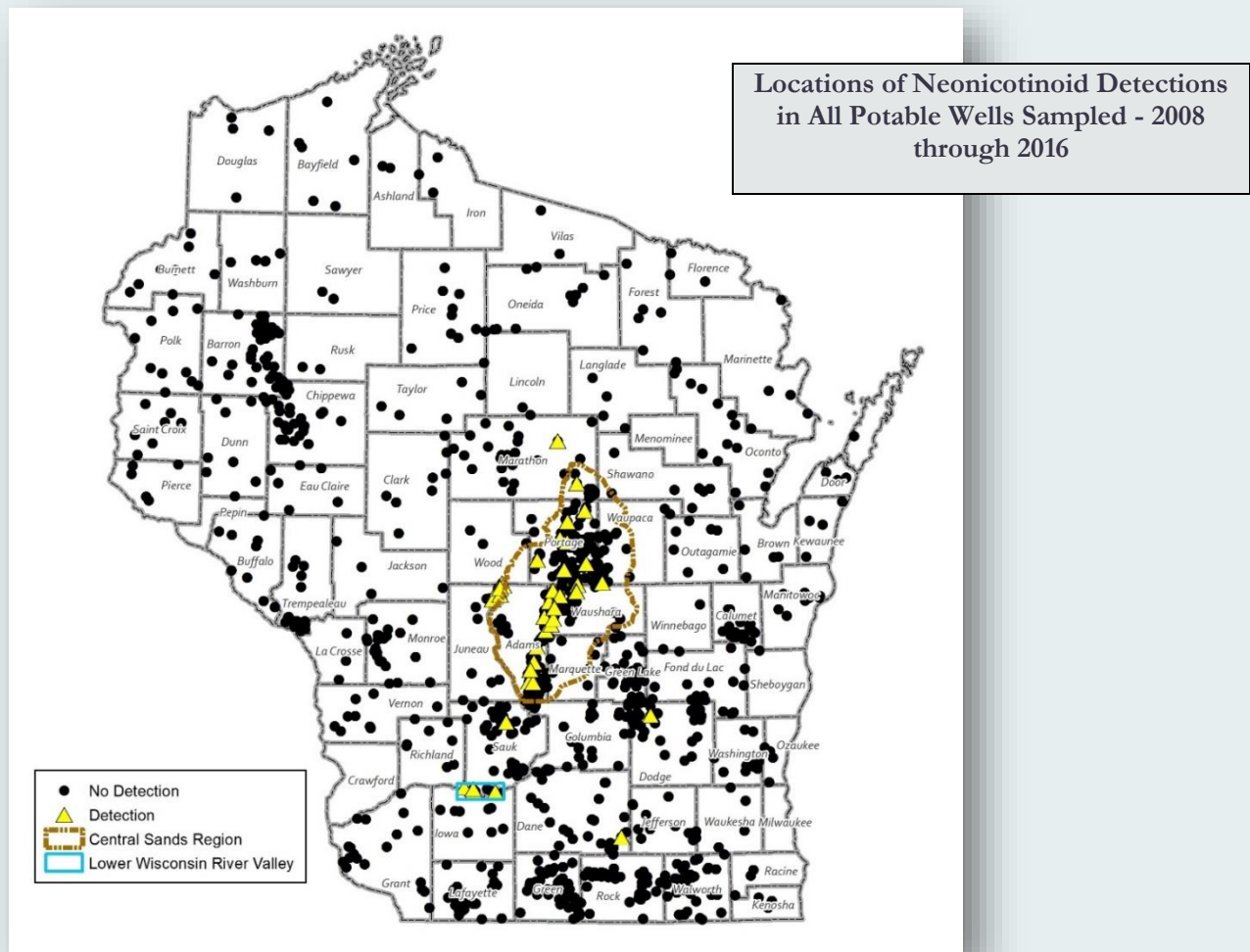
During 2018 ACM staff participated in the interagency Groundwater Coordinating Council's (GCC) Joint Solicitation for Groundwater Research. ACM staff works with other GCC subcommittee members to review, rank, and recommend grant proposals annually for funding by GCC member agencies (DNR, UW, DSPS and DATCP). DATCP provides funding for pesticide and fertilizer related research involving groundwater and surface water issues that are of regulatory importance. DATCP's research funds come from the ACM fund.

In 2018, one research grant project was selected for funding by DATCP to provide additional information about potential groundwater impacts resulting from residential pesticide use. The research project entitled, *Assessment of Pesticide Contamination in Suburban Drinking Water Wells in Southeastern Wisconsin*, is a two-year grant awarded to researchers at the University of Wisconsin – Milwaukee. The overall objective of the project is to monitor the occurrence and concentration of commonly used residential pesticides in suburban drinking water wells in Southeastern Wisconsin, and to evaluate their impact on local groundwater quality. The research project will quantify eight commonly used home and garden pesticides with a perceived elevated risk of contaminating groundwater. Pesticides having relatively large use by homeowners, and having high water solubility, low soil affinity, and long half-life were proposed for testing. Samples will be collected from approximately 60 private drinking water wells in the greater Milwaukee metropolitan area with a focus on shallow and/or aged wells that are thought to be at an elevated risk for contamination. Wells having detections in the first year will undergo further testing in the second year to attempt to identify any seasonal dynamics that may be observed. Results will be beneficial to DNR, DATCP, the Southeastern Wisconsin Regional Planning Commission (SEWRPC), the Department of Health Service (DHS), local governments, and the public who use private wells for drinking water.

In December 2018, DATCP also identified three additional research grants for funding starting in July, 2019. Two proposals will provide additional research on the occurrence and ecological effects of neonicotinoid insecticides detected in baseflow dominated streams in the Central Sands Region. A third proposal will be co-funded by DATCP and the University of Wisconsin-Water Resources Institute. This one-year study will assess the use of drones and thermal imaging technology to identify shallow bedrock fissures, springs and other important land features that have an increased potential to influence the migration of contaminants like pesticides, fertilizer and manure to drinking water wells in the karst region of northeastern Wisconsin.

