

FINAL INTEGRATED PEST MANAGEMENT PLAN

Storm Water Management Services

June 19, 2015

Prepared For:

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- A Chemical List (DRAFT)
- B Request for Addition to Approved Chemical List (DRAFT)

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1.0 Introduction

1.1 Background

The State Water Resources Control Board (SWRCB) promulgated new requirements for storm water discharges for Phase II Small Municipal Separate Storm Sewer Systems (MS4s) on July 1, 2013 by issuing the Water Quality Order No. 2013-0001-DWQ (General Permit No. CAS 000004). A subset of the Phase II Small MS4 permit includes systems that are similar to municipalities, such as systems operated by military bases, large hospitals or prison complexes, highways and other thoroughfares. These subsets of Small MS4s are referred to as Non-traditional Small MS4s. North County Transit District (NCTD) was designated as a new Non-Traditional Small MS4 Permittee subject to this general permit. In order to comply with the Non-traditional Small MS4 permit provisions, specifically Section F.5.f.9_(ii) (b)_(2), NCTD has developed this Integrated Pest Management (IPM) plan.

1.2 The Elements of an IPM Plan

IPM is a strategy used by NCTD in the maintenance of its built facilities and rights-of-way. The following definition is from the U.S. Environmental Protection Agency's IPM web site (USEPA, 2015):

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

The University of California-Davis defines integrated pest management as follows (UCD, 2015):

Integrated pest management is 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 use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

The integrated pest management process first determines if a pest needs to be managed, and if so, how best to do it. Key elements are information gathering, well-informed decision making and monitoring of results. The process promotes effective, low-risk management strategies to manage pests. The controls used in this program include cultural, physical, mechanical, manual, biological and pesticide methods and materials. A combination of these methods is often used, with preference given to non-chemical controls. Under certain circumstances, non-chemical methods may not be applicable and chemical applications are the only viable alternative. Where chemical methods are to be utilized, consideration is given to the potential human and ecological hazards of the chemical, as well as the persistence, mobility, and potential for impact to stormwater quality or nearby aquatic habitat.

NCTD's integrated pest management policy is designed to standardize specific work practices at NCTD which are performed by contractors across multiple sites. The specific pest prevention and control measures explained in this policy are aimed at pest management applications at NCTD's built facilities

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and rights-of-way. Within these standardized work practices, NCTD professionals will evaluate methods selected to manage specific pest populations on a case-by-case basis. In order of preference, from most preferable to least preferable, these methods of vegetation and pest management include:

- Proper Planning and Management Strategies
- Cultivation Practices
- Biological Methods
- Chemical Methods: Use of the least toxic and most effective pesticide from NCTD's chemical list

These methods are explained and described further in Section 3.

1.3 IPM Jurisdiction

This plan applies to all railroad track ballast, rights-of-way, station grounds, rail yards, bridges, road and pedestrian crossings, around shops, buildings, communications and signals within all property owned or controlled by NCTD (with the exception of all "Mitigation Areas"). Mitigation areas are being managed separately under project specific mitigation plans and/or revegetation plans, which will include specific pesticide and/or herbicide requirements not included herein.

1.4 Safety

When NCTD Contractors perform pest management activities to apply pesticide and/or herbicide materials, the Contractor is required to provide each worker appropriate personal protective equipment (PPE). Use of PPE is an integral part for safely applying pesticides and/or herbicides. **No NCTD employees may apply pesticides or herbicides.**

1.5 Training

Pursuant to permit section F.5.f.9.(ii)(b)(1), NCTD will provide all contractors buying, using, supervising or advising on the use of pesticides, with mandatory training regarding NCTD's MS4 General Permit requirements associated with pollution prevention, storm water issues, BMPs, and how these new requirements may affect the use of pesticides and herbicides.

1.6 Laws and Regulations

Several federal and state agencies regulate the use of pesticides. NCTD conforms to all applicable pesticide laws and regulations. NCTD does not purchase, store, and apply pesticides and allows only State of California Department of Pesticide Regulation (DPR) licensed pesticide applicators to buy, advise, use or supervise pesticides and their application on NCTD-owned properties. To obtain a Public Pesticide Applicator's license, applicators must pass a series of tests given by DPR covering pesticide laws, safety, use, integrated pest management, and other subjects. Applicators may be personally liable if they apply pesticides contrary to state and federal laws and label directions.

Applicators are required by law to record specific information when applying pesticides. NCTD requires this information and these forms, be provided to the NCTD Storm Water Program Manager within a

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reasonable timeframe. Recorded information should include: date and time of application, conditions, locations and formulations and amount applied.

NCTD will assess over time the adequacy of the provided forms and information in use, and as necessary, may develop replacement forms.

1.7 NCTD IPM Project Manager

NCTD has designated the following NCTD employee as the IPM Project Manager. This person will be responsible for ensuring all pesticide/herbicide activities are performed in accordance with this IPM plan, NCTD's MS4 General Permit, and applicable state and federal laws.

NCTD IPM Project Manager:

Nadina Facchini, Senior Planner North County Transit District Phone (760) 966-6537 Mobile (760) 450-8922

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2.0 Licensing of Pest Management Personnel

2.1 Purpose

This section defines the education, training, licensing and certification requirements for applicators who are applying pesticides, or supervising others applying pesticides.

2.2 Background

The California DPR, issues pesticide applicator licenses which assures a level of expertise and familiarity with pest management practices and pesticide materials. NCTD is committed to maintaining a high level of expertise in its contracted workforce. The continuing education requirements of state licensing also help keep personnel up-to- date on pest management theory and practice. Therefore, NCTD requires all contractors buying, using, supervising or advising on the use of pesticides, to maintain a California DPR applicators license. In addition, no NCTD employees or volunteers may plan the use of or apply pesticides or herbicides.

2.3 Procedure

NCTD will require the following:

- For all new contracts with pesticide and herbicide contractors, the contract language will be updated to require the contractor to produce documentation of a valid DPR applicators license for all personnel buying, using, supervising or advising the use of pesticides on behalf of NCTD.
- 2. NCTD will maintain a file of all received licensing documentation.

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3.0 **Pest Management Methods**

3.1 **Purpose**

This section establishes the principles governing NCTD's approach to pest management.

3.2 Background

NCTD utilizes the principles of integrated pest management in managing facilities and land under its care. Integrated pest management is a coordinated decision-making process that uses the most appropriate management strategy on a site-specific basis. The process first identifies the pest, determines if the pest needs to be managed, and if so, how best to do it. Key elements of an integrated pest management program are information gathering, well-informed decision making and monitoring of results. Through proper decision making, the process promotes effective strategies to manage pests.

Pursuant to MS4 General Permit section F.5.f.9.(ii)(a) & (b), NCTD will use the below IPM principles to reduce discharge of pesticides, herbicides, and fertilizers whenever applicable and appropriate.

3.3 Procedure

NCTD shall employ integrated pest management principles in managing pest problems. NCTD and contractor Staff shall monitor facility and landscape conditions, assess appropriate thresholds and determine action levels on a site-by-site basis. All licensed applicators shall determine an effective, feasible and economically sound pest management method that does not create unusual risk to the public, the environment or staff. This requires that all proposed applications consider the location of surrounding sensitive receptors (e.g., storm drains, aquatic habitat, and schools or day care centers) prior to each application.

If a pesticide or herbicide is chosen as the best method for pest management, licensed applicators shall choose appropriate materials only from the chemical list specific to their facility, site or work unit. The suitability of the material, nature of the site, potential health and safety effects, potential environmental effects, overall costs, characteristics of the product and any other special considerations related to the situation shall be taken into account in this process. Per permit section F.5.f.9.(ii)(b)(2)(d), NCTD will limit or replace herbicide and/or pesticide use whenever applicable and appropriate. After control measures have been made, employees or contractors should appropriately monitor the facility or site to assess any impact and the efficacy of the measures taken.

Pesticide resistance describes the decreased susceptibility of a pest population to a pesticide that was previously effective at controlling the pest. To avoid pesticide resistance at a site, different pesticide products appropriate for controlling a target pest and listed on the chemical list for the program addressing the pest, should be rotated.

3.3.1 **Proper Planning and Management Strategies**

The management techniques used in this manual include proper planning and management decisions, and cultivation, mechanical and physical, biological and chemical methods. One or more of these methods are often utilized in combination.

Management of pests via prevention strategies can be highly effective and low in cost. This approach focuses on eliminating problems before they begin. Examples include prioritization of specific areas for control measures and establishing thresholds for action and the tolerance level for different pests. These thresholds vary according to pest, plant and site. Action thresholds are determined on a case-bycase basis.

Threshold is used to describe a level of pest presence above which unacceptable amounts of negative plant health impacts, environmental impacts, effects on infrastructure and assets, intolerable aesthetic impacts, or undue safety risks are likely to occur.

Action level is the point at which control measures are necessary to prevent a pest population or its impact from exceeding the threshold.

Best Management Practices are methods or techniques that have consistently shown results superior to those achieved with other means, and that are used as benchmarks or guides for defining NCTD's onsite practices.

Proper site design and plant selection are significant ways to avoid pest problems. While no landscape or facility can be designed to be completely free of pest management needs, such considerations need to be part of the planning process. Examples include:

- Use of disease- or pest-resistant or tolerant plant species or varieties;
- Use of native and climate-appropriate plants for decorative landscape applications (to reduce water use and fertilization requirements), pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(a);
- Removal of pest-susceptible plants, or replacement with pest-resistant plants or varieties;
- Elimination or modification of problematic areas;
- Proper spacing of plant material to reduce the incidence of pest problems;
- Maintenance of species diversity and elimination of monocultures in plantings;
- Prohibiting the application of pesticides and fertilizers when two or more consecutive days with greater than 50% chance of rainfall are predicted per permit section F.5.f.9.(ii)(b)(2)(c);
- Establishing over-story plantings, occluding groundcover plantings and other design techniques benefiting both the establishment of plants and the reduction of weeds;

3.3.2 **Cultivation Practices**

Proper cultivation practices are essential to well-managed facilities and landscapes and can often help maintain their resistance to pest problems. Examples of cultivation practices include:

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- Knowledge of the cultivation requirements of plants to best provide proper conditions for optimum plant health and pest resistance;
- Adequate site, soil and grade preparation before landscape installation;
- Use of disease-resistant grafting rootstock or scion wood;
- Proper timing and use of water to reduce over or under watering and to minimize irrigation runoff, pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(4);
- Proper timing and use of fertilizer to eliminate over and under fertilization, including limiting or eliminating the use of fertilizers within five feet of pavement, twenty-five feet of a storm drain inlet, or fifty feet of a water body, pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(e);
- Raking and debris removal in certain garden or landscape situations, and removal of pest sources;
- Pruning and plant removal to promote air circulation and light penetration for plant health;
- Removal of diseased, infested, damaged or dead wood;
- Reduced mowing of grass to allow for greater pollutant removal, but jeopardizing public safety, pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(f);
- Mulching for weed reduction, water retention, winter protection, root zone improvement, and to keep clippings and leaves away from waterways and out of the street, pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(b).

3.3.3 **Biological Methods**

Where applicable, biological control of pests is useful to manage pests. Typically most important is minimizing disruption of natural pest controls that may be present. Examples of biological methods include:

- Introducing insect or disease parasitoids, predators and microbial products to control pests. Any use or release of non-native insects is subject to the approval of NCTD;
- Minimizing the use of disruptive techniques and materials in landscapes that may destroy natural pest control organisms.

3.3.4 **Chemical Methods**

Chemical controls include both naturally derived and synthetically derived pesticides. Pesticides are derived from many sources, vary widely in their characteristics and must be examined individually to determine their suitability within the integrated pest management approach. Examples of chemical methods include:

- Placement of pheromone traps
- Disinfecting materials or equipment to prevent spread of pests

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· Application of naturally and synthetically derived pesticides

Chemical List is a list of those chemicals approved for use by the NCTD IPM Project Manager for a specific NCTD department that is responsible for overseeing contractors applying pesticides. An example of the current chemical list is provided in Appendix A.

Herbicide Resistance is the inherited ability of a non-native plant to survive and reproduce following exposure to a dose of herbicide that would normally be lethal to a non-native plant.

4.0 Criteria for Choosing a Pest Management Method

Section 4 provides additional criteria to inform staff and contractors in the determination of the pest management method best suited for the particular site or need.

4.1 Nature of the Site

Different NCTD sites may have varying standards of acceptable care and appearance. Determining whether a particular NCTD site requires control of pests, and what level of control, requires taking these differences into account and specifically considering the following:

- Erosion susceptibility and potential movement of soil through runoff
- The intended use and function of the facility or landscape
- The feasibility of the method given the area and scope of the problem
- The relative importance and public expectation of a facility site or planting
- Site conditions such as soil type, grade, drainage patterns and presence of surface water

4.2 Possible Health and Safety Effects

Pest management methods have varying possible health and safety effects. It is necessary to assess the following:

- Short and long term toxicological properties, equipment operation safety issues, worker safety and any other related potential health effects of the materials or methods, both to the applicator and especially vulnerable populations such as young children and pregnant women
- Equipment operation safety issues for both the operator and the public
- Worker safety and worker injury issues involved with carrying out the method

4.3 Possible Environmental Effects

Some pest management methods may cause both acute and chronic toxicity and other related potential effects to non-target organisms including mammals, birds, amphibians, fish, invertebrates and other organisms. Factors to be considered in evaluating possible environmental effects include the following:

- Environmental effects from potential bioaccumulation
- Potential impacts to non-target plants and other organisms from materials or methods
- Potential impacts to federally listed threatened or endangered species
- Possible introduction or establishment of invasive plants
- Chemical solubility and potential migration from the point of application to storm drains or other natural drainage areas.

4.4 Costs

In choosing a pest management method, consider both short and long term costs as they relate to:

- · Costs of the material or method
- Application and labor costs
- Length and quality of pest control
- Feasibility of using a particular method or product

4.5 Characteristics of the Product

A pest management product must match the problem it is meant to tackle. Consider:

- Target pests and target sites of the product being used
- Possible residual effects, decomposition pathways, rates and breakdown products
- Volatility and flammability
- Product formulation and package size
- Leachability, solubility and surface and soil bonding characteristics of the product
- Ease of cleaning equipment after use
- Positive and negative synergistic effects of pesticide combinations
- Components of so-called inert ingredients and trademarked adjuvants

4.6 Special Considerations

- Application equipment availability
- Method of delivery: type of equipment and technique being used to apply pesticide
- · Current and anticipated weather conditions
- Previous pesticide applications to the site and the interval between treatments
- Possible development of pest resistance to a particular management method or material (ensure the optimal amount of pesticide consistent with the label be used to reduce the potential for development of pest resistance and to minimize the frequency of applications necessary to control the target pest)
- Product rotations with differing modes of action rather than relying on a "one material fits all" approach to avoid pest resistance
- For natural area invasive plant removal, the presence of nesting birds in area to be treated

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Following are some considerations to make before beginning an application to assure the proper amount of pesticide is mixed.

- Weather conditions and predictions: Pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(c), when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, there shall be no application of pesticides and fertilizers;
- Acreage/square footage of the job site
- Calendar: special events, mowing, irrigation, etc.
- Type and size of the equipment appropriate to do the job

When applying the pesticide use the following procedures to reduce and safely store the rinse solution. These are secondary to label information and state and federal regulations.

- Mix only enough pesticide solution to do the job that day.
- Use up all pesticide, applying until the tank is empty, or no more solution is coming through the nozzle.
- If pesticide mix remains in spray equipment at the end of the work day clearly label the contents, affix to the tank or sprayer all legal labels for the products used. Also mark the current concentration for each product, the date and the name of the applicator.
- When resuming spray applications at a future date, either use the leftover material, or add dilution water and circulate the mix thoroughly before adding new concentrate.
- If spray tank rinsate is created, store the rinsate as make-up water for the next day. The next day's pesticide should be compatible or the same. The same labeling requirements described above pertain to the rinsate mix as well.
- Rinsing and/or cleaning of the sprayer may be necessary if the following conditions apply: it is necessary to use a pesticide incompatible with that previously used, or before long term storage of the equipment.

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5.0 Pesticides Approved for Use by NCTD

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5.1 **Purpose**

This section establishes the oversight procedures and selection process of pesticide materials for use at NCTD facilities.

5.2 Background

Pesticides vary widely in their characteristics and their legally labeled uses. Not every registered pesticide will be appropriate for use. Certain pesticides may be suitable for one kind of site or purpose but not for others. For example, managing for native grasses in large prairies may require the use of broadleaf specific herbicides. These same broadleaf-specific chemicals would not be the best choice for managing a grass lawn in a developed park, school yard or home garden because other techniques or less toxic chemical options are available. Pesticides must be carefully evaluated for their suitability for specific program use before they are included on an approved list. For Leadership in Energy & Environmental Design (LEED) certified buildings, any pesticide that meets San Francisco's Tier 3 hazard criteria is considered a least toxic pesticide (http://www.tier3pest.com/). Program needs for various pesticides change over time as new pest challenges arise. Also, pesticide material availability changes as products, active ingredients and label uses are added or removed. Information about pesticides may change over time and this may influence their suitability for program use. For these reasons, approved lists need to be flexible allowing for additions and deletions.

Integrated pest management principles show that it is more desirable to have a specialized selection of products that target specific pests, than a smaller number of general-purpose pesticides. This aids in limiting the effects of the control to the target pest only and may also reduce the number of resistant pests that can arise from continued use of a small number of controls. As a result, a reduction in the overall quantity of pesticides used is realized.

5.3 Procedure

Pesticides approved for use on NCTD property shall be listed in the chemicals list (Appendix A). The list of chemicals in Appendix A have not been formally vetted and approved by the NCTD IPM Project Manager. Rather, they represent the chemicals that are currently used and are considered to be conditionally approved. Only chemicals identified in the conditionally approved current use list should be used at this time. NCTD will spend the next year reviewing and refining these list in collaboration with affected staff and managers in each program. Chemical lists will be finalized after this effort has been completed.

Requests by Contractors to add products to the approved lists are made by submission of a "Request for addition to approved chemical list" form (see Appendix B) to the NCTD IPM Project Manager. This request will include information regarding the product and its characteristics, expected uses, comparative costs and how the product will improve the integrated pest management program. The NCTD IPM Project Manager will then research the product's characteristics, including toxicological, environmental and physical properties. All aspects of potential use of the product and possible impacts

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to facility users, infrastructure and the environment will be examined. Proposed additions and deletions from the lists shall be approved by the NCTD IPM Project Manager.

Once approved, the product will be placed on the approved chemicals list and staff informed of the addition. Deletions of products will be made known to NCTD staff and Contractors as soon as practicable. A pesticide may also be designated on the list as "use up do not restock" is approved for use within specified units until current supplies are exhausted unless otherwise noted. NCTD will comply with all federal and state laws addressing use of pesticides. Loss of federal or state registration for a pesticide will result in its automatic deletion from the approved chemicals list, without the need for approval by NCTD, following the schedule set by law. NCTD will choose pesticides for the approved chemical list after assessing toxicological impacts, environmental impacts, efficacy, feasibility, cost and all other pertinent aspects of their use within an integrated pest management approach. Only pesticides from the approved lists shall be used.

NCTD expects strict compliance by all Contractor applicators to all pesticide label requirements concerning safe, legal and effective use of pesticides.

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6.0 Notification of Pesticide Use at a Facility

6.1 Purpose

This section establishes notification procedures for each application of chemical or biologically derived pesticides by NCTD Contractors at NCTD facilities and rights-of-way.

6.2 Background

NCTD understands that facility personnel and users may want to be informed of treatments. Label requirements for pesticide applications may also mandate that entry to treated areas be avoided for a specific time interval. Visitors may also seek additional information about pest management activities occurring at a facility or site. To satisfy these needs, all pesticide applications will be accompanied by onsite notification signage.

6.3 Procedure

NCTD intends to inform site visitors of pesticide application through the use of notification signs. Applicators will post signs immediately before an application begins in clearly visible locations. The intent of the signs is to allow the public to encounter the signs prior to entry to a treated area during or after an application, and so they have the opportunity to avoid this area. Signs do not need to be posted in areas where the public will not come in contact with an application. This notification signage will include basic information about the application and appropriate contact numbers for those desiring more details about the pest problem and the approach being used. NCTD requires applicators to provide to the NCTD Storm Water Program Manager copies of the signs to be used. NCTD will assess over time the adequacy of the provided signs, and as necessary, may develop replacement signs.

Other NCTD programs or facilities should develop signage that includes language and graphics that meet the criteria of their operations or signage standards.

Re-entry specifications will be listed on notification signs if required by the label. Employees or contractors will remove the signs after the re-entry specification has been met. For most products, this interval is limited to when the liquid application has dried or until any dust has settled from a dry or granular application.

As a convenience for community centers, schools and day care facilities in session, these entities should be notified in writing before an application is made to nearby adjacent properties. School or community center personnel can then schedule the activities of their users accordingly. The notification letter or its equivalent shall be delivered to the school or community center 24 hours before any applications of pesticides are planned to take place.

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7.0 **Using Pesticides on NCTD Property**

7.1 **Purpose**

This section establishes procedures for application of pesticide materials by NCTD Contractors.

7.2 Background

As part of NCTD's integrated pest management program, employees and contractors will apply pesticides in a legal manner and strictly follow all precautionary requirements for their use. This section outlines procedures for pesticide application at facilities and rights-of-way maintained by NCTD employees or contractors. All registered pesticides are accompanied by a legal label specific to each product that defines all legal uses. All NCTD Contractors must use pesticides strictly according to these label directions.

7.3 Procedure

The label is the law and shall be followed strictly in addition to the following:

- Personal protective equipment shall be used wherever indicated on the label of the product and/or on the safety data sheet for the product.
- Spray equipment shall be maintained in a safe and useful condition and shall be calibrated regularly.
- Anti-siphoning devices shall be used when filling large spray tanks.
- Pesticides used shall be chosen from the approved chemicals lists as provided to the appropriate work units.
- Employees and contractors shall apply pesticides only in appropriate weather conditions and consider all other relevant criteria from Section 4.
- Employees and contractors applying pesticides shall post notification signs where pesticides are being applied, as stated in Section 6.
- Contractors shall record all pesticide applications and provide this information to NCTD;

The law allows a licensed applicator to:

- Apply a pesticide at any dosage, concentration or frequency listed on the label
- Use any equipment or method of application not prohibited by the label
- Mix a pesticide or pesticides with a fertilizer if the mixture is not prohibited by the label
- Mix two or more pesticides, if all the dosages are at or below the recommended rates and if not specifically prohibited by the label

Pesticide may be used only on sites and targets stated on the label. Higher dosages, higher concentrations or more frequent applications than the label allows are not permitted. All employees

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and contractors applying pesticides must strictly follow label directions for use, safety, mixing, diluting, storage and disposal, as well as any restrictions on re-entry.

7.3.1 <u>Using Pesticides at NCTD</u>

The following steps shall be taken when using pesticides on NCTD property:

- Prior to entering NCTD property, all contractors must notify the NCTD IPM Project Manager, who will determine if NCTD dispatch needs to be notified
- A NCTD employee or contractor identifies or is informed of a pest problem.
- Identify the pest.
- Determine if actions need to take place. Thresholds and action levels are determined by a licensed applicator or licensed supervisor for the specific pest problem in question.
- Management strategies are determined by a licensed applicator;
- Prioritize cultivation, mechanical and physical and biological management methods as part of an integrated pest management approach, as explained in Section 3.
- Choose the pesticide using the "Criteria for choosing a pest management method" summarized in Section 4 and the approved chemicals list (see Appendix A) for the appropriate work unit.
- Check application equipment for safety and mechanical problems; calibrate if necessary.
- If applications are outdoors, check label for appropriate application situations and appropriate wind conditions to prevent pesticide drift and volatilization. Applications should be done when suitable wind conditions exist to minimize drift. Adjustments should be made for spray droplet size and pressure if and when conditions warrant. No application should take place where there is unacceptable drift.
- Post notification signs before use to inform the public of the application. For specific rules, see
 Section 6.
- List re-entry specifications on the signs if required by the label.
- Apply material according to the label and in accordance with state and federal regulations.
- Record applications of pesticides on the approved forms. See appendices.
- Remove signs after the label designated re-entry requirements have been met. This is usually when the liquid pesticide has dried, unless indicated otherwise on the label.
- Evaluate the results of management measures.

8.0 Notification of Pesticide Use at a Facility

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8.1 **Purpose**

This section establishes recording and reporting procedures for all pesticide applications taking place at NCTD facilities, parks and natural areas by licensed NCTD personnel, or any other agency, bureau, company or individual pursuant to a contract or intergovernmental agreement.

8.2 Background

Detailed record keeping is an essential part of integrated pest management program implementation, and is vital in communicating, reporting and analyzing the effectiveness of pest management activities. State law requires that written records be kept for pesticide applications. The law requires that licensed applicators record the details of pesticide applications and keep these records for three years. These records must be stored in a central location and be available for review.

8.3 Procedure

A key goal of NCTDs integrated pest management program is to have consistent, quality records of all pesticide applications performed across NCTD facilities and rights-of-way. It is the responsibility of each department to track and report chemicals applied at each site. In the future NCTD will develop a centralized reporting system/database. In the meantime, NCTD will provide appropriate forms to its employees and contractors. After each application, a copy of the completed form will be provided to the NCTD Stormwater Project Manager within a reasonable time frame. Each operating unit shall keep a record of pesticide applications by their own personnel for no less than three years.

Information regarding application of each pesticide applied to NCTD facilities to be recorded includes:

- The location of the land or property and specific area where the application was made*
- Total area treated if applicable
- Date and approximate time (start and end of application)*
- The supplier of pesticide products applied*
- The trade name and the strength of the pesticides applied and EPA number of pesticide*
- The amount of concentration* and total amount of mixture applied
- Summary information of device or apparatus used*
- Name and license number of applicator, apprentice or trainee*
- Temperature and wind conditions
- Target pest or weed*
- Aquatic buffer designation where applicable
- Records kept for three years*

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Applications on different dates or at different locations must have their own application record and may not be combined on one record. NCTD requires these records be provided to the NCTD Storm Water Program Manager within a reasonable timeframe. NCTD will assess over time the adequacy of the provided records, and as necessary, may recommend alternative record tracking.

9.0 Pesticide Application by NCTD Contractors

9.1 Purpose

This section establishes oversight procedures over all pesticide applications taking place at NCTD facilities and rights-of-way. Anticipated applications by NCTD Contractors must undergo an approval process to satisfy certain licensing and other requirements before the work can take place. This oversight is essential to ensure that all pest management activities occurring at NCTD facilities and rights-of-way adhere to established integrated pest management-based goals and principles and address environmental and safety concerns.

9.2 Background

Without proper oversight, pest management activities undertaken by unauthorized personnel may lead to regulatory, environmental or safety problems. NCTD infrastructure, landscapes and the public may be put at risk, or integrated pest management principles may not be followed. The approval process within this manual is not intended to be a hindrance to appropriate and timely work. However, these procedures are intended to ensure that the best practices are used and problems avoided.

9.3 Procedure

9.3.1 Notification to NCTD

NCTD Contractors must notify the NCTD IPM Project Manager at least 48 hours prior to entering NCTD property. The NCTD IPM Project Manager will make the determination on whether or not NCTD dispatch will be notified.

9.3.2 Chemical Selection

NCTD Contractors shall review the IPM guidelines prior to selecting the appropriate pesticide from the chemical list provided in Appendix A. NCTD Contractors are required to ensure that pesticides which are intended to be applied at NCTD owned facilities are recommended for use as described in Appendix A. NCTD Contractors desiring to apply pesticides not on the approved chemical list, to NCTD land or facilities shall submit a "Request for addition to approved chemical list" form (Appendix B) to the NCTD IPM Project Manager. The NCTD IPM Project Manager will evaluate the request before any additional pesticide application can take place. Chemicals listed in Appendix A which are recommended to be eliminated from use, should be replaced by a substitute chemical to be approved by the NCTD Stormwater Project Manager, prior to use.

9.3.3 <u>Pesticide Application</u>

All pesticide application on NCTD ROW and facilities by NCTD contractors, shall be performed in accordance with manufacture specifications, DPR standards and laws, and standard industry practices. Application of pesticides shall also conform to this IPM, specifically regarding Sections 3.0 and 4.0, in reference to MS4 General Permit section F.5.f.9.(ii)(b)(2). NCTD contractors shall report the actual pesticide application rates to the NCTD Stormwater Project Manager within a reasonable time frame following application.

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9.3.4 Employees of Commercial Pesticide Operator Companies

Employees of commercial pesticide operator companies must possess valid state pesticide applicator licenses at the time of planning and application of pesticides. The applicator license in the state- defined category appropriate for the particular application is required. Per state law, any contract staff operating under a "Trainee License" must be under the direction of a licensed commercial pesticide applicator. NCTD project managers shall regularly review the performance record of contracting businesses applying pesticides to NCTD facilities and rights-of-way. This review shall include an examination of past work and safety performance. All involved parties shall disclose pertinent information regarding any performance or safety issues raised from prior projects.

9.3.5 <u>Employees of County Vector Control Agencies</u>

NCTD understands that there may be situations where the county vector control agency has the need to apply pesticides to NCTD property as part of its mandate to further public health goals. The NCTD IPM Project Manager shall respond to communications from this agency in a timely manner. NCTD and the county will work together to arrive at mutual agreements for activities that address public health goals and good environmental stewardship.

San Diego County Vector Control Program – Contact Information: (858) 694-2888 vector@sdcounty.ca.gov

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10.0 Transportation of Pesticides

10.1 Purpose

This section defines the method and procedure for transportation of pesticide materials for all NCTD locations.

10.2 Background

Attention to the proper storage of pesticide material is vital to assure public and employee safety, as well as to protect the investment in their purchase. Several agencies are involved in regulating aspects of pesticide storage. No single agency has comprehensive authority. NCTD Contractors shall be responsible for storing and transporting pesticides in a manner that reduces the risk of spills, exposure, theft, degradation, contamination or loss. **No pesticide storage on NCTD properties is allowed**.

10.3 Procedure

Prior to transport to the location of application, pesticides or pesticide containers shall be kept in secure and safe locations in accordance with existing laws and in a cabinet specifically designed for chemical storage. They shall be kept in a temperature controlled, well-ventilated area. Areas used for storage shall be labeled and designated for use by the NCTD Contractors.

Pesticides shall be safeguarded from environmental damage such as extreme temperature, photodecomposition or moisture. All pesticides in storage shall be inspected regularly and, if necessary, rotated to ensure that the oldest items are used first.

Pesticides being transported shall be appropriately and safely secured in the vehicle. (Only licensed applicators shall transport pesticides.) Appropriate spill response supplies must be immediately available.

Pesticides shall not be transported in the cabs of passenger vehicles when alternatives exist, such as truck beds, truck boxes or vehicle trunks.

11.0 Use of Remaining Pesticide Solutions and Rinses

11.1 Purpose

This section establishes procedures for the use and disposal of any pesticide remains generated by NCTD Contractors. It outlines methods for use of remaining pesticide solutions and rinses in a legal and safe manner.

11.2 Background

Applicable laws require that all pesticide solutions and rinses be applied to target areas according to label directions. These solutions and rinses may also be disposed of at an authorized pesticide disposal site. It is the goal of NCTD that Contracted personnel conduct pesticide operations so that disposal of remaining material is not necessary.

11.3 Procedure

Pesticide solutions and rinses should be applied according to the label directions, and to legal target sites so there are no pesticides remaining. This shall be accomplished by accurately gauging the amount of pesticide needed for the job. NCTD promotes the use of advance planning to minimize the number of times it is necessary to switch pesticides in spray equipment. In order to reduce the amount of excess rinsate, rinse equipment only at the end of the spray cycle or when changing to pesticides that are incompatible with those in the tank. It is a legal requirement to fully and legally label all tanks and sprayers containing leftover pesticides at the end of each day.

- Read the pesticide label. The following procedures should not conflict with label information or state or federal regulations.
- Wear protective clothing as listed on the label when handling pesticides, pesticide containers or pesticide equipment.
- Fill the spray equipment approximately 1/4 full with clean water. Shake or agitate so that all inside surfaces are washed. If possible use the spray hose to rinse the inside surface of the tank. These procedures should coincide with all labels.
- Spray the rinse water out of the spray equipment onto an approved target area. Rinse water should be run through all hoses, booms, etc. Filters should be cleaned. Because of the dilute nature of the pesticide in the rinse water, a coarse spray can be used and is recommended to save time. Do not "pond" or saturate the soil.

12.0 **Disposal of Empty Pesticide Containers**

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12.1 **Purpose**

This section defines the method and procedures for the disposal of pesticide containers and unusable pesticides or those pesticides with registrations that have been totally or partially suspended.

12.2 Background

Pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(3), NCTD considers proper disposal of unusable pesticides and pesticide containers of the utmost importance to the safety of employees, the public and the environment. Several governmental agencies regulate pesticide disposal. No one agency has comprehensive authority. Agencies involved include the Department of Toxic Substances Control, Department of Pesticide Regulation, Environmental Protection Agency and Occupational Safety and Health Administration. NCTD Contractors shall comply with all relevant laws governing the proper disposal of these materials.

12.3 Procedure

NCTD Contractors shall dispose of pesticides and empty pesticide containers in accordance with all state and federal regulations and label recommendations. Disposal of pesticide containers and unusable pesticides not in accordance with this manual will be cause for additional action.

The following steps should not conflict with pesticide label information or state and federal regulations. Always wear protective clothing when handling pesticides or pesticide containers, as directed on the label.

12.3.1 Storage of Non-Rigid Containers including bags, boxes, and sacks

- Pesticide material must be emptied into application equipment to the extent made possible by physical agitation of the container.
- Visually verify that residues have been removed.
- Multiple-rinse non-rigid containers such as paper lined with plastic or foil.
- Place in a plastic bag and mark as to contents.

12.3.2 Storage of Rigid Containers such as glass, metal, or plastic

- Pesticide material must be emptied into application equipment to the extent possible by pouring, then visually verifying that the residues have been removed.
- The container must be rinsed with clean water until clean; the rinse water poured into the spray equipment. Empty the pesticide and all rinsates into the sprayer before the full amount of diluting water is added to the spray equipment.
- Replace lid firmly on the container and place in a plastic bag and mark as to contents.

12.3.3 Storage of Empty Containers

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Containers must be stored in plastic bags in a secure area until they can be taken to a NCTD transfer station. Containers do not need to be processed as hazardous waste and should be processed through the standard waste stream.

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13.0 Use of Protective Clothing and Equipment

13.1 Purpose

This section outlines the requirements for the use of protective clothing and equipment by NCTD Contractors when undertaking pest management activities.

13.2 Background

Use of pest management tools, equipment, and materials may require the use of personal protective equipment. Use of such equipment is necessary to provide an adequate measure of safety for the applicator. This equipment may be clearly defined in legal pesticide label directions or directives in equipment manuals. When such directives exist they must be followed. Use of appropriate equipment may not be so clearly defined for all pest management methods, and in such cases it is the responsibility of the applicator and the supervisor to determine and employ adequate safety equipment.

13.3 Procedure

Personnel engaged in the use of pest management tools, equipment or materials shall follow all clothing and equipment requirements required to ensure their safety. When using pesticides, the label directives for use of personal projective equipment must be followed. Use of related power and mechanical equipment must be accompanied by appropriate equipment as determined by equipment manuals or Contractor's directives.

Required personal protective equipment appropriate to satisfy specific pesticide label requirements shall be provided by NCTD Contracted employees for their use. These may include, but are not limited to respiratory protection, eye protection, face shields, coveralls, rain gear, mixing aprons, chemically resistant boots and gloves. The applicator is responsible for cleaning, storing and maintaining all personal protective equipment in a safe and useful manner. Single use equipment shall be disposed of in accordance with applicable local, state and federal laws.

14.0 Emergency Information Concerning Accidental Pesticide Exposure

14.1 Purpose

This section establishes procedures for the proper response to employee and citizen inquiries regarding accidental exposure to any pesticide material used by NCTD Contractors. It defines NCTD's response to inquiries concerning adverse health effects as a possible result of accidental exposure to pesticides.

14.2 Background

NCTD's handling of public inquiries should be prompt, professional and well supported. While NCTD can answer general questions, NCTD does not have medical professionals on staff to address specific medical questions relevant to accidental exposure. This expertise is readily available in the health care community. Therefore, the Contractor should refer concerns of this nature to qualified medical personnel for resolution.

14.3 Procedures

- Use planning to avoid emergencies and to expedite aid should an accident occur;
- Be informed of the symptoms of exposure and the decontamination steps necessary in case of accidental exposure;
- Use all safety procedures and protective gear as recommended on the label;
- Have a copy of the appropriate label available when applying or transporting pesticides (concentrated and dilute);
- Notify the NCTD IPM Project Manager as soon as practicable.

14.3.1 In Case of Emergency Related to Suspected Pesticide Exposure

Handle any emergency situation as per first aid instructions on label and safety data sheet. Call for emergency backup if necessary.

- Contact the Poison Control Center: 1-800-876-4766
- Take the label and safety data sheet for medical personnel reference if it is necessary to leave the site.
- Inform your supervisor as soon as possible.
- Inform the integrated pest management NCTD IPM Project Manager as soon as possible.

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15.0 Pesticide Spill Response

15.1 Purpose

This section establishes procedures for the proper response to employee and citizen inquiries regarding accidental exposure to any pesticide material used by NCTD Contractors. It defines NCTD's response to inquiries concerning adverse health effects as a possible result of accidental exposure to pesticides.

15.2 Procedure

15.2.1 Immediate Actions

- If there is an injury, pesticide exposure or fire, call 911 immediately for assistance;
- Assist injured people;
- Remove contaminated clothing immediately. Use eyewash, emergency shower or other source of water to decontaminate the individual;
- If there is a pesticide exposure, obtain the product label and have it ready for medical responders;
- Determine whether there is an imminently hazardous situation that you can take steps to correct. For example it may be appropriate to move a vehicle away from a waterway or heat source;
- If in a vehicle, pull it off the roadway to a secure location if possible;
- Keep bystanders at a safe distance using barrier tape or other means;
- Assess the situation. Determine if you are able to clean up the spill with the supplies and helpers that you have immediately available. Take into account the volume and hazardous properties of the product spilled;
- Notify your supervisor or manager;
- Notify the NCTD IPM Project Manager as soon as practicable; and
- Determine if the spill requires notification of state or federal authorities (see below).

If you are not able to clean up the spill:

- Make contact to obtain assistance. If you are not able to quickly obtain the required supplies and assistance from co-workers or NCTD Hazardous Waste Program staff, call 911 to obtain help from the local hazmat team.
- Stay a safe distance away and take defensive action to prevent further spread, such as placement of absorbent booms.

If you are able to clean the spill, proceed to spill control steps below:

15.2.2 Spill Control and Cleanup

- If at any time the spill begins to react, heat up or becomes too large or otherwise unsafe to clean up, immediately stop, evacuate and call for assistance.
- Put on proper protective equipment based on the hazards of the material.
- Clear and secure the area and take defensive steps to block or contain the flow of materials to the environment (soil, water, storm drains and sewer drains).
- If the spill is from a leaky container, position the container to prevent additional spillage. If possible, patch the container with duct tape, plug holes with a rag, and/or place the container in secondary containment, such as a plastic bag or pail.
- For dry material, carefully sweep up the pesticide to minimize dust.
- If the spill is liquid, contain the spill by placing absorbent or booms around the edges. Working from the outside towards the center, pour absorbent over the spilled liquid. Using a broom, dustpan or other tool, mix the absorbent into the spilled material.
- Thoroughly sweep all material into a sealed plastic bag or other sealed container. Clearly label the container. Wash or dispose of the broom.
- Remove protective equipment, keeping contamination away from your body. Clean hands and face with wipes.
- Put contaminated disposable protective equipment in a plastic bag for disposal. Put contaminated non-disposable protective equipment in a bag for later decontamination.

15.2.3 After the Incident

- If there is any remaining contamination of soil or anything else in the area, consult your supervisor about additional cleanup needed.
- Dispose of spill cleanup residues.
- Complete a Pesticide Spill Incident Report and provide a copy to your supervisor.
- Clean contaminated equipment and restock spill response supplies.

15.2.4 Spill Response Equipment

The following items must be immediately available to all persons applying or transporting pesticides:

- A binder that includes:
- Chemical labels for materials being transported
- Safety data sheets for chemicals being transported clipped to front of binder
- Pesticide Spill Response Procedures and Incident Report form

- o A Department of Transportation Emergency Response Guidebook
- Emergency phone numbers
- A cellular phone, if there is the potential of a spill occurring that would require assistance.
- Personal protective equipment appropriate for handling the pesticides being applied or transported in the event of a spill. Bring extras in case of contamination, tears, etc.
- An eyewash either on the truck or on site and immediately available in the case of an emergency.
- Tools and supplies to make repairs to containers and application equipment and to stop leaks.
- Tools for picking up spilled material. Depending on the formulation this may include absorbent material, broom and dustpan, or shovel.
- Plastic recovery bags and ties for the material and for contaminated personal protective equipment.
- Optional equipment and supplies, depending on type of pesticide, volume and whether it is in transport:
 - Bagged absorbent
 - Absorbent booms, dikes, pillows and towels
 - Squeegee
 - Whisk broom
 - Dust pan 0
 - Hard bristle brush to loosen material
 - Duct tape for temporary repair 0
 - Patching material 0
 - Quill and hose
 - Warning tape, signs
 - **DOT** reflectors
 - Bucket
 - Flat and pointed shovels
 - Flashlight 0
 - Safety vests

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- o Tools: hammer, box knife, screwdriver
- o First aid kit
- Waterless soap, moist wipes

15.2.5 When to Notify State/Federal Authorities

California and federal law requires reporting certain spills of hazardous materials or waste. Consult with the NCTD IPM Project Manager on the reporting requirements.

The reporting requirement does not apply for spills that meet all three of the following conditions:

- The spill occurs on public or private property and is known to the person having control over hazardous materials
- The spill occurs on a surface impervious to the hazardous materials spilled
- The spill is completely cleaned up without further incident

Spill reporting is required if these three conditions are not all met, and the spill exceeds any of the following in a 24 hour period:

- Two hundred pounds (25 gallons) of concentrated pesticide residue
- An amount equal to or greater than the quantity listed in 40 CFR Part 302 Table 302.4 (List of Hazardous Substances and Reportable Quantities) and amendments adopted prior to July 1, 2002; these spills must also be reported to the National Response Center, 1-800-424-8802.
- Ten pounds or more of a hazardous material not otherwise listed as having a different reportable quantity by the department or the United States Environmental Protection Agency on the list of hazardous substances in 40 CFR 302.4
- Other thresholds apply for oil and other non-pesticide spills

For spills of mixtures or solutions, the regulation calls for reporting if the total quantity of hazardous materials in the mixture or solution, in pounds, exceeds the reportable quantity of the hazardous material with the lowest reportable quantity.

The regulation also call for reporting of threatened spills or releases, defined as, "circumstances or events exist that indicate a spill or release of oil or hazardous materials is likely and imminent."

15.2.6 Reporting

Qualifying spills must be reported to the Office of Emergency Services, 1-800-852-7550. Information to have on hand when reporting a spill:

- Your Name
- Who you work for

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- Phone number
- Location of spill
- Material spilled and quantity
- Time spill occurred
- Is the spill contained?
- Is the spill likely to enter a body of water?
- Who has been notified
- What is being done to clean up the spill

15.2.7 <u>Contact Phone Numbers</u>

Emergency service	Telephone
Fire, Ambulance, HAZMAT	911
California Poison Control System	800-876-4766
Office of Emergency Services	800-852-7550
NCTD Operations	760-966-6700
National Response Center	800-424-8802

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16.0 Worker Protection Standards

16.1 Background

The federal Worker Protection Standard is designed to protect employees engaged in pesticide application from occupational exposure to pesticides. It contains requirements for notifