

City of South San Francisco



Integrated Pest Management Program

Prepared by



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REVISION HISTORY LOG

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1.0 SCOPE AND APPLICATION

The City of South San Francisco (City) is responsible for implementing pest control management practices within City-owned or managed properties/facilities. This includes, but is not limited to parks and open spaces, roadsides, landscaped medians, flood control channels and other outdoor areas, as well as municipal buildings and structures. The City of South San Francisco is committed to using environmentally safe practices for pest control to ensure the protection of the public and City employees, and to protect potable water sources, other aquatic resources, and public and private property.

The City has established this Integrated Pest Management (IPM) program to develop a consistent approach toward pesticide usage and management throughout the City, and to monitor the use of herbicides and pesticides. This IPM program provides written guidance for determining appropriate pest control methods, including the use of chemicals and other methods, for specific needs. IPM procedures and practices are provided to managers and supervisors of work units that have pest management responsibilities.

Pests include a wide range of plant, fungi and animal species that may be creating a nuisance. The City uses cultural and physical control methods as a the primary method of control. When these methods are not adequate, chemical controls are utilized to achieve an acceptable maintenance level for identified pests. After an acceptable level of control is achieved, the City then uses a combination of chemicals, physical and cultural methods to keep the pests under control. Physical methods include using brush rakes, chainsaws, flail mowing, weed whacking, and using various hand tools and tarping methods to control weed species growth. The City of South San Francisco may use livestock grazing and/or fire as a means of pest vegetation control, where applicable. Cultural method examples include removing debris and infested plant material, proper watering and fertilizing, growing competitive plants, or using pest resistant plants as well as mulching.

The City will perform educational outreach and/or support countywide or regional efforts as opportunities arise to educate residential and commercial pesticide users regarding:

- Goals and techniques of IPM.
- Pesticide related water quality issues consistent with the municipal regional storm water permit requirements.

2.0 REFERENCES

a) Federal Regulations

- Title 7, United States Code, Section 136-136y, and 40 Code of Federal Regulations (CFR), Parts 152-186 established the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which provides the federal regulatory framework governing pesticides and herbicides. FIFRA requires that all pesticides must be registered, and that no one can use a pesticide unless it has been registered. FIFRA further specifies whether a pesticide is classified as a restricted use or general use pesticide. The U.S. Environmental Protection Agency (EPA) is responsible for regulating pesticides at the federal level.
- Clean Water Act, for spills to a receiving water, sanitary sewer, or storm sewer.
- Safe Drinking Water Act, which establishes Maximum Contaminant Levels (MCLs) in drinking water for certain chemicals that are components of pesticides.
- Clean Air Act, which classifies certain pesticides as Hazardous Air Pollutants (HAPs).

b) State Regulations

- The Pest Control Operations Laws are located in Title 3, California Code of Regulations (CCR), Section 300 et seq, and in the Food and Agricultural Code, Section 11401 et seq. These laws establish the Department of Pesticide Regulations (DPR) as the agency responsible for oversight of state regulation of pesticides. The California pesticide program parallels FIFRA. The DPR enforces federal and state-defined pesticide laws and regulations, and certifies applicators that use restricted use pesticides in California.
- Hazardous Materials Business Plan/Community Right to Know Laws, which require inclusion of pesticides in Hazardous Materials Business Plans, if the quantities stored exceed 55 gallons or 500 pounds.
- Hazardous Waste Control Laws, under which pesticide wastes (with the exception of empty containers) are considered to be hazardous wastes in the State of California, and subject to regulation by the Department of Toxic Substances Control (DTSC).
- The City of South San Francisco will follow guidelines for pesticide application as stated on the product label and will adopt specific application guidelines from the Pesticide Regulation's Endangered Species Custom Real time Internet Bulletin Engine (PRESCRIBE). The PRESCRIBE online database application was developed to help pesticide applicators find out if they have any endangered species in the vicinity of their application site, and the use limitations applicable to the pesticide product(s) they intend to use. The following is the link to the engine:

<https://www.cdpr.ca.gov/docs/endspec/prescint.htm>

c) Jurisdiction of Local Agencies

- County agricultural commissioners are employees of the California Department of Food and Agriculture, having responsibility for local pesticide regulation under the direction of the DPR. The DPR enforces state and federal requirements, and the commissioners enforce local standards. The commissioners have the authority to adopt regulations governing pest control operations upon approval of the DPR.