## Neonicotinoids Report

Neonicotinoid insecticides are highly effective on insects and are one of the most widely used class of insecticides in the world. In Wisconsin, more than 500 products containing neonicotinoid active ingredients are registered for use. They are labeled for use on most major crops, including corn, soybeans, forage, small grains, vegetables and cranberries. They have become the subject of extensive research into possible effects on pollinator populations across the country. In 2017 and 2018, ARM's environmental quality unit conducted an extensive survey of neonicotinoid compounds detected in groundwater and surface water samples collected between 2008 and 2016. This assessment included an extensive review of test results from monitoring wells at 17 field locations statewide, 22 irrigation wells within the Central Sands vegetable growing region, over 1,000 private potable wells statewide, and surface water samples collected from 34 streams statewide.



DATCP testing for six neonicotinoid compounds shows that three most commonly used neonicotinoids (clothianidin, imidacloprid and thiamethoxam) were detected in samples collected from private potable wells, field-edge monitoring wells, and irrigation wells and surface water samples. The majority of neonicotinoid detections occurred where major agricultural crops are grown in areas with coarse, well-drained surface soils and shallow groundwater (less than about 20 feet deep). Many detections coincided with sandy agricultural areas within the Central Sands region and the Wisconsin River Valley. Additionally, two neonicotinoid compounds (imidacloprid and thiamethoxam) were frequently detected in two streams within

the Central Sands region. Results suggest that these compounds are likely present in shallow groundwater discharging as base flow to the streams.

Based on detections in groundwater and surface water and recent toxicity research results by others, neonicotinoids in surface water and groundwater are of concern for the following reasons. First, private well owners are concerned about their risk of exposure and any possible health effects; drinking water standards have not been established for any of the six neonicotinoid compounds tested. Second, growers are concerned that chronic concentrations of these compounds could enhance pest resistance development in the target pests that these compounds are intended to control (like Colorado Beetle). This can occur as sub lethal doses of these compounds are repeatedly and unintentionally applied to crops through contaminated irrigation water. And third, beneficial pollinators and other non-target insect species may be unintentionally exposed to chronic doses of these compounds through contaminated irrigation water. Similarly aquatic invertebrate species that live within streams may be exposed to compounds at levels known to cause negative effects. The data suggests there is a need for additional studies to help understand the significance of these findings.

The study concluded that additional research is needed in the Central Sands and other areas where neonicotinoid compounds were detected to evaluate measurable effects on organisms from the long term presence of neonicotinoids and other compounds detected in groundwater and surface water.

### School Integrated Pest Management (IPM) Program

Integrated pest management, commonly called IPM, is an approach to pest control that focuses on minimizing pest problems by making the environment unfavorable to pests. The Department of Agriculture, Trade and Consumer Protection supports schools in using IPM to manage pests in school settings. In addition, Wisconsin law includes specific practices that school districts must use when applying pesticides in public schools for pre-kindergarten through grade 12.

In 2018, the School IPM Program launched an agency webpage dedicated to making useful resources available. The webpage includes statute and administrative code references, a factsheet that explains Wisconsin's pesticide law and how it applies in school settings as well as a link to the Environmental Protection Agency webpage that has additional resources to help set up an effective program, webinars, managing common pests, blog and contact information.

One of the most common pests in schools and homes is bed bugs. The School IPM Program webpage also includes resources available to the public for general information on bed bugs provided by the Wisconsin Department of Health Services, information about prevention and control in different settings, as well as a link to find registered pesticide products and certified and licensed applicators to treat bed bugs.

Lastly, the webpage provides a link to online classes and training sponsored by the IPM Institute of North America, Inc. for school staff including custodians, nurses, facility managers, grounds professionals, administrators, maintenance, teachers, food service and pest control specialists.

To check out these resources, please visit the [School IPM webpage](#).

### Fertilizer Research Council

In the mid-1970's, when public support of agricultural research declined, the University of Wisconsin began seeking new sources of funding to continue the practical, applied research that directly benefits Wisconsin farmers. Soil fertility, plant nutrition and soil management were important research areas that needed additional funding. With the cooperation of fertilizer dealers and manufacturers, farmers, and the Wisconsin Legislature, a law was passed in 1978 that created the Wisconsin Fertilizer Research Fund. The law has since been amended to include a focus on environmental issues.

Today, for every ton of fertilizer sold in the state, the Wisconsin Fertilizer Research Fund receives 17 cents for fertilizer research. This money is part of a larger tonnage fee created to cover other programs, such as nutrient and pest management and agricultural chemical clean-ups. The fertilizer research fee is collected by the Department of Agriculture, Trade and Consumer Protection, and, by law, forwarded to the University of Wisconsin System at the end of each fiscal year.

The research dollars are used to fund applied research projects within the University of Wisconsin System. Typically, the projects have small budgets, with average annual requests of \$15,000-\$45,000. These projects produce research that directly benefits Wisconsin farmers. Results make their way to their intended audience through area meetings, field days, and industry conferences. Other results are incorporated into the fertilizer recommendations provided with soil samples submitted to

Wisconsin laboratories. Finally, many of the results are included in UW-Extension Factsheets, commodity group proceedings, and technical papers that are shared between scientists.

The Fertilizer Council consists of a 7-member board which is responsible for deciding which research projects will be funded by fertilizer research funds. The council members meet annually to select projects to recommend for funding. As directed by State Statutes [Sec. 94.64 (8m)], the program funds applied soil fertility, soil management or plant nutrition research as these topics relate to the usage of fertilizers or their impacts on surface or groundwater in Wisconsin. The program typically funds 3-5 new proposals each year with annual budgets ranging from \$10,000-45,000.

