New Pesticide Products Reviews

Determining Licensing Eligibility of Chemicals New to the State of Hawaii

3rd Annual Joint Government Water Conference
August 11, 2015

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Registration & Technical Review
Pesticides Branch

Pesticides in Water Program Workplan

EPA-Hawaii Performance Partnership Grant

- Primary objectives:
  - To initiate regulatory actions such as:
    - Use restrictions
    - Cancellation or registration denial, if it is determined that unreasonable risks are or will result from a pesticide's use
    - Develop a program to identify pesticides which could potentially leach

New Product Reviews

- Required for all outdoor use products containing a new chemical
- Submission of environmental fate data
- Initial review process considers:
  - Federal registration status
  - Chemical properties
  - Method of application
  - Expected use

Chemical Name: _____ Date: _____
Registrant: _____

Groundwater Review for New Chemicals

Product contains a new active ingredient (first time product being licensed in Hawaii).

1) Product has Kd more than 5 (low laboratory-derived mobility) and low persistence characteristics (e.g. hydrolysis half-life less than 30 days at any pH or aerobic soil metabolism half-life less than 2 weeks). 0 points

   Product has Kd less than 5 (laboratory-derived mobility) or persistence characteristics (e.g. hydrolysis half-life greater than 30 days at any pH or aerobic soil metabolism half-life greater than 2 weeks) similar to other pesticides found in groundwater as a result of normal label uses. 15 points

2) Total acreage (all uses on EPA stamped approved labels containing the active ingredient) is less than 10,000. 5 points

   Total acreage (all uses on EPA stamped approved labels containing the active ingredient) is more than 10,000. 10 points

3) Application of the pesticide is made directly to the soil; or pesticide is systemic and acts by moving throughout the plant, including the roots. 10 points

   Application of the pesticide is made to foliage, indoors, within the drip line of a structure's roof, in bait boxes or other protective devices to shield chemical from the environment, to swimming pools, as a coating for a structure, or other use patterns where contact with soil is minimal. 0 points

If score is 30 points or higher at this point, request environmental fate data:

Analysis of chemical data shows that the pesticide is "likely" to leach in areas registered for use, or has groundwater labeling restrictions or advisories based on modeling using Attenuation Factors or charts reflecting the relationship between chemical properties and Hawaiian soils. 15 points

Analysis of chemical data shows that the pesticide is "unlikely". 5 points

Review Action: If there is a score of 45 or more: Submit for review and seek comments on classification: Options include: 1) do not license, 2) Annual Use Permit, or 3) licensed as restricted.

Score of less than 45: license product without a groundwater review.

Three-tiered approach

1. Internal Review
2. Leaching Model
3. Full groundwater review

1. Internal Review

Product contains a new active ingredient (first time product being licensed in Hawaii).

1) Product has Kd more than 5 (low laboratory-derived mobility) and low persistence characteristics (e.g. hydrolysis half-life less than 30 days at any pH or aerobic soil metabolism half-life less than 2 weeks). 0 points

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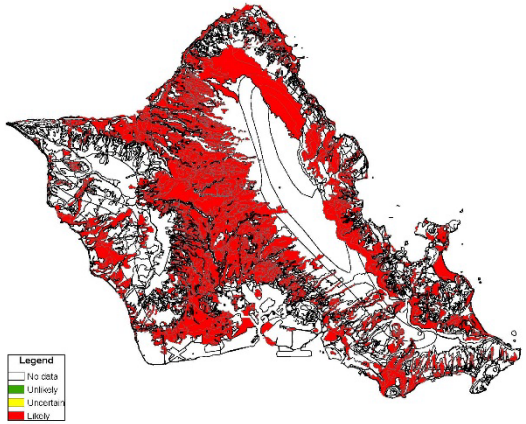
1. Internal Review (cont.)