3.0 DEFINITIONS

<u>Term</u>	<u>Definition</u>
<i>"Action Threshold"</i>	The set of conditions required to trigger a control action.
<i>"FIFRA"</i>	Federal Insecticide, Fungicide, and Rodenticide Act
<i>"General Use Pesticides"</i>	Pesticides that may be used without creating unreasonable adverse effects on the environment.
<i>"Herbicides"</i>	<p>Substances or mixtures of substances intended to prevent or inhibit the growth of, kill, or destroy plants and plant parts that are declared to be pests. Herbicides are a category of pesticide and include, but are not limited to:</p> <ul style="list-style-type: none">• Direct contact herbicides intended to kill or destroy weeds, unwanted brush and trees, or unwanted plant parts, or to mitigate their adverse effects on desirable plants.• Soil treatment herbicides intended to kill or destroy weeds, unwanted brush and trees, or unwanted plant parts, or to prevent the establishment of any or all plants.• Pre-emergent herbicides intended to prevent or inhibit the germination or growth of weed seeds or seedlings.• Root control herbicides intended to prevent the growth of, or kill roots in certain sites such as sewer lines and drainage tiles.• Aquatic herbicides intended to prevent, inhibit, control the growth of, or kill aquatic weeds.• Algaecides, except slimicides, intended to prevent or inhibit the multiplication of, or destroy, algae in ponds, swimming pools, aquaria or similar confined sites.• Debarking agents intended to kill trees by treatment of bark on trunks.• Biological weed-control agents such as specific pathogenic organisms or entities prepared and used as herbicides.

<u>Term</u>	<u>Definition</u>
<i>“Injury Level”</i>	The pest population size or density associated with intolerable damage.
<i>“Pesticides”</i>	Any substances or mixtures of substances that are intended prevent, destroy, repel, or mitigate any pest, or intended for use as a plant regulator, defoliant, or desiccant. Pesticides are classified as being for either general use or restricted use.
<i>“Pests”</i>	(1) Any weed, insect, rodent, nematode, fungus. (2) Any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other micro-organism (except viruses, bacteria, or other micro-organisms on or in living humans or other living animals) that is declared to be a pest under FIFRA.
<i>“Pest Problem”</i>	A pest infestation and its consequences, or any condition for which the use of plant regulators, defoliants, or desiccants would be appropriate.
<i>“Restricted Use Pesticides”</i>	Pesticides that may have unreasonable adverse effects on the environment, including injury to the applicator. The use or possession of restricted pesticides requires a written permit from the local agricultural commissioner. The commissioner has the authority to deny a permit for use if the commissioner finds that the proposed use will have adverse environmental effects that outweigh the benefits. As a general rule, the City of South San Francisco does not use Restricted Pesticides.
<i>“Signal Words”</i>	The following definitions apply to signage associated with the use of pesticides: <ul style="list-style-type: none"> • “Caution”: Least Hazardous to Human Health • “Warning”: Intermediate Hazard to Human Health • “Danger”: Requires Pesticide Applicator

4.0 RESPONSIBILITIES

Departments performing pest management activities will identify an IPM program coordinator who is responsible for assisting staff with implementation of this IPM policy. The Parks Program Manager is the IPM Program Coordinator for the South San Francisco Parks Division. The Facilities Program Manager is the IPM Program Coordinator for the South San Francisco Facilities Division.

4.1 LEAD PARK MAINTENANCE WORKERS / PARKS SUPERVISORS

- a) Ordering supplies including, but not limited to products used and required Personal Protective Equipment
- b) Maintaining current and up to date copies of all Safety Data Sheets

- c) Maintaining stocked spill kits
- d) Assigning IPM related work to employees

4.2 EMPLOYEES

- a) Performing all work safely and in accordance with California Department of Pesticide Regulation (DPR) guidance
- b) Applying pesticides according to the label
- c) Posting areas 48 hours prior to application and keeping public sites closed after application
- d) Utilizing PPE according to the label

5.0 MONITORING

The Best Management Practices described in this section are to be implemented by all City of South San Francisco work units that practice pest management on City property.

5.1 IDENTIFY POTENTIAL PESTS WITHIN MANAGEMENT AREA

All personnel having responsibilities for pest management will be trained to accurately identify major pests and the damage that such pests may cause. Field manuals and other resources will be made available to staff to assist in pest identification, as necessary.

5.2 ESTABLISH INJURY LEVELS AND ACTION THRESHOLDS FOR INDIVIDUAL PEST SPECIES

An injury level is the pest population size or density associated with intolerable damage (e.g., height and thickness of grasses under aqueducts or number of ground squirrels burrowing in an earthen dam). An action threshold is the set of conditions required to trigger a control action (e.g., emergence of Bermuda grass along a right-of-way).

City of South San Francisco staff shall determine the infestation levels that will be intolerable or that will cause unacceptable damage at different times of the year, during various plant growth stages, and for other situations.

Action thresholds are usually reached when:

- Monitoring results indicate that the pest population will reach the injury level, if left untreated.
- Biological or environmental factors cannot be expected to reduce the pest problem within a reasonable amount of time.
- Pest management costs (including any environmental or health impacts) are considered to be lower than costs associated with potential pest damage.

5.3 ESTABLISH MONITORING GUIDELINES

A monitoring program is necessary for detecting pest infestation levels and determining when to implement control actions. Pest monitoring programs have two primary objectives:

- To identify where and when pest problems become intolerable.
- To determine the effectiveness of treatment actions.

Monitoring methods may vary from site to site, and from pest to pest, but all monitoring methods must involve regular inspections for pests and/or damage symptoms.

Written monitoring reports will be prepared by each of the work units performing IPM activities so that management strategies may be reliably evaluated. All reports shall include date, time, location, observed pest species, and degree of the pest problem. All IPM for facilities is outsourced and the City receives a monthly log tracking any pesticide that is used in those efforts.

5.4 DEVELOP A LIST OF ACCEPTABLE MANAGEMENT STRATEGIES FOR INDIVIDUAL SITES TYPES OF SITES, AND PESTS

Each work unit practicing IPM shall develop a list of acceptable management strategies for the areas under which it has authority and responsibility. The criteria listed below should be used in developing these management strategies. Since these criteria may not be met in every case, or met to varying degrees, judgment must be exercised to maximize the benefits associated with each strategy:

- Least damaging to the general environment.
- Least hazardous to human health.
- Least toxic to non-target organisms.
- Absence of listed species or known listed species habitats.
- Most likely to produce permanent reduction of the pest.
- Easiest to carry out effectively.
- Most cost-effective in the short and long term.

As strategies are developed, they may include a combination of various management alternatives. The preferred methods in an IPM program are those that permanently prevent pest problems, thereby eliminating the potential for pest damage. When this is not possible the City prefers to use mechanical and cultural controls whenever possible; relying on chemical controls last. Pest management strategy may include one or more of the following elements:

- No controls.
- Physical/mechanical controls (e.g., hand labor, soil tilling, mowing).
- Biological controls (e.g., animal grazing, use of predators or parasites).

- Chemical controls (preferably low toxicity materials such as soaps and oils).
- Cultural controls (e.g., mulching, alternative vegetation, prescribed burns).

6.0 PESTICIDE USE PRACTICES

In certain cases, City of South San Francisco work units applying IPM strategies include pesticide use (primarily herbicides) as an element of their management strategies. The City of South San Francisco's pesticide usage practices are summarized as follows:

- If chemical pesticides/herbicides are used, use the least toxic pesticide/herbicide that will adequately achieve IPM goals. Take into consideration overall risk to the applicator, end users, and impact to the environment.
- Comply with all federal, state and local laws and regulations.
- Read and follow all chemical product label instructions.
- Review the history of a site and determine pest conditions.
- Monitor problem areas periodically in order to identify the level of pest condition, as discussed in Section 5.0.
- Establish an action threshold for each pest species or pest type as part of a pesticide use decision. This action threshold should be consistent with the work unit's IPM strategy.
- Apply pesticides at the appropriate time and under adequate weather conditions to maximize their effectiveness on the target organism and minimize the likelihood of non-target impacts as well as discharging non-degraded pesticides in storm water runoff.
- Do not mix pesticides adjacent to a storm drain inlet, culvert, watercourse, or filter bed. Mix in an area where spillage, if it occurs, can be easily contained.
- Select pesticides and application techniques along roadsides that will retain some vegetative cover, if possible. This will help prevent soil erosion, slow the rate of storm water runoff and minimize potential for contaminated runoff.
- Calibrate field equipment regularly to ensure the desired application rate.
- Mix only as much product as necessary for the application. Striving for the lowest amount of active product to achieve pest management levels.
- Maintain a record of pesticide usage for each site. This record shall include the type and quantity of pesticide used.
- If there is likely to be public contact within the area to be sprayed with a pesticide, adequate notification or posting must be provided. After application, the site must be monitored until re-entry period is met as defined by the product label.
- Monitor success of the pesticide treatment and adjust usage based on monitoring. This monitoring shall be consistent with this IPM program.

6.1 PESTICIDE STORAGE

Pesticides shall be stored in locked buildings. All pesticide containers shall be labeled. The label shall include the name of the pesticide, signal word, owner's company name and section (e.g., SSF Parks Division-Vegetation Management).

6.2 PESTICIDE DISPOSAL

Triple rinse empty pesticide containers immediately upon emptying contents. Place rinse water in the pesticide spray tank, incorporating it into the pesticide mixture. Dispose of the container rinse water or spray tank rinse water as a product over a targeted area within the application site. Dispose of triple-rinsed empty pesticide containers according to County Agricultural Commission and manufacturer's recommendations. Containers should be rendered unusable and can then be disposed of with other non-hazardous trash produced at the site. If possible, unwanted or unused pesticides should be returned.

6.3 PESTICIDE SPILL RESPONSE

Spill kits must be prepared and maintained at pesticide storage areas and on all application equipment. Spill kits will include the following:

- An instruction sheet with a contact notification list and phone numbers.
- Absorbent material capable of absorbing up to five gallons of liquid.
- Shovel, broom, dustpan, gloves, warning tape and any other required PPE to secure the area in case clean-up cannot be accomplished immediately.

Employees who apply pesticides will be trained in the use of spill kits. Work units shall maintain a written pesticide spill response and notification procedure and all employees that apply pesticides shall be familiar with the procedure. The Lead Park Maintenance Workers and/or Supervisors are responsible for ensuring spill kits are stocked, maintained and placed in necessary locations.

7.0 TRAINING AND CERTIFICATION

Pesticide applicators shall obtain a state pesticide applicator certification or work under the direction and supervision of an employee who has obtained the state certification. For the City of South San Francisco Parks Division, individuals in the following job titles hold this certification: Lead Park Maintenance Workers, Supervisors, Craftworkers and ideally Division Manager. As a general rule, the City of South San Francisco does not use Restricted Pesticides. The use or possession of Restricted Pesticides requires a written permit from the County Agricultural Commissioner. The commissioner may elect to be present at the time the restricted material is being used.

Pesticide applicators shall be trained in general IPM practices, the safe use of pesticides and the proper inspection of applicator equipment to prevent accidental pesticide leaks, spills, and potential hazards to applicators and the environment. Training shall be conducted annually for all staff who do not hold a state pesticide applicator certificate. The work unit shall maintain records of staff that received the training for at least three years. New employees shall not apply pesticides until they have received the appropriate training or until their supervisor confirms that they have skills and knowledge equivalent to the training.

City of South San Francisco personnel who apply pesticides will be trained in procedures and methods to identify and protect Endangered Species during the use and application of pesticides.

8.0 PROGRAM EVALUATION

The City of South San Francisco will evaluate its IPM Program annually to ensure the procedures strive to achieve the goals through an adaptive management process. The annual evaluation will include the following:

- Review the IPM Best Management Practices to ensure that responsible City of South San Francisco personnel employ the practices, and revise the practices if necessary to achieve the IPM program goals.
- Review monitoring records from the current or previous year(s) to determine if the acceptable pest management practice is appropriate or requires alteration to achieve the program goals.
- The City of South San Francisco will review its purchasing procedures, contracts or service agreements with pest control contractors, and employee training practices to determine what changes, if any, need to be made to support implementation of this IPM Program.

9.0 RECORDKEEPING

Accurate recordkeeping is essential for evaluating and improving an IPM program, as well as for reference purposes in the event that City of South San Francisco management, City Council or Commissions, or the public requests information on measures taken by the City of South San Francisco to control certain types of pests.

9.1 MANAGEMENT AREAS

Each work unit is responsible for maintaining written records that include the following information, which should be reviewed and updated annually:

- A list of pests identified within a given management area.
- A description of injury levels and action thresholds for a given management area.
- A list of acceptable management strategies for a given management area.

9.2 CONDITIONS AND ASSOCIATED PESTICIDE USE

In addition, written records shall be kept of observations of the management area based on the monitoring guidelines established in Section 5.0. These observations should include, whenever possible:

- The degree of pest infestation using density, distribution, or other appropriate parameters (a map of the management area is useful).
- Information concerning the treatment method used for the pest problem, including a description of the treatment method, area treated, time(s) and date(s) of treatment location of treatment, personnel performing treatment, and the cost of treatment.
- An assessment of the effectiveness of the treatment method in minimizing or eradicating the pest problem in both the short and long term.
- A description of side-effects of the treatment on non-target organisms.
- A summary of any citizen complaints and/or positive comments received, and a description of any other issues that arise.

9.3 PESTICIDE TYPES AND USES

Each City of South San Francisco Division or Department that uses pesticides shall produce an Annual Pesticide Usage Report. The report shall contain the following information, at a minimum:

- Types of pesticide used (product name is acceptable).
- Quantity of each pesticide used.
- Locations where pesticides were used.

Reports shall be submitted to Supervisors or Managers, who will compile and maintain the information.

Appendix A
Approved Pesticide List

Appendix A: Approved Pesticide List

Product Name	EPA California / FIFRA Registration #
Capstone	62719-572
CheetahPro	228-743
Cleantraxx	62719-702
Dimension 2EW	62719-542
Garlon 4	62719-527
Lesco 90-10 Nonionic Surfactant	10404-50003-AA (CA Reg No.)
Lifeline	70506-310
Magnify	9==682: 5569
Milestone	62719-519
Pathfinder II	62719-176
Roundup Custom	524-343
Roundup ProMax	524-579
SpeedZone Southern	2217-835
Triclopyr 4	10404-119
Turflon 4	62719-566
Turflon Ester	17545-8-54705

NOTE: EPA/California Registration Numbers are listed on the pesticide containers and are specific to the formulation of the pesticide. These numbers will change if a manufacturer changes a formulation, regardless of any change in the product name. Always check EPA/California Registration Number to confirm that product is consistent with the above list. Rodenticides with the anticoagulants chlorophacinone and diphacinone are also approved for use.