

IPM: Capturing Contractor Activities with Creative Compliance

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Delivering world class utility services and programs to improve our health, environment, and economy.

Environmental Services

Outline

- Integrated Pest Management (IPM) Drivers and Regulations
- IPM Policy
 - IPM – Working Definition
 - Active Ingredients of Concern
- City Efforts to Facilitate Compliance
 - Public Outreach
 - Multi-Departmental Coordination
 - Data Tracking and Reporting Challenges
- Pesticides Toxicity Control Data Reporting Form
 - Microsoft Office 365 and SharePoint platform features
- Field Form
- Resources
- Contact Information



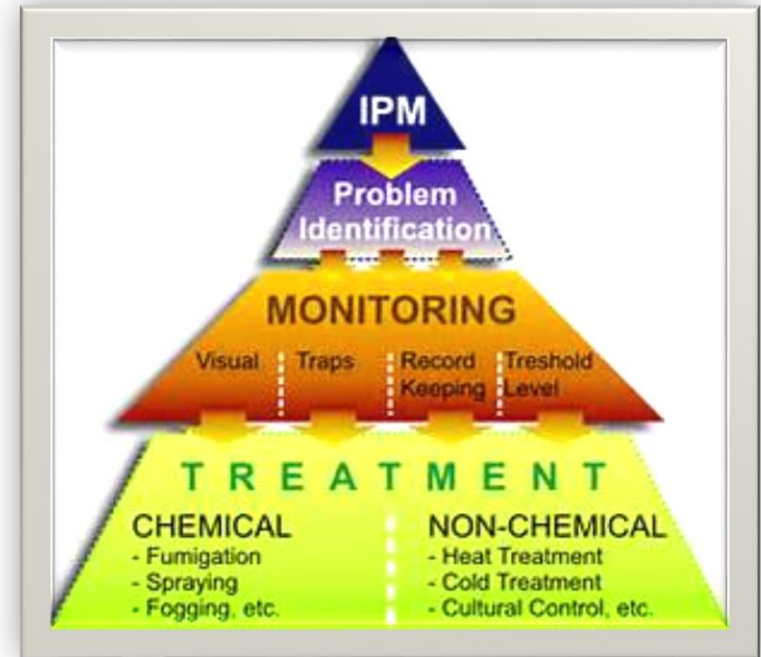
IPM Drivers and Regulations

- The Clean Water Act requires the USEPA to develop and implement the National Pollutant Discharge Elimination System (NPDES) program.
- The California Water Resources Control Board through its Regional Water Boards issues NPDES permits to dischargers.
- The City of San José has two main NPDES permits:
 - Regional Wastewater Facility
 - Stormwater



IPM Policy- Down in the Weeds

- Integrated Pest Management Policy
 - Minimize pesticide use to the Maximum Extent Practicable, and reduce, phase out and ultimately eliminate use of pesticides that **cause impairment of surface waters**.
- IPM – A Working Definition:
 - An ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a **combination of techniques** such as biological control, habitat manipulation, modification of cultural practices, and the use of resistant varieties.



Active Ingredients of Concern

- **Diamides** (chlorantraniliprole, cyantraniliprole)
- **Fipronil** and its degradates
- **Indoxacarb**
- **Organophosphorus Insecticides** (chlorpyrifos, diazinon, and malathion)
- **Pyrethroids** (metofluthrin, bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, and permethrin)
- **Carbamates** (e.g., carbaryl, aldicarb).
- **Copper-containing pesticides**





City Efforts to Facilitate Compliance

- Incorporate IPM Techniques into City Operations
 - Require External Vendors and Muni Staff to understand and Implement IPM
 - Coordinate Residential and Municipal Demonstration Workshops (Bay Friendly, Green Gardener, BAWSCA).
 - Facilitate Citywide Coordination (Pesticide Management Committee, Bioretention Plant Care and Identification Trainings, IPM pilot programs).
- Maintain and Implement an IPM Policy, Standard Operating Procedures, and Best Management Practices
 - Seek input/feedback from External Vendors and Muni Staff regarding new methods, tools, techniques, and thresholds for target pests
 - Living document (hard copies are updated on permit cycle)

Facilitating Compliance- Continued

- Interface with County Office of Agricultural Commissioner
 - CAB trainings, site restrictions and applicator verification, etc.
- Public Outreach
 - IPM pilot projects, OWOW, sustainable landscaping factsheets and signs
- Track, Analyze, and Report Pesticide Applications
 - Online SharePoint Data Collection
 - Trend Analysis and Alternative Treatment/Method Highlights





Facilitating Compliance- Multi Department Efforts

- Section 6.6 Bid Packet - Pesticide Use Reporting
 - Highlights changes to reporting methods and new requirements (alternative treatments, external, etc.)
- Coordinate with Purchasing/Finance Dept
 - Updates and changes to Standard Contract Language and cross checking with commodity categories

6.6. Pesticide Use Reporting

Contractor shall obtain access to the online form for submitting monthly Pesticides Toxicity Control (PTC) reports from the ESD IPM Coordinator by calling (408) 945-3000. The PTC report shall be submitted online by the 10th of each month and shall contain the following information for each pesticide application:

- Date of Application
- Facility Treated
- Chemical Applied
- Total Product Used
- Units
- Alternative Treatment
- Acres/Unit Treated
- Target Pest
- Comments
- Company Name
- Title (Okay to leave blank)
- Attachments (Photos)

6.6.1. Name of applicator The City may withhold payment for services until the pesticide report for the invoice month is received and approved. The report shall include information for San José municipal property only.

6.7. Evidence of Training

Contractor shall demonstrate evidence of recent IPM training, to the maximum extent feasible, upon entering into a new contract or renewal of an existing contract.

6.8. Restricted Pesticides

Before a contractor can apply a California Restricted Material on a City of San José site, the contractor must first obtain a copy of the City of San José's Restricted Use Materials Permit that will be provided by the contract manager. Before the application can be made, the operator must notify the contract manager 24 hours in advance of the application. The contractor must provide the contract manager with a copy of the notice of intent per site. This should correlate to the monthly usage report also provided by the contractor.

Facilitating Compliance- Multi Department Efforts

■ Commodity List

- Contact code manager/purchaser and train on IPM policy

■ Municipal Groups

- New this year, capturing RWF and PW staff with incidental use of pesticides within scope of duties (electrical boxes, light posts, etc.)

Purchase Order Number	Description	Vendor	Cost	Bid?
OP 50832	Skunk Abatement		\$5,100	No
OP 51108	Pest/Rodent Management Services		\$15,592	RFQ 17237
OP 51115	Insect Control for Stables		\$2,800	No
OP 51207	Pest/Rodent Management Services		\$3,000	RFQ 17237-R
OP 51243	Pest/Rodent Management Services to be Performed as Required		\$40,000	RFQ 17237-R
OP 51377	Pest Control Services		\$10,000	Cancelled
OP 51459	Gopher Abatement at the Airport		\$3,000	No
OP 51551	Pest Control Service		\$20,000	RFQ 15914
OP 51703	Pest Control Service		\$10,000	RFQ 15914
OP 51755	Pest/Rodent Management Services to be Performed as Required		\$30,000	RFQ 17237-R
OP 52147	Gopher Abatement		\$10,750	No
OP 52412	Skunk Abatement at RWF		\$5,100	No
OP 52541	Insect Control for Stables		\$2,800	No
OP 52544	Pest/Rodent Management Services		\$15,000	RFQ 17237
OP 52814	Pest/Rodent Management Services to be Performed as Required		\$40,000	RFQ 17237-R
OP 52899	Pest & Termite Control		\$10,000	No
OP 52907	Pest/Rodent Management Services		\$40,000	Cancelled
OP 52999	Fumigation & Pesticide Services		\$9,505	No
OP 53051	Pest Control Services		\$35,000	RFQ 15914
OP 53052	Pest/Rodent Management Services		\$3,000	RFQ 17237-R
OP 53055	Pest Control Services		\$35,000	RFQ 15914
OP 53588	Gopher Abatement in Landscaping Areas		\$8,350	No
PO 79608	Gopher Abatement		\$8,350	Cancelled

Data Tracking and Reporting- Challenges

- Former Tracking Method: Excel
- Common Problems
 - Multiple versions circulating
 - Difficulties streamlining updates
 - Manual Entry Fields- Incomplete EPA Registration #'s
 - Truncated product names
 - Inactive product use (DPR 2-digit alpha code)
 - Nomenclature Issues- Location, Alternative Methods, and Target Pest
 - No indication of internal vs. external applications

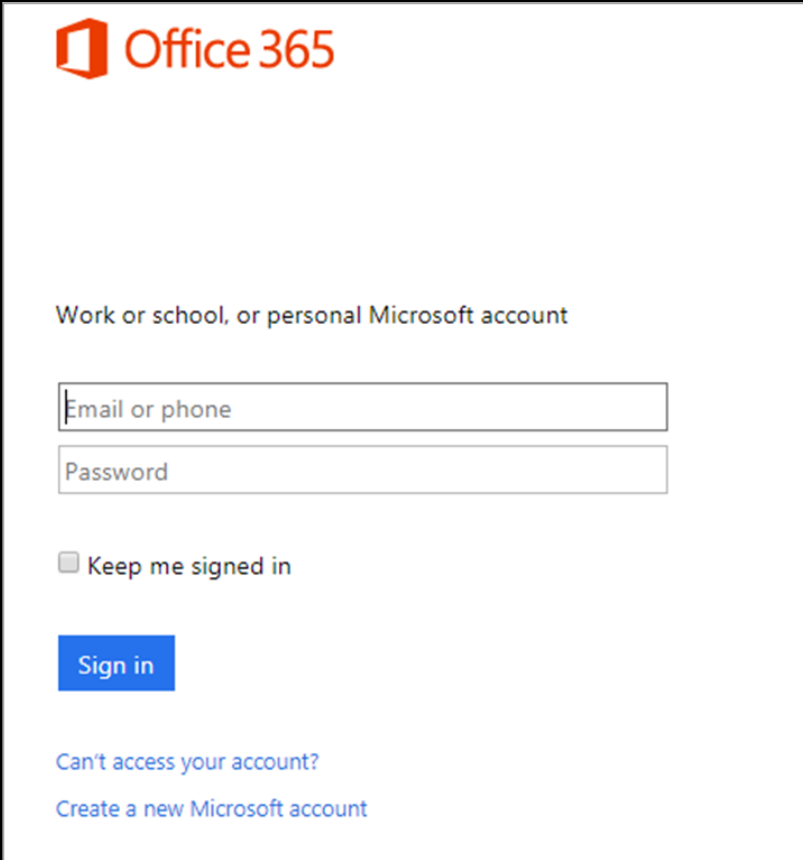
The screenshot shows an Excel spreadsheet with the following structure:

Pest	Mark It	Copy to Targeted Pest:
Abiotic Disorders		
Herbicide Injury		
Mineral Disorders		
Foliage Chewing Insects		
Annual bluegrass weevil		
Asiatic Garden Beetle		
Billbugs		
Black turgrass atenuis		
Chinch bug		
Cutworms		
European Chafer		
European crane fly		
Green June Beetle		
Japanese beetles		
Leaf-Feeding Beetles		
Leaf-Feeding Caterpillars		
Mole Crickets		
Oriental beetle		
Sawfly		
Foliage Diseases		
Anthraxnose		
Black Spot of Rose		
Botrytis		
Fire Blight		
Fusarium		
Lawn Diseases		
Leaf Spots		
Powdery Mildew		
Pythium		
Rhizoctonia		
Rust Diseases		
Sclerotinia		
Invertebrate Pests		
Ant, Argentine		
Ant, Black Harvester		
Ant, CA Fire		
Ant, Carpenter		
Ant, Harvester		
Ant, Odorous House		
Ant, Pavement		
Ant, Pharaoh		
Ant, Pyramid		
Ant, Thief		

The spreadsheet includes a ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Power Pivot, and Tell me. The 'Home' tab is active, showing options for Clipboard, Font, and Alignment. The 'Formulas' tab shows the 'fx' button and the formula bar. The 'Data' tab shows the 'Data' button and the 'Data Validation' button. The 'Review' tab shows the 'Review' button and the 'Comments' button. The 'View' tab shows the 'View' button and the 'Gridlines' button. The 'Power Pivot' tab shows the 'Power Pivot' button and the 'PivotTable' button. The 'Tell me' button is located in the top right corner.

Data Tracking and Reporting- Updates

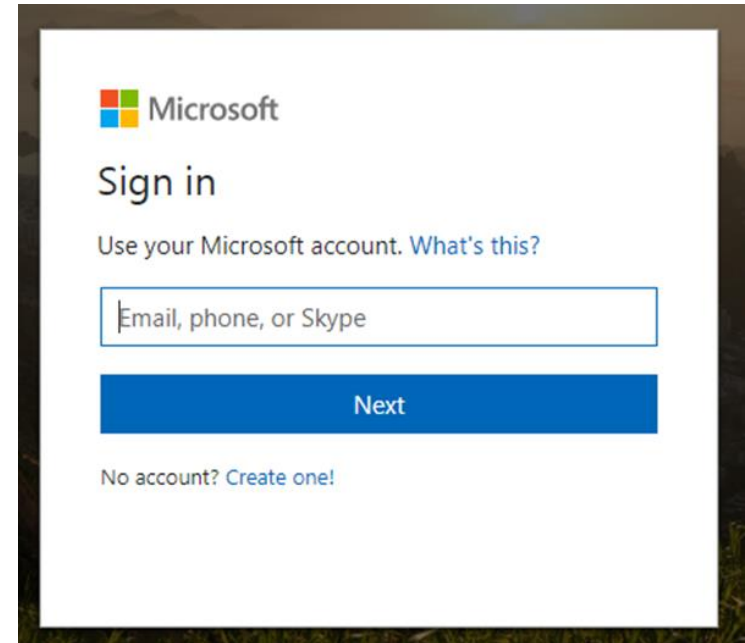
- Track, Analyze, and Report Pesticide Applications
 - Microsoft Office 365 - Online SharePoint Data Collection
 - Mobile Optimized- access and input data anywhere
 - Pesticide Use Trend Analysis improvements
 - Alternative Method Highlights



The screenshot shows the Microsoft Office 365 sign-in interface. At the top left is the Office 365 logo. Below it, the text 'Work or school, or personal Microsoft account' is displayed. There are two input fields: 'Email or phone' and 'Password'. Below these fields is a checkbox labeled 'Keep me signed in'. A blue 'Sign in' button is positioned below the checkbox. At the bottom, there are two links: 'Can't access your account?' and 'Create a new Microsoft account'.

Step #1: Create an Account and Log in to Office 365

- Go to <https://login.live.com> to set-up a Microsoft Office Account.
 - Click on “Create one!” to get started and follow the prompts.
 - Once your account is active and you have an email address associated with a Microsoft Office account send it to IPM program staff and wait for an invitational email to access the data reporting system in SharePoint.



- Open a new tab or window in the Chrome browser
 - Type or copy and paste this link into the search bar: : bit.ly/2siJyOC
 - If you are not already logged into Microsoft Office, it will prompt you to do so with your associated email address and password.

Steps #2-3: Obtain Access and View Data

- Landing Page
 - View Data Categories and Records
 - Practice using Data Filters (Date, Product, EPA reg #, etc.)
 - Begin a New Item/Record
 - Edit Records

The screenshot shows a SharePoint page titled "Pesticides Toxicity Control Records" under the "Stormwater Management" category. The page includes a navigation bar with "Office 365" and "SharePoint" tabs, and a user profile for "Schat, Amber". The main content area features a "new item" button and a search bar. Below the search bar, there is a table with columns for "Edit", "Date of Application", "Treatment Location", "Chemical Applied Choice:Title", "Chemical Applied Choice:EPA/CA Registration", "Chemical Applied/EPA# (Not Listed Above)", "Total Product Used", "Units", "Alternative Treatment", "External Application", "Acres / Unit Treated", and "Targeted Pest". A single record is displayed with the date "8/30/2017", treatment location "No Treatment, so No Treatment Location.", chemical applied "(None) No applications necessary", units "none", and targeted pest "not listed;".

	Edit	Date of Application	Treatment Location	Chemical Applied Choice:Title	Chemical Applied Choice:EPA/CA Registration	Chemical Applied/EPA# (Not Listed Above)	Total Product Used	Units	Alternative Treatment	External Application	Acres / Unit Treated	Targeted Pest
✓		8/30/2017	No Treatment, so No Treatment Location.	(None) No applications necessary				none				not listed;

Step #4: Begin a New Record

- Data Requested
 - Asterisk indicates required fields
 - Some drop down menus/lists
 - Some fields are “recognized suggestion lists” or “tag” system option

The screenshot shows a SharePoint form titled 'Pesticides Toxicity Control Report - City Staff'. The form is displayed in 'EDIT' mode, with a ribbon at the top containing 'BROWSE' and 'EDIT' tabs. The 'EDIT' tab is active, showing icons for Save, Cancel, Paste, Copy, Attach File, and Spelling. The form fields are organized into two columns. The left column contains a sidebar with 'Home' and 'Recent' sections. The right column contains the form fields. The fields are: 'Date of Application *' (text box with a calendar icon), 'Treatment Location *' (text box), 'Chemical Applied Choice *' (dropdown menu with '(None) No applications necessary' selected), 'Chemical Applied/EPA# (Not Listed Above)' (text box), 'Total Product Used' (text box), 'Units *' (dropdown menu with 'none' selected), 'Alternative Treatment' (text box with a link icon), 'External Application *' (radio buttons for 'Yes' and 'No', with a note 'select yes if chemical products are likely to come into contact with Stormwater or urban runoff'), 'Acres / Unit Treated' (text box), 'Targeted Pest *' (text box with a link icon), 'Comments' (text area), 'Company Name *' (dropdown menu with '(Select your company)' selected), and 'Title' (text box). At the bottom right, there are 'Save' and 'Cancel' buttons. A note at the bottom of the form states 'This is an optional field for any purpose you choose.'



Step #5: Data Entry

- Date of Application
 - This field will auto-fill with the current date and can be updated using the calendar icon to select the correct past date, or entered manually. If an application at a single site takes multiple days, record *only the date the application was completed*.
- Facility Treated
 - This is an alphabetical drop down list. Type the first letter of the full product name (as it appears on the label), and the system will bring you to the top of that letter in the list. Scroll as needed.
- Chemical Applied
 - This is a manual entry. Watch for typos for future data filtering purposes.





Step #5: Data Entry Cont.

- Total Product Used
 - This is a numerical only field. Leave it blank if not reporting chemical use, but make sure to report total product and NOT the percentage of the Active Ingredient.
- Unit
 - This is a drop down list that defaults to “none” in case the record does not include a chemical application. However, this is good for checking to make sure the product indicated, matches the proper unit (and extra layer of ensuring that applicators know their products).

Step #5: Data Entry Cont.

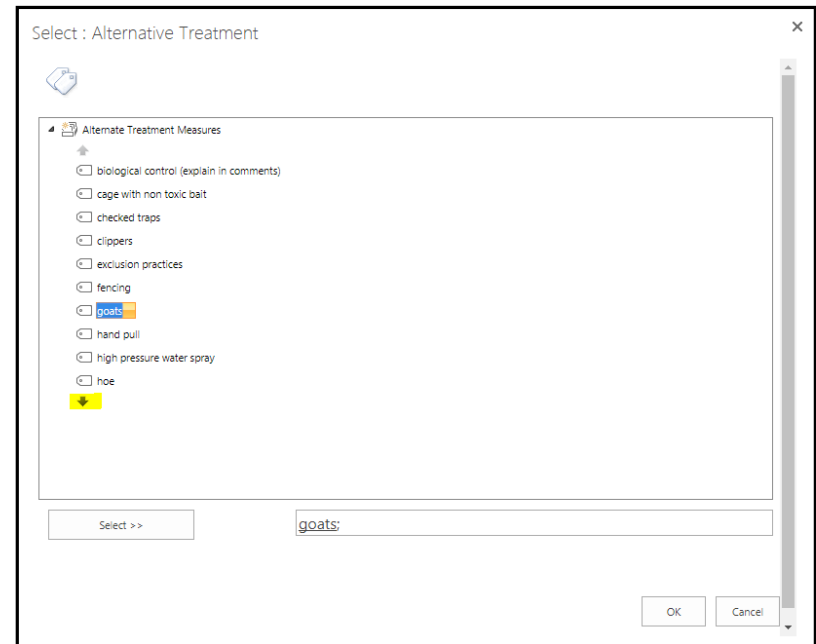
- Alternative Method
 - Includes a hierarchy of categories that can also be used to match a method in the list. Able to manually enter any method not recognized in the list if necessary.

Example: Begin typing “mulch” to see suggested matches. As each suggestion appears for subsequent methods, select it from the list and **DO NOT JUST HIT ENTER**.

Alternative Treatment	<input type="text" value="mul"/>	
External Application *	<div><div>Suggestions</div><div>sheetmulch (mulch, sheet) [Alternate Treatment Measures]</div><div>mulch/wood chip [Alternate Treatment Measures]</div></div>	
Acres / Unit Treated	<input type="text"/>	 ter or urban runoff

Step #5: Data Entry Cont.

- Alternative Treatment/Method Cont.
 - Includes a hierarchy of categories that can also be used to match a method in the list. Able to manually enter any method not recognized in the list if necessary. Or, use the tag icon in the upper right of the field to view the choices in a separate window.



- Use the black arrows to scroll the list. Once you see the item you need, click on it and choose the “select” button on the bottom left, or just double click and it will list your choices in the field below.

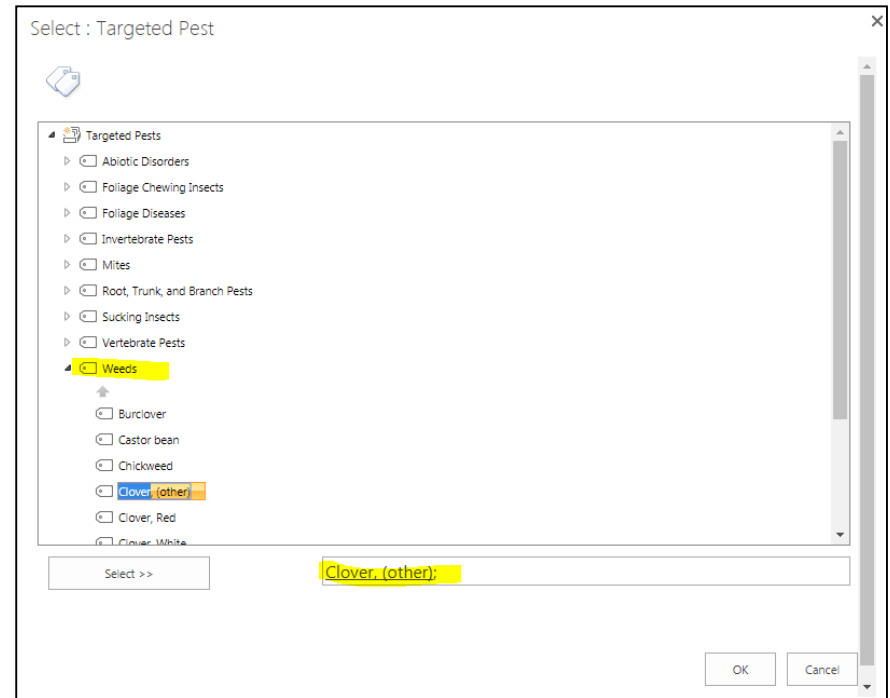


Step #5: Data Entry Cont.

- External Application
 - This required field indicates whether an application has the potential to come into contact with stormwater or urban runoff.
- Acres Treated
 - This field is optional and useful for vendors managing large areas (e.g. weed abatement).
- Targeted Pest
 - This field functions as a “suggestion list” or a hierarchical category system.
 - Begin typing name of target pest to see recognized options or open the tag system using icon on the right.

Step #5: Data Entry Cont.

- Targeted Pest Cont.
 - Scroll up or down the alphabetic list or use the black arrows to locate the correct category, and then click on the right facing triangles to expand the “node” or category list.
 - Ex: Navigate to the “Weeds” section and expand the arrow to select the correct species. Click “Ok” when finished.





Step #5: Data Entry Cont.

- Comments
 - Use this for tracking changes to targeted pest or effectiveness of alternative methods, etc..
- Company Name
 - This field is required. Select the correct option from the drop down list.
- Title
 - This is an field generated by the system that cannot be removed but is options. Vendors can use it as they see fit.

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Step #6: Review

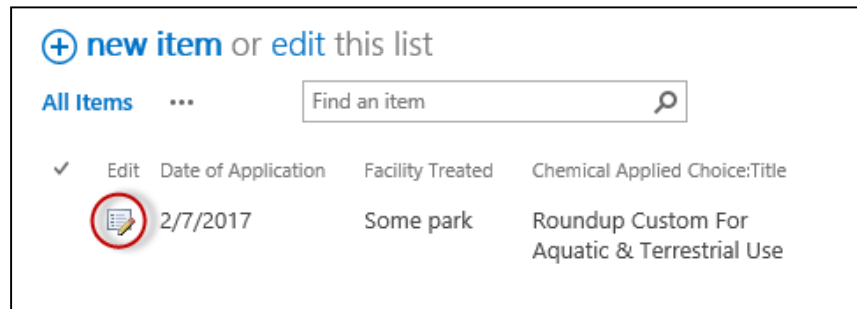
- Summary
 - Each service with a unique location and date will have a single record with the chemical use and/or alternative treatment and pest associated with it...
 - UNLESS the service provided is an ongoing and approved “standardized, non-target pest landscaping activity”. Talk to your Contract Manager for more information.
 - Even if NO applications or alternative methods were used/needed for an entire month, submit an “no services required” record with an explanation in the comments section.

Editing Records

■ Options


- Any record can be edited using the “edit” icon to the left of each entry.
- The record window will appear. Make changes and then select the “save” icon in the upper left.
- Delete the entire record if need be through the edit feature in the upper left.

.



+ new item or edit this list

All Items ... Find an item

✓	Edit	Date of Application	Facility Treated	Chemical Applied Choice:Title
		2/7/2017	Some park	Roundup Custom For Aquatic & Terrestrial Use

Field Form- Era of Accountability

- Optional Form
 - Developed with PRNS for municipal staff compliance
 - Shared with EV's for modification as needed
 - Good for Ag Commission auditing, etc.

Pesticide Use Reporting Field Form FY 16-17

Date: _____

Park District #: _____

Facility/Location: _____

Applicator Name(s): _____

Weather Conditions: _____

Targeted Weed/Pest: _____

Nontoxic Alternatives: _____

Pre-spray Checklist:

____ Label on Site ____ Reviewed Label

____ PCA Recommendation on Site ____ Service Container Label on Site

PPE Required (list): _____

____ Reviewed Route to Medical Facility

Full Chemical Name: _____

EPA Registration #: _____

Total Amount of Product Used: _____ Circle the Correct Unit: OZ. GA. PT. QT. LB.

Application Method(s): _____

Describe Treated Area (tree base, turf, water, etc.) _____

Units Treated _____ (Sq. Feet/Acres)

*Start Time: _____ AM/PM End Time: _____ AM/PM

Time Spent Applying Chemical: _____

Comments (note significant interactions, presence of park users, etc.) _____

Precautionary Measures Taken (notifications posted, barricades, etc.) _____

Applicator's Signature: _____

Instructions: Reference this form to guide required monthly online C.9 pesticide use reporting. Keep for your records (up to two years). *Start time refers to the time at which mixing of the chemical began. If a section does not apply, leave it blank. Send questions to Amber Schat or Sandra Freitas in ESD.

Pesticide Information

- DPR Search Tool

- <http://www.cdpr.ca.gov/docs/label/labelque.htm>
- Search By:
 - Product name
 - Registration number
 - Single chemical code
 - Single site code
 - Multiple variables
 - .

Search for Pesticide Products by California Registration Number

[Back to Product/Label Database Queries & Lists](#)

This query yields pesticide product information that meets the criteria you specify below.
For best results in running this query, see [What's in a Registration Number?](#)

Search by
registration number(s):

Enter a full or partial registration number.
To search for a distributor registration, enter the first two parts of the number.
To select multiple registration numbers, separate them with a comma.

Retrieve active products only: ☐



Contact Information

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