Chlorantraniliprole (e.g., Coragen)

1) Moderately mobile & long half-life
2) Potential for widespread use in the state
3) Systemic and can be applied to the soil

2. Leaching Model

Atrazine: Oahu



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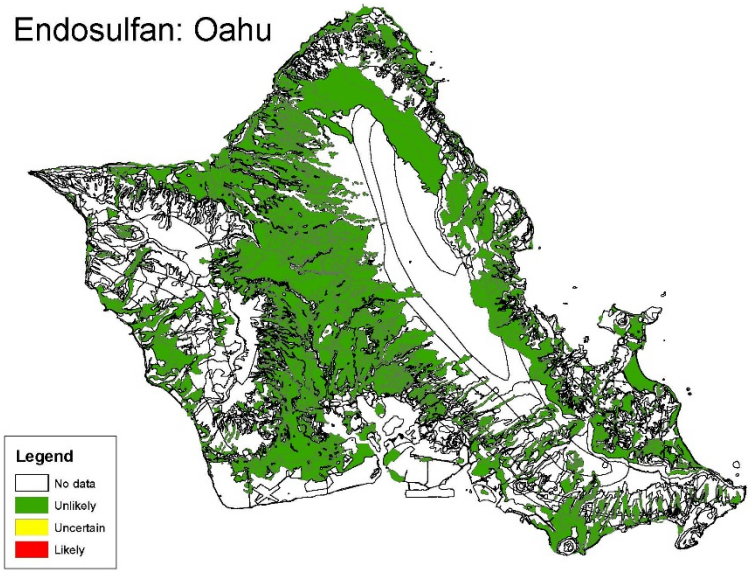
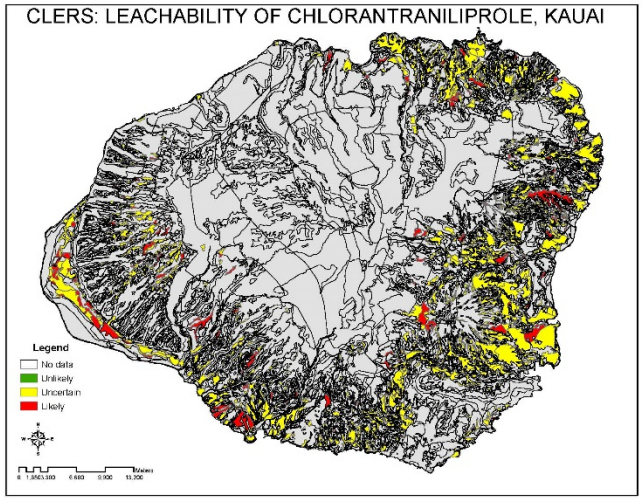
Comprehensive Leaching Risk Assessment System (CLERS)

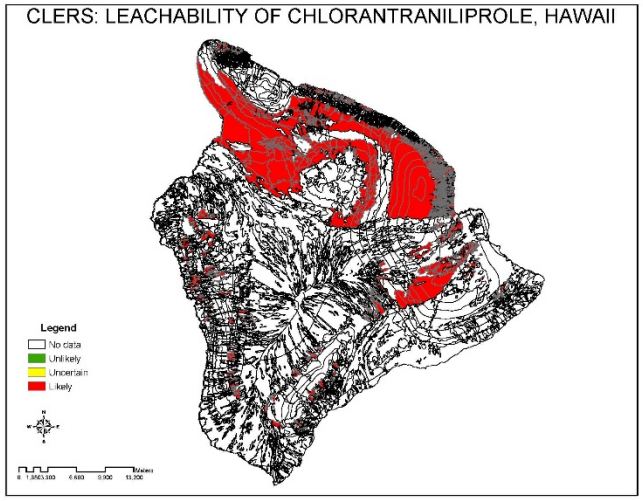
2. Leaching Model (cont.)

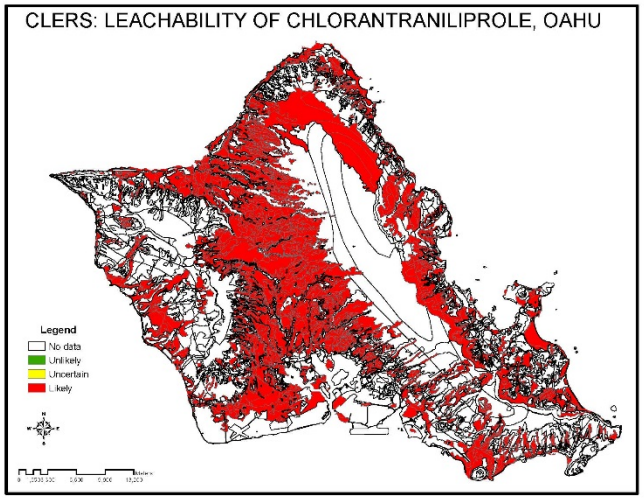


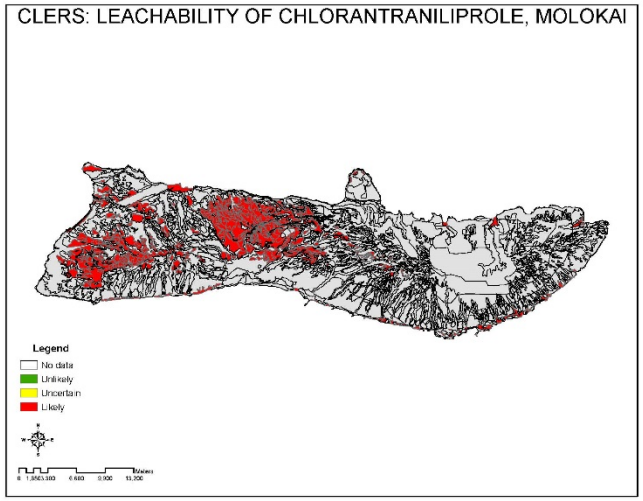
- Exposure assessment tool
- Only to serve as a screening tool
- Not intended for determination of potential leaching for individual map units

Chlorantraniliprole









3. Full Groundwater Review

Review Action: If there is a score of 45 or more: Submit for review and seek comments on classification: Options include: 1) do not license, 2) Annual Use Permit, or 3) licensed as restricted.

Score of less than 45: license product without a groundwater review.

Request for full groundwater data package

- Degradation
- Metabolism
- Mobility
- Dissipation

3. Full Groundwater Review (cont.)

- Contracts with UH WRRC since 1996
  - Evaluate physical and chemical properties of compounds
  - Evaluate potential to move to runoff waters
  - Seek input from EPA and USGS
- Principal Investigators
  - Dr. Chittaranjan Ray
  - Dr. Seo Jin Ki

Review Results

- Denied
- Restricted Use
- Annual Use Permit
- Environmental monitoring
- No restrictions

RESTRICTED USE PESTICIDE

State of Hawaii
DEPARTMENT OF AGRICULTURE
Division of Plant Industry
1428 S. King Street
Honolulu, HI 96814

FOR HAWAII DEPARTMENT OF AGRICULTURE USE ONLY:
☐ Approved ☐ Denied due to: _____
Permit No: _____ Expires on: _____
_____
HDOA Approval Date

ANNUAL USE PERMIT
PESTICIDE CONTAINING PICLORAM
FOR PURCHASE AND USE

Farm or Business Name _____ Phone Number _____
Business Address _____ City _____ State _____ Zip Code _____