Some of the projects that the Fertilizer Research Council is currently funding include Evaluating Different In-season Nitrogen Diagnostic Approaches for Production of New Potato Cultivars in Wisconsin; the Long-term Management, Soil Health, and Optimum Nitrogen Rates for Corn; Developing Long-Term P&K Trials to Evaluate Sustainable Crop Production in Wisconsin; and the Impact of Liquid Manure Application Methods to Cover Crops for Increasing Dairy Manure Nutrient Utilization and Reduce Environmental Risk. These projects will help discover the effects of these management practices and what impacts they may have on the environment. There is always a potential to find new benefits and techniques to improve the effectiveness of the usage and application of fertilizer in the state of Wisconsin because of these projects.

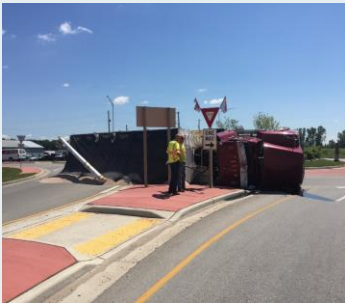




## Compliance and Enforcement

The Investigation and Compliance Section performs investigations related to the feed, fertilizer and pesticide programs. These cases can involve product distribution, storage, use, disposal or environmental contamination.

The section has 14 Environmental Enforcement Specialists (EES), an Investigation Program Manager, two Supervisors and a Section Chief who conduct and oversee activities associated with inspections and investigations for the ACM Bureau. In 2018, there was an EES retirement that subsequently led to three of the EES staff voluntarily electing to be reassigned to different territories. The timeline necessary to accomplish these territory reassignments delayed the recruitment process to fill the vacated EES position until early 2019. In 2018, there was also an EES that applied for and accepted a supervisor position within the Division. This position was successfully recruited for in October of 2018.



*Photo of an overturned truck spilling a load of blended fertilizer onto the roadway.*

### Program Activities

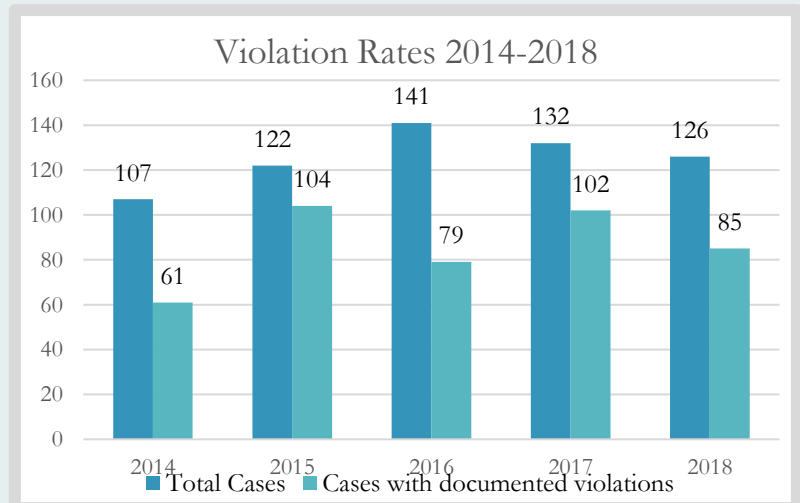
In 2018, the section conducted a total of 126 investigations. The 126 investigations include the following types of cases: 112 pesticide, 3 animal feed, 5 remediation, 3 containment, 1 license enforcement, and 2 worker protection.

Violations may result in actions ranging from verbal warnings to a court action invoking civil or criminal penalties depending on the statutory authorities in specific program areas. All civil or criminal cases conducted by the section are prosecuted by the district attorney's office in the county where the violation(s) occurred. A majority of the formal enforcement actions are conducted by the section through stipulated settlements, with court documents being prepared by the section. Chart 1 shows the number and type of enforcement actions taken during 2018. Chart 2 shows violation rates for investigations over the past five years.

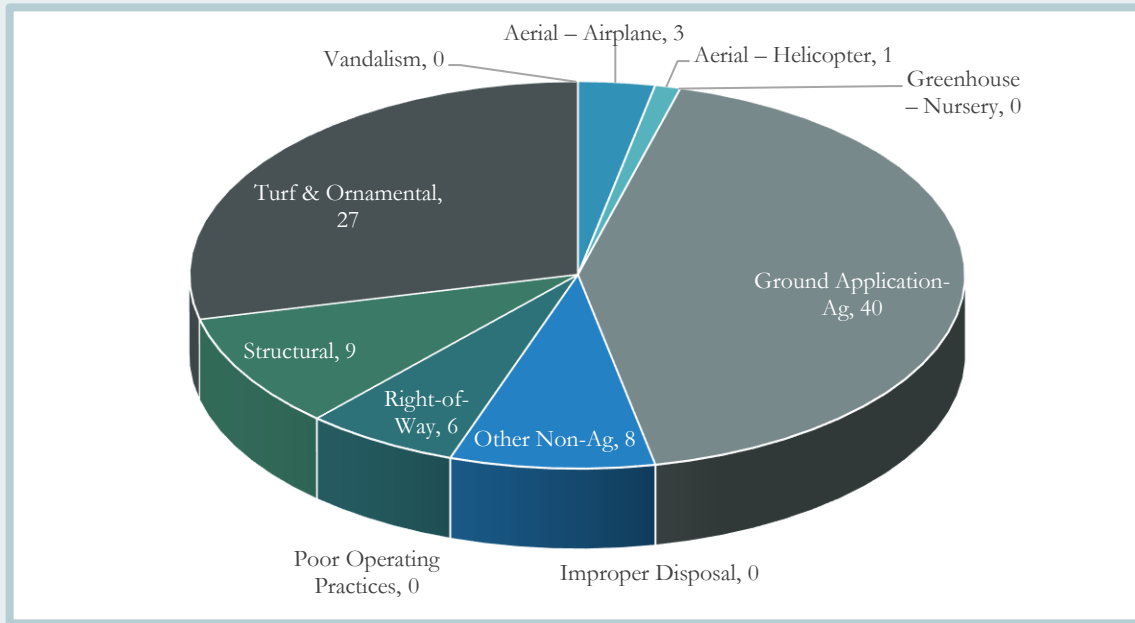
**Chart 1: Compliance Actions Taken in 2018**

Action Taken 2018 Only	2018
Verbal Warning	24
Warning Notice – Investigator	56
Warning Notice – Office	6
Administrative Order	0
Compliance Conferences	112
Civil Forfeiture Action Submitted to DA	0
Criminal Action Submitted to DA	74
Referred to US EPA	0
Total	272

**Chart 2: Violation Rates 2015-2018**



In 2018, 33 cases were delivered to county district attorney offices for prosecution. These cases may include investigations from previous years. The department assigns the highest response priority to complaints involving alleged human exposure to pesticides. In 2018, the section investigated 22 complaints involving alleged pesticide drift, with 17 of the complaints involving agricultural applications and 5 involving non-agricultural applications. Chart 3 shows the breakdown of pesticide investigations in 2018. This does not include investigations noted in Chart 2 that are administrative in nature.



**Chart 3: 2018 Pesticide Investigations**

### Interesting Cases 2018

1. As the result of a complaint, DATCP initiated an investigation into a Milwaukee County firm operating without proper certification or licensure. Due to the firm's refusal to cooperate with the investigation, an additional charge of Obstruction was included. The Defendant met with DATCP to discuss the substantiated violations, at which time additional violations came to light, and the Defendant ultimately agreed to a stipulated settlement that required the Defendant to pay a civil forfeiture totaling \$5,500.
2. Following a routine surveillance restricted-use pesticide dealer records inspection at a Chippewa County firm, DATCP initiated an investigation into the firm's sale of restricted-use pesticides to uncertified customers. DATCP found that a total of eight transactions had been made involving four separate uncertified customers. The Defendant met with DATCP to discuss the substantiated violations and agreed to a stipulated settlement that required the Defendant to pay a civil forfeiture totaling \$2,188.50.
3. As the result of a routine surveillance commercial applicator records inspection at a Pierce County firm, DATCP initiated an investigation into commercial for-hire pesticide applications that were made by uncertified and unlicensed commercial pesticide applicators. DATCP discovered fourteen commercial for-hire pesticide applications had been made by individuals that were not individually licensed or certified. The Defendant met with DATCP to discuss the substantiated violations and agreed to a stipulated settlement that required the Defendant to pay a civil forfeiture totaling \$1,420.50.
4. Following a routine surveillance restricted-use pesticide dealer records inspection at an Illinois firm selling into the State of Wisconsin, DATCP initiated an investigation into the firm's sale of restricted-use pesticide to uncertified customers. DATCP found that a total of eight transactions had been made involving two uncertified customers. The Defendant met with DATCP to discuss the substantiated violations and agreed to a stipulated settlement that required the Defendant to pay a civil forfeiture totaling \$2,073.50.
5. As the result of a routine surveillance follow-up inspection covering ATCP 33 Wis. Admin Code – Fertilizer and Pesticide Bulk Storage, a Dodge County firm was found to be out of compliance in several areas. DATCP discovered that mixing and loading of bulk pesticide and fertilizer were occurring at the facility site and off of an approved mix/load pad, pesticide and fertilizer products were stored without adequate security, bulk pesticide and fertilizer storage was found to be out of containment, and rinsate from a sump had not been recovered in a timely manner. The Defendant met with DATCP to discuss the substantiated violations and agreed to a stipulated settlement that required the Defendant to pay a civil forfeiture totaling \$3,000, and to include a DATCP presentation regarding the matter at a subsequent facility board meeting.

## Program Activity Data

Pesticide Licenses & Certifications	2014	2015	2016	2017	2018
Pesticide Business Location	2,165	2,285	2,338	2,385	2,381
Individual Commercial Applicator	8,311	8,585	8,799	8,887	9,239 (includes 506 reciprocals)
Restricted Use Dealer	401	406	429	445	449
Commercial Certifications	3,716	3,665	3,930	4118	5,616
Total Commercial Certifications	18,873	16,826	17,800	18,953	19,883
Private Certifications	1,959	2,021	3,050	2083	2,675
Total Private Certified	14,897	12,829	12,420	12,352	11,789
Manufacturers and Labelers	1,259	1,295	1,411	1,437	1,438
Pesticide Products	12,617	12,900	13,298	13,355	12,753
Landscape Registry Addresses	5,707	5,000	6,408	5300	4,521
Landscape Registry Warning Notices	32	28	39	33	27
24(c) special local need (new)	2	6	6	2	9
Section 18 Emergency Exemption	1	1	0	1	1
Experimental Use Permits	0	0	1	0	6
Special Use Small Mammal Permits	6	4	5	3	0
Feed License	1,431	1,449	1,338	1,429	1,544
Feed Tonnage	4,773,115	5,103,122	5,128,364	7,588,124	7,156,846
Feed Certificates of Free Sale	188	270	354	439	243
Fertilizer License	766	796	801	811	751
Fertilizer Permits (new)	443	501	661	582	536
Fertilizer Tonnage	1,860,000	1799271*	1,916,597	1,754,777	1,849,184
Soil and Plant Additive License	144	142	197	208	201
Soil and Plant Additive Permits (new)	105	243	268	174	269
Soil and Plant Additives Tonnage	174,440	164,629	198,751	98,864	155,176
Lime License	104	104	98	100	90
Lime Tonnage	993,000	1,084,942	1,046,402	947,773	684,550
Clean Sweep -- HHW (lbs)	2,037,418	2,137,104	2,149,615	2,166,369	2,199,403
Clean Sweep -- Ag & Ag Business (lbs)	129,960	149,176	126,120	140,925	127,960
Clean Sweep -- Rx (lbs)	62,106	52,127	43,625	38,513	37,483
Clean Sweep -- VSQG (lbs)	352,378	305,045	198,075	310,416	311,659

\*as of 9/12/16

Case Management	2014	2015	2016	2017	2018
ACCP - open cases	157	150	138	127	126
ACCP - new long-term (LT) cases	5	8	3	4	6
ACCP - LT cases closed	20	15	15	15	7
ACCP - total closed LT cases	561	576	591	606	613
Spill cases - new	31	48	43	26	39
Spill cases closed -- same year	6	34	17	4	30
Spill cases closed each year - total	6	51	39	32	50
Spills - total closed cases	1073	1124	1163	1195	1245
ACCP applications received	49	39	32	22	22
Containment plan sets reviewed	41	42	53	34	20
Containment plan set projects	20	28	28	17	13

Inspections & Sampling	2014	2015	2016	2017	2018
Pesticide Use Observations	78	58	94	90	70
Commercial Applicator Inspection	53	87	55	58	62
Containment Inspection (Full)	11	9	8	11	9
Containment Inspection (Small/Chemigation)	80	85	88	103	115
Dealer Record Inspection	42	38	46	44	50
Feed Inspection (ATCP 42)	60	105	102	60	64
Feed Inspection (FDA BSE & MFL)	170	59	6	6	6
Feed Surveillance Samples	104	631	552	617	577
Fertilizer Samples	556	361	280	293	306
Groundwater samples	143	283	576	276	294
Surface Water samples	111	59	86	88	140
Marketplace Inspection	233	261	236	313	258
Mix/Load Inspection	8	6	18	17	23
Private Applicator Inspection	40	38	27	32	46
Producer Establishment Inspection	15	15	14	14	11
Sump Test Inspection	32	51	55	58	64
Worker Protection Inspection	21	29	35	43	41

## ACM Programs

### ACCP - Remediation

Environmental Quality (EQ) unit staff oversees the cleanup of agrichemical contamination within Wisconsin through the Agrichemical Cleanup Program (ACCP), working closely with the responsible person(s) to ensure cleanups are completed consistent with environmental regulations in a cost effective manner. Remediation investigations are triggered by a notification to DATCP from the person or entity responsible for the property or facility, observed contamination by DATCP or other state employees, or other concerned parties. Remediation efforts may also be undertaken as a result of lead arsenate reports from the Department of Natural Resources, the Department of Health Services, or other responsible persons. An average of 30 remediation investigations were performed annually between 2003 and 2007. Since 2007, fewer than 10 remediation investigations have been performed annually. Once a remediation case is opened, the process can take many years to obtain closure due to the complexity of site issues, including multiple contaminated areas and contamination beneath structures. Consequently, the investigation and cleanup can have many phases.

### ACCP – Reimbursement

The ACCP Reimbursement program focuses on reimbursing a portion of the eligible cleanup costs. The program financial coordinator receives requests for reimbursement of costs to clean up spills and remediate clean up sites, evaluates eligibility for reimbursement, tracks costs and issues payments in close coordination with technical staff. The reimbursement process begins when an application for reimbursement for a cleanup project is submitted by a responsible person. Currently, the financial coordinator creates an Excel workbook for each application and manually links the summary spreadsheet and the individual application workbooks. The department has 90 days to review completed applications and provide a written decision on cost eligibility. The department makes reimbursement payments at the end of each quarter through the state of Wisconsin's financial accounting system.

### ACCP – Spills

ACCP staff oversee the investigation and cleanup of agrichemical spillage, and monitor drinking water wells that might be affected by spillage. An average of 40 spill responses are performed annually. Investigation and Compliance section staff are also directly involved in the spill response investigation. Once the spill has been cleaned to satisfactory levels, excavated soil has been documented to be properly land spread (including issuing any required land spreading permits) or disposed of, and wells have been determined to not have been impacted, the case is closed with no further action. If significant soil contamination is left in place, the spill may be closed with a DNR GIS registry that tracks properties with known contamination left in place. The EQ unit works closely with DNR on spill response investigations. DNR's Spill Environmental Response Tracking System (SERTS) is used for cross tracking of the spill incident between agencies. DNR also provides a Bureau for Remediation and Redevelopment Tracking System (BRRTS) number, assigned when the spill is closed in SERTS.

### Environmental Quality Protection Programs

Agriculture contributes an annual \$88 billion to Wisconsin's economy. Growers use millions of pounds of pesticide products, and millions of tons of fertilizer products annually, to grow a wide variety of crops that are typically produced in one Wisconsin growing season. Wisconsin's groundwater law, chapter 160, Wis. Stats., requires agencies to sample and monitor groundwater for substances related to facilities, activities and practices under their jurisdiction. These substances are those that have a reasonable probability of entering the groundwater resources of the state. Currently there are approximately 750,000 groundwater results tracked within the groundwater database. In addition the program areas track approximately 20,000 surface water sample results. All of this information is gathered and compiled into multiple databases that are used in conjunction with data from the Groundwater Retrieval Network (GRN) database to assess and analyze for pesticide and nitrate impacts to groundwater sources.

Additional responsibilities of the program areas are to determine whether preventive action limits or enforcement standards have been exceeded at points of standards application. Wisconsin's groundwater law further specifies that agencies develop monitoring plans that include provisions for conducting four types of monitoring: problem assessment, regulatory, at-risk and management practice monitoring (§160.27; §160.05). While the Containment, Remediation and Spills Programs work to protect the state's groundwater resources from point source pesticide and fertilizer discharges, non-point groundwater protection activities are also provided by program areas within the EQ Unit.

## **Groundwater Sampling Program**

To meet its statutory obligation in protecting the groundwater resources within the state, the Groundwater Sampling Program utilizes several non-point source monitoring methods. In addition to collecting physical groundwater samples, program responsibilities include monitoring the sales and use of prohibited or restricted-use pesticide products – such as atrazine, isoxaflutole, simazine, etc.; and reviewing data and information from the Targeted Sampling Program surface water sampling activities, and the Field Edge Monitoring Program. Upon analysis of this information, the Groundwater Sampling Program develops and implements management strategies and regulatory responses for the protection of groundwater.

The Groundwater Sampling Program assists other program areas within the Agrichemical Programs Section by providing technical information related to environmental assessments and impact statements, and technical assistance in the review and issuance of pesticide registrations and special pesticide product registrations.

## **Emerging Issues Program**

The Emerging Issues Program explores and evaluates groundwater issues that are on the forefront of mainline activity. Some of the more recent issues have included the oversight and review of the pesticide active ingredient isoxaflutole, and the impacts of that active ingredient on a variety of Environmental Quality Protection Program areas.

The Groundwater/Emerging Issues Program Manager works with the ACM management team to develop annual program work plans that include the necessary non-point source groundwater monitoring efforts, along with emerging issues and how those issues intertwine with groundwater program areas.

## **Targeted Sampling Program**

DATCP's Targeted Sampling Program is non-point monitoring the agency performs to meet its statutory obligation to protect groundwater. The agency utilizes a targeted approach to monitor drinking water wells that are at an elevated risk of being impacted by agricultural chemicals. The Targeted Sampling Program tests private wells located in or near agricultural areas of the state to assess the occurrence of pesticides and nitrate-nitrogen in drinking water. This data is used to inform other pesticide regulatory programs, homeowners, DHS, DNR, EPA and other Groundwater Coordinating Council (GCC) member agencies of pesticide and nitrate issues occurring in private water supplies statewide.

## **Field Edge Monitoring Program**

Agricultural management and practice monitoring occurs primarily under the Field Edge Monitoring Program. Under this program, staff monitor groundwater quality in fields where agricultural chemicals and fertilizer are applied in accordance with labeled use rates. Staff collaborate with growers around the state to install and maintain a network of monitoring wells on agricultural fields. Staff sample these wells regularly, and use the data collected from this program to inform a variety of other pesticide regulatory programs, and to inform growers, registrants, EPA, DNR and other agencies about pesticides that pose elevated risks of contaminating drinking water or surface water, or that may cause other environmental concerns.

## **Surface Water Monitoring**

This is a subset of the Field Edge Monitoring Program. The Field Edge Monitoring Program Manager works with DNR to collect and analyze water samples to evaluate potential agricultural chemical impacts to small streams and other surface waters of the State. The data is used to inform other pesticide regulatory programs, EPA, DNR and other Groundwater Coordinating Council (GCC) member agencies of pesticide impacts to surface waters.

## **Pesticide Product Restrictions Program**

### *Non-Atrazine Containing Products:*

Under Ch. ATCP 30, Wis. Admin. Code, the department has the authority to place increased restrictions on the use of certain pesticide products. Under this rule, pesticides like DDT, endrin, chlordane and dinoseb, and metals like cadmium are prohibited pesticides in the state. The rule further limits certain products for specific uses (like bat control), or restricts application methods or timing, or specifies other management practices for specific pesticides. The rule provides increased restrictions on uses of aldicarb and atrazine, two pesticides known to have caused groundwater contamination through past use.

### *Atrazine Containing Products:*

The Field Edge Monitoring Program Manager works with the ACM management team to develop annual program work plan activities that include groundwater monitoring efforts, marketplace inspections and pesticide use observations that are necessary to provide continual monitoring and compliance with the pesticide management practices as required by ATCP 30.

### Containment

The Containment Program regulates the storage and handling of bulk fertilizer, pesticide, and non-bulk pesticide, with the goal to protect against groundwater contamination resulting from both chronic and acute spillage of fertilizer and pesticide at storage and handling facilities. Staff reviews the design and construction of such facilities, the ongoing inspection of such facilities, as well as investigations into facilities that are not complying with the fundamental environmental protection sections of the various rules and statutes. Department staff may inspect a construction or alteration of a containment facility. Containment structure construction observations are performed by conservation engineering staff in the Bureau of Land and Water Resources.

### Pesticide Manufacturer and Labeler Licensing, Fees, Records, and Reporting

Pesticide products distributed, sold, or used in Wisconsin must be registered with the U.S. Environmental Protection Agency (EPA) and the manufacturer or labeler must be licensed in the state. Companies must be licensed to sell or distribute pesticide products for distribution in Wisconsin, regardless of whether the company is located in Wisconsin or manufactures pesticides here. The person or firm whose name and address is on the pesticide product label is required to obtain this license. A Wisconsin Pesticide Manufacturer and Labeler (PML) license application must be submitted to DATCP at least 15 days prior to distributing pesticide products in Wisconsin.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), provides for several types of pesticide registrations. The PML license lists two types of products, based on FIFRA classifications. Wisconsin charges a fee to list FIFRA Section 3 products (those products regulated by the EPA) on the state registry. Listing of these products ensures they are properly registered by the EPA or are exempt from registration. The PML business license is an annual license from January 1 through December 31 and is not transferable. The PML program licenses approximately 1,400 companies and lists almost 13,000 associate products.

### Pesticide Product Special Registrations and Use Authorizations

Pesticide products are registered and labeled for specific uses and must be used according to label directions. Ch. ATCP 30, Wis. Admin. Code provides additional restrictions for certain pesticide products, which include prohibited pesticides; special use permits for pesticides; and pesticide use restrictions and reporting. Under the Pesticide Special Registration Program included in Ch. ATCP 29 Wis. Admin. code, the department processes various types of requests for pest control: Federal Section 18 emergency exemptions, Wisconsin emergency use permits and special local need (SLN) registrations. DATCP also receives requests to conduct experimental research with pesticides in Wisconsin. If a request is authorized, pesticide users must obtain, and have in their possession at the time of application, authorized special use directions to legally use pesticide products for the requested purposes.

### Commercial Pesticide Applicator Business Licensing, Records, and Notifications

Businesses that make pesticide applications on a "for hire" basis must obtain a Pesticide Business License (PBL) and must employ individuals who are licensed as an Individual Commercial Applicator (ICAL). Currently, over 2,300 business sites hold PBL. To obtain licensure, companies must submit a completed application with all required fees, and list all individual commercial pesticide applicators for hire and their Individual Commercial Applicator License (ICAL) number. If the company is subcontracting its pesticide application work, the company must list the company(s) and that company's PBL number.

### Pesticide Restricted Use Dealers and Distributors Licensing and Sales Records

A Restricted Use Pesticide (RUP) license is required of any business that sells or distributes RUPs, either into the state or within the state. Currently, there are approximately 440 businesses licensed as RU dealers. RUPs can only be sold to individual pesticide applicators certified to apply restricted use pesticides, licensed pesticide application businesses, or other licensed RUP dealers. The ACM Investigation and Compliance Section completes an average of 40 Dealer Record inspections of pesticide businesses who sell RUPs each year.

## Individual Commercial Pesticide Applicator Licensing and Inspections

Persons applying any pesticides on a for-hire basis or applying RUPs for any reason, are required to be licensed as individual commercial applicators. Commercial applicators must be certified within a base category and must submit a completed license application to DATCP with fees and surcharges. An individual commercial applicator license (ICAL) is valid for one calendar year. When renewing the license, the individual must continue to meet the certification requirements. The Investigation and Compliance Section conducts Commercial Applicator Records (CAR) inspections each year to verify that pesticide applicators are commercially certified and licensed to apply pesticides, recording the necessary elements of recordkeeping, and providing the required pre and post application information to customers.

## Commercial and Private Pesticide Applicator Certification

The pesticide applicator certification program certifies individuals, via written examination or reciprocal equivalency, to use and/or direct the use of pesticide containing products. Certification is available for both commercial and private pesticide applicators. Commercial pesticide applicator certification is required if an individual is making pesticide applications for-hire or to any public school property, or to their own commercial property if they are using an RUP. Private pesticide application certification is required only if an individual is applying a restricted-use pesticide on property that they and/or their employer owns, rents, controls, that is used for the production of an agricultural commodity. Currently there are over 19,000 commercial certifications (an applicator can have more than one certification) and about 12,000 certified private pesticide applicators. Annually, there are over 5,000 individual commercial certification exams, and about 2,000 private certification exams proctored. Commercial applicators must pass the exam with a score of 70% or more, while private applicators attending a training session must score 50% or higher. Both certifications are valid for five years. If an applicator adds certification categories during the five year period, all certifications will expire at the original five year expiration date.

## Reciprocal Certification

Reciprocal certification is an option for an individual who resides in another state, and applies pesticides in Wisconsin. Reciprocal certification may be granted to an out-of-state resident that is certified in that state to make pesticide applications for-hire, or to any public school property. Currently, there is a reciprocal certification fee of \$75 and there are approximately 450 individuals that are issued reciprocal commercial certification annually.

## Temporary Certification

Temporary pesticide applicator certification allows an individual to make pesticide applications for-hire while under the direct supervision of an applicator who is certified and licensed. Temporary certification is valid for thirty days and an individual may not register for temporary certification more than once in the same category. A certification number is not generated, and a card is not issued in the current system. Approximately 50 individuals annually apply for temporary certification.

## Private Pesticide Applicator Records

The Private Applicator Records (PAR) Inspection program performs inspections of individuals that purchase and/or apply RUPs to determine whether applicable record keeping requirements are being followed. Private applicators must keep a legible record of each RUP application for at least two years or three years if atrazine-containing pesticides are applied. Staff annually completes approximately 30 PAR inspections, chosen from approximately 12,000 certified private applicators. In addition, our environmental enforcement staff also provide training at the private applicator training sessions offered by the University of Wisconsin's Pesticide Applicator Training (PAT) program. These training sessions provide an opportunity for our field staff to speak directly to private applicators on specific pesticide related topics besides recordkeeping requirements. Staff reach at least 500 private applicators each year through the PAT sessions.

## Associated Certification and Licensing Programs:

### **Landscape Applications, Notifications, and Registry**

The Landscape Registry allows Wisconsin residents to be notified before lawn care and landscape companies apply pesticides to neighboring property. The registry applies only to commercial lawn and landscape pesticide applications. Individuals must specify each of the addresses for which they want to receive notification of pesticide application, and businesses are required to notify individuals at least 12 hours in advance when registered addresses are to be treated with pesticides. The Landscape Registry is open for registration from November 1 to February 1 each year. Renewal notices are sent to users in early November.



## **Storage, Transport, and Sale of Pesticides**

The storage, transport and sale of pesticides are monitored through CAR and PAR inspections, RUP dealers' inspections, state marketplace inspections, and pesticide use observations.

## **Pesticide Handling, Disposal, and Spills**

Pesticide handling, disposal, and spills are monitored through CAR and PAR inspections, as well as some functions of the ACCP and the Containment programs within the Agrichemical Programs Section.

## **Agricultural Worker Protection**

The agricultural Worker Protection Standard (WPS) is an EPA regulation, adopted in whole in Wisconsin law, that requires employers that use pesticides in raising agricultural crops on farms, forests, nurseries or in enclosed spaces, to protect agricultural workers and pesticide handlers from illness or injury from pesticide use. Wisconsin's WPS inspections are part of the annual cooperative agreement between DATCP and the EPA. The cooperative agreements runs on the federal fiscal year, October 1-September 30. ACM performs approximately 40 WPS inspections each year.

## **Clean Sweep Program**

The Clean Sweep Program provides grants to municipalities, tribes and regional planning commissions to help them create and operate local programs for the collection and disposal of household hazardous waste. The goal of the Clean Sweep Program is to reduce the health and environmental risks posed by hazardous wastes, unwanted chemicals, and unwanted prescription drugs. Administering the Clean Sweep Program requires numerous processes, including a request for proposal, receipt of grant applications, application scoring and ranking, grant awards, contracts, purchase requisitions/purchase orders, final reports, reimbursements, program reports and data analysis.

## **Feed License and Tonnage**

The ACM Bureau licenses about 1,500 commercial feed and pet food companies. Each location requires its own license, in exchange for a license fee, and in return each is given a license card to display at each licensed site; however, the licenses are all connected to the legal entity. Each year, these feed companies distribute over 7 million tons of feed in Wisconsin, which includes feed for Wisconsin's livestock and poultry industry, as well as pet food. At license renewal time, feed licensees must report and pay inspection fees on each ton of feed distributed during the previous calendar year.

## **Feed Certificates of Free Sale**

The feed program also issues around 300 certificates of free sale annually to companies exporting feeds and feed ingredients. Companies submit an application, fee and label of the feed they wish to export in order to be issued a certificate of free sale. The certificate of free sale confirms that the company is licensed and legally able to sell in Wisconsin the feed or feed ingredient being exported.

## **Feed Inspections and Sampling**

The feed program routinely inspects feed mills for compliance with good manufacturing practices, and collects samples to ensure the nutrients in the feeds are present at the levels guaranteed on the label. Approximately 70 inspections are completed annually. Feed program staff collect 500-600 feed samples each year, and send those samples to the DATCP Bureau of Laboratory Services (BLS) for analysis.

## **Fertilizer License**

The fertilizer, soil and plant additive (SPA), and lime licenses are annual and not transferable. A license is required for each business location and each mobile unit used for manufacturing or distributing fertilizer, SPA, or lime. Licenses are directly related to the entity and location (premise). Each application submitted requires a license fee and is issued its own license card. Renewal licensees require the license fees and surcharges, inspection fees and surcharges, and tonnage report. Approximately 800 fertilizer, 200 SPA and 100 lime licenses are issued annually.

## **Fertilizer Tonnage**

The fertilizer and SPA programs have a tonnage reporting requirement that involves the reporting of tons of fertilizer distributed and submitting inspection fees and surcharges collected during the previous fiscal year (July 1st-June 30th). The fertilizer tonnage is directly related to the entity and only one tonnage report should be received for each licensed entity. The lime program also has a tonnage reporting requirement that involves the reporting of tons of lime distributed during the

previous calendar year and submitting inspection fees collected. Approximately 1.8 million tons of fertilizer, 100,000 tons of SPAs and about 1 million tons of lime are reported distributed in WI annually.

### Fertilizer Permits

Permits are issued for some fertilizer and all SPA products. The fertilizer program issues a permit for products under 24 NPK after an applicant has paid the permit fee and met all labeling requirements. Permit applications can be filed any time during the year for new products. Permits are non-transferable and remain in effect until substantial changes are made in the product formulation, label or advertising; the licensee must apply for an amended permit at that time. The fertilizer program has approximately 2,320 fertilizer products permitted, with about 500 permitted annually.

All SPA products require a permit. The SPA program issues a permit to an applicant that has paid a permit fee and met all the necessary labeling requirements. The SPA permit does not have a renewal period; permits are non-transferable and remain in effect until substantial changes are made in the product formulation, label or advertising; the licensee must apply for an amended permit at that time. The SPA program has approximately 701 products permitted, with about 200 products permitted annually.

### Fertilizer sampling

The fertilizer program includes sampling to ensure the fertilizer meets the label guarantees and economic value. Samples are sent to the DATCP Bureau of Laboratory Services (BLS) for analysis. Approximately 300-400 samples are collected and analyzed annually.

### Investigation and Compliance Section

The Investigation and Compliance Section supports the functions of the program staff in the Bureau, and is responsible for compliance and enforcement related to the following programs: ACCP, Containment, Feed, Fertilizer, Groundwater, Lime, and Pesticides. The section has 14 environmental enforcement specialists (EES), located throughout the state, who conduct inspections and investigations in all of these program areas for the ACM Bureau. The section typically conducts approximately 750 inspections and 130 investigations annually.

Enforcement activities also fall within the scope and responsibilities of the Investigation and Compliance Section. Enforcement actions are taken in response to the discovery of violation(s) of Wisconsin statutes and/or administrative rules and include warnings, special order, holding orders, administrative cases (whether stipulated or contested), and court actions.

### Bureau of Laboratory Services (Support Service)

The Bureau of Laboratory Services analyzes animal feed, fertilizer, vegetation, soil and water samples collected during various ACM Bureau monitoring, survey, inspection and investigation activities. BLS is an accredited laboratory and is the official enforcement laboratory for all of the Bureau's programs.



**WISCONSIN DEPARTMENT OF AGRICULTURE,  
TRADE AND CONSUMER PROTECTION**

**Division of Agricultural Resource Management**

P.O. Box 8911  
Madison, WI 53708-8911  
608-224-4500