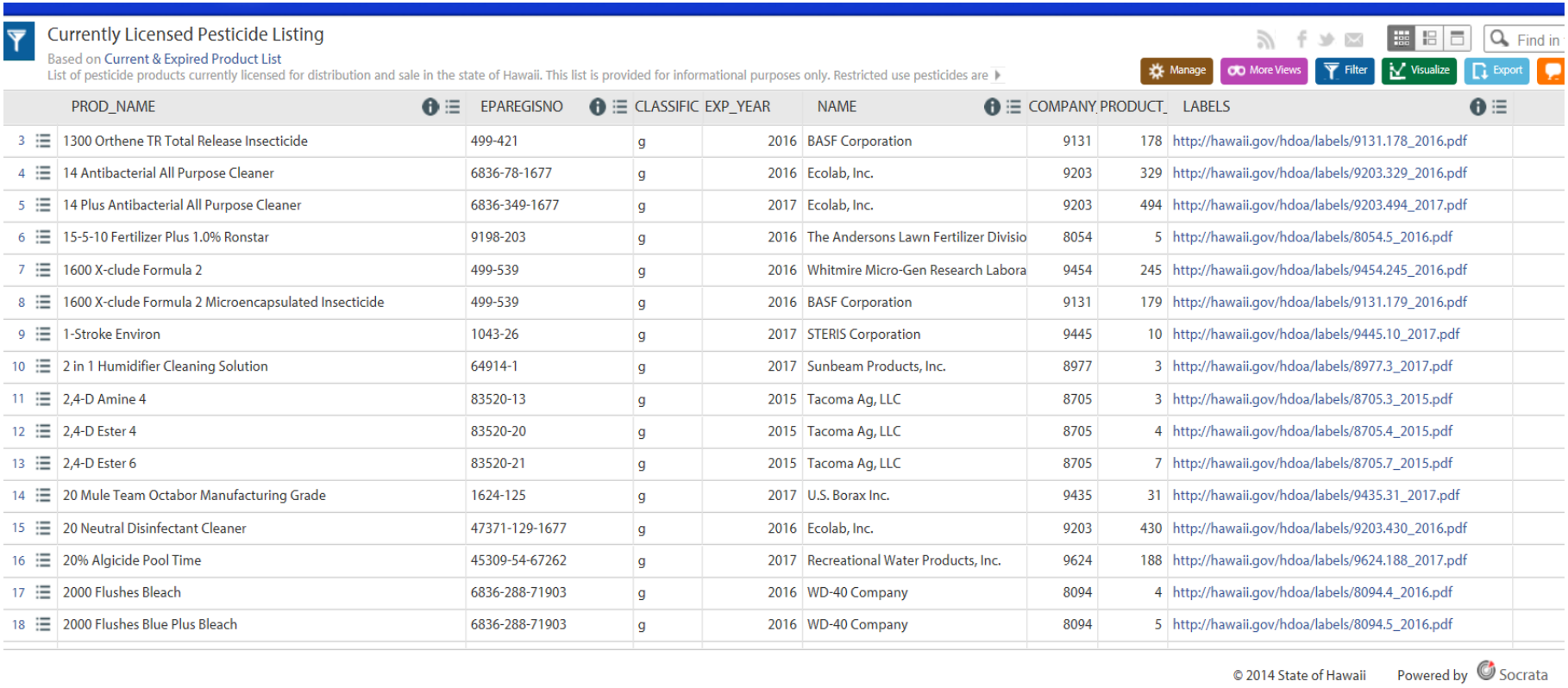
Active Ingredient: _____
Crop Type: _____
Maximum Use Rate: _____ lbs. per acre per year
Total Treated Area: _____ acres
Max Amount Per Year: _____ lbs. active ingredient

What about products that are already licensed?

- Mechanisms for evaluating licensed products
  - Environmental Monitoring
  - Collaboration with other agencies
    - Department of Health Safe Drinking Water Branch
    - HEER Office
    - USGS
    - US FWS
  - Registered uses

Resources

- Hawaii Department of Agriculture Licensed Pesticide Listing
  https://data.hawaii.gov/Health/Currently-Licensed-Pesticide-Listing/ufr5-uv4x



Currently Licensed Pesticide Listing

Based on Current & Expired Product List

List of pesticide products currently licensed for distribution and sale in the state of Hawaii. This list is provided for informational purposes only. Restricted use pesticides are

Manage | More Views | Filter | Visualize | Export | Find in

	PROD_NAME	EPAREGISNO	CLASSIFIC	EXP_YEAR	NAME	COMPANY	PRODUCT_	LABELS
3	1300 Orthene TR Total Release Insecticide	499-421	g	2016	BASF Corporation	9131	178	http://hawaii.gov/hdoa/labels/9131.178_2016.pdf
4	14 Antibacterial All Purpose Cleaner	6836-78-1677	g	2016	Ecolab, Inc.	9203	329	http://hawaii.gov/hdoa/labels/9203.329_2016.pdf
5	14 Plus Antibacterial All Purpose Cleaner	6836-349-1677	g	2017	Ecolab, Inc.	9203	494	http://hawaii.gov/hdoa/labels/9203.494_2017.pdf
6	15-5-10 Fertilizer Plus 1.0% Ronstar	9198-203	g	2016	The Andersons Lawn Fertilizer Divisio	8054	5	http://hawaii.gov/hdoa/labels/8054.5_2016.pdf
7	1600 X-clude Formula 2	499-539	g	2016	Whitmire Micro-Gen Research Labora	9454	245	http://hawaii.gov/hdoa/labels/9454.245_2016.pdf
8	1600 X-clude Formula 2 Microencapsulated Insecticide	499-539	g	2016	BASF Corporation	9131	179	http://hawaii.gov/hdoa/labels/9131.179_2016.pdf
9	1-Stroke Environ	1043-26	g	2017	STERIS Corporation	9445	10	http://hawaii.gov/hdoa/labels/9445.10_2017.pdf
10	2 in 1 Humidifier Cleaning Solution	64914-1	g	2017	Sunbeam Products, Inc.	8977	3	http://hawaii.gov/hdoa/labels/8977.3_2017.pdf
11	2,4-D Amine 4	83520-13	g	2015	Tacoma Ag, LLC	8705	3	http://hawaii.gov/hdoa/labels/8705.3_2015.pdf
12	2,4-D Ester 4	83520-20	g	2015	Tacoma Ag, LLC	8705	4	http://hawaii.gov/hdoa/labels/8705.4_2015.pdf
13	2,4-D Ester 6	83520-21	g	2015	Tacoma Ag, LLC	8705	7	http://hawaii.gov/hdoa/labels/8705.7_2015.pdf
14	20 Mule Team Octabor Manufacturing Grade	1624-125	g	2017	U.S. Borax Inc.	9435	31	http://hawaii.gov/hdoa/labels/9435.31_2017.pdf
15	20 Neutral Disinfectant Cleaner	47371-129-1677	g	2016	Ecolab, Inc.	9203	430	http://hawaii.gov/hdoa/labels/9203.430_2016.pdf
16	20% Algicide Pool Time	45309-54-67262	g	2017	Recreational Water Products, Inc.	9624	188	http://hawaii.gov/hdoa/labels/9624.188_2017.pdf
17	2000 Flushes Bleach	6836-288-71903	g	2016	WD-40 Company	8094	4	http://hawaii.gov/hdoa/labels/8094.4_2016.pdf
18	2000 Flushes Blue Plus Bleach	6836-288-71903	g	2016	WD-40 Company	8094	5	http://hawaii.gov/hdoa/labels/8094.5_2016.pdf

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Resources

- National Pesticide Information Retrieval System (NPIRS)
  http://nspirs.ceris.purdue.edu/docf/fmenu.html

PURDUE UNIVERSITY

NPIRS National Pesticide Information Retrieval System

My NPIRS | Searches | Meetings | Resources | Contacts

Federal Product Search

EPA Registration Data
Search by **Federal Status** | **EPA Registration Numbers** | **Registration Dates** | **Registration Type** or lookup an entry in the **EPA Company Name Dictionary**.

Company or Brand Name
Search by **Primary Company Name** | **Distributor Company Name** | **Primary Brand Name** | **Distributor Brand Name**.

Active Ingredient
Search by **Specific Active Ingredients** | **Percent of Active Ingredients** | **Exclude Active Ingredients** | **Sole Active Ingredient Products** or lookup an entry in the **Chemical Dictionary**.

Site of Application
Search by **Specific Sites** | **Site Categories** | **Site Dual Qualifier** | **Seed Treatment Sites** or lookup an entry in the **Site Dictionary**.

Pest to be Controlled
Search by **Specific Pests** | **Pest Groups** or lookup an entry in the **Pest Dictionary**.

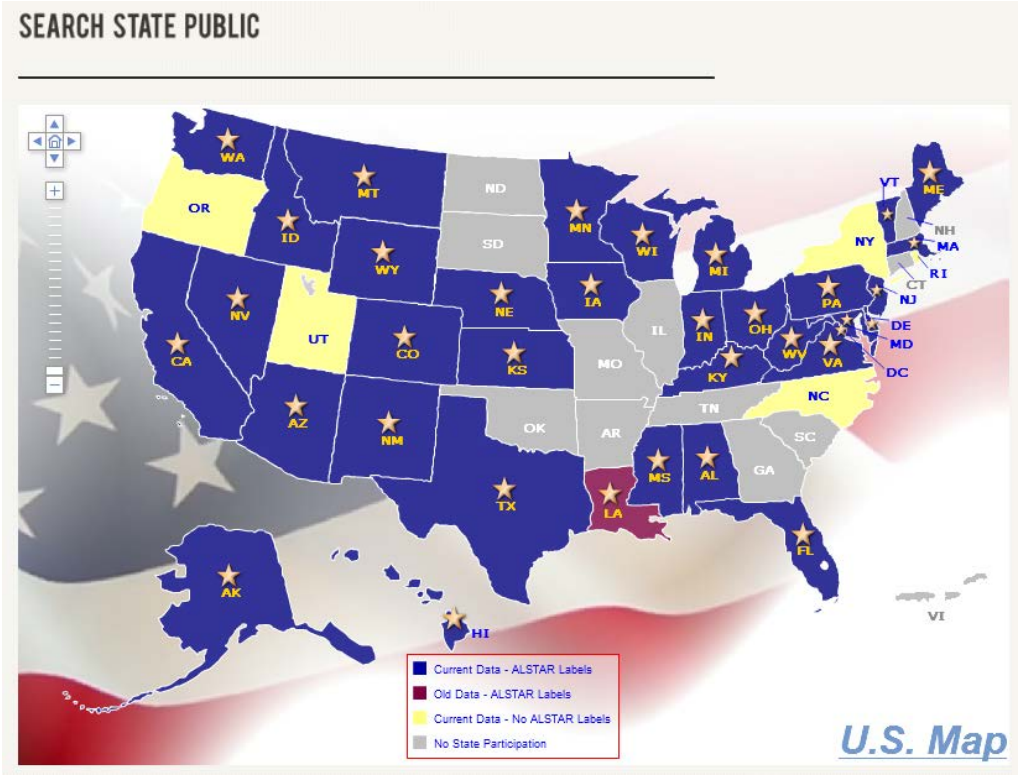
Other Options
Search by **Formulation** | **Signal Word** | **Use Restriction** | **Product Use Types** | **Conditional Registrations** | **Federal Lists**.

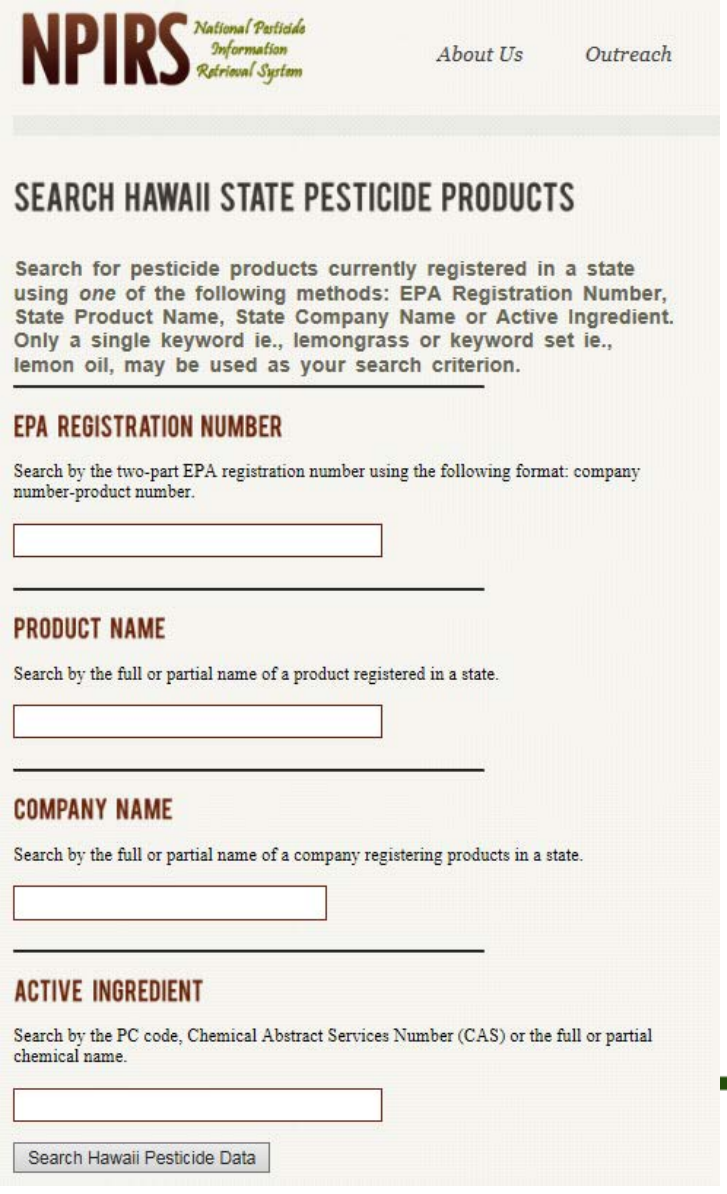
Purdue Memorial Union at Night

Resources

- NPIRS State Public

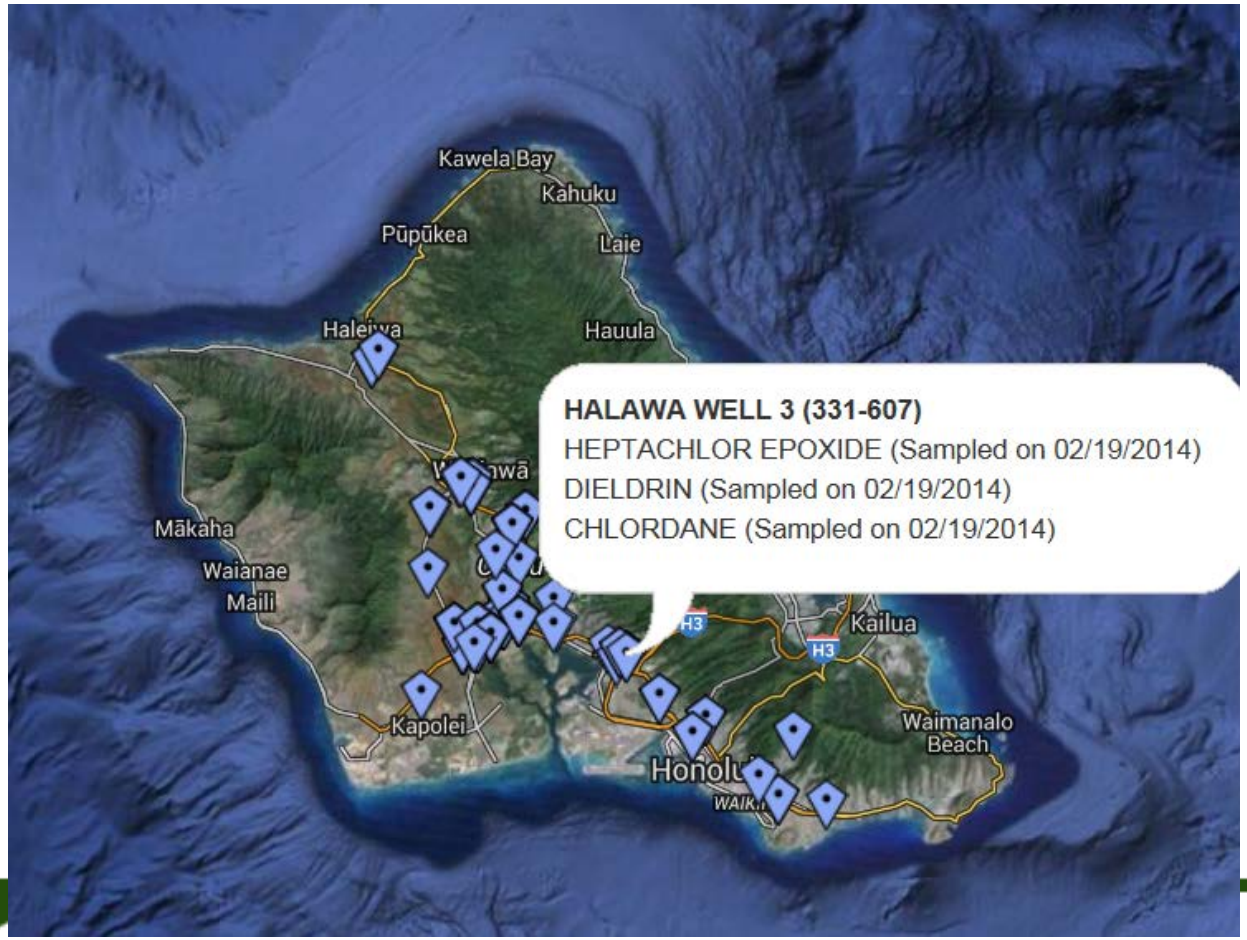
http://npirspublic.ceris.purdue.edu/state/





Resources

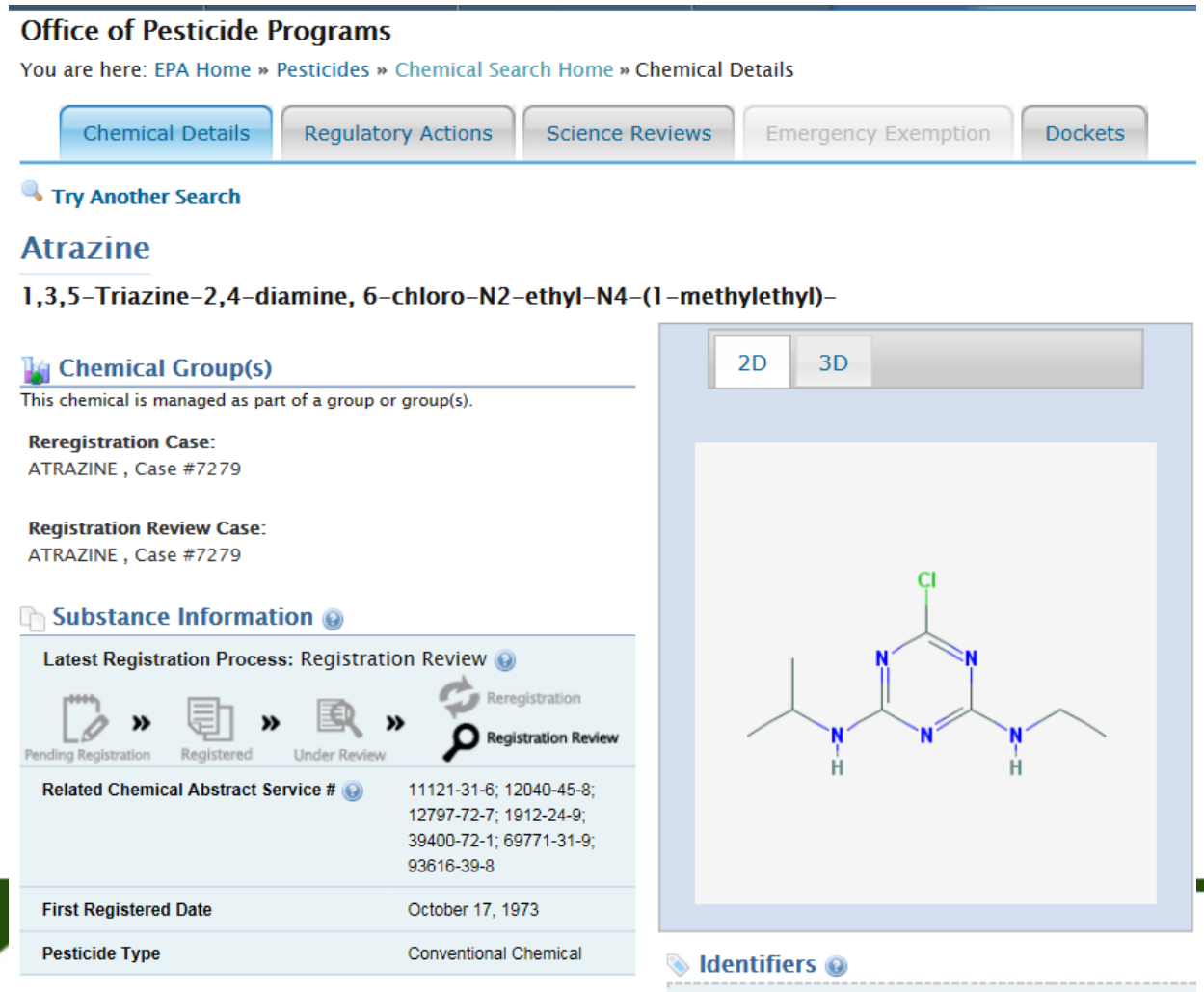
- HDOH Groundwater Contamination Viewer http://eha-web.doh.hawaii.gov/gw-contam/



Resources

- EPA Chemical Search

  http://iaspub.epa.gov/apex/pesticides/f?p=CHEMICALSEARCH:1:0::NO:1::



Department of Agriculture
STATE OF HAWAII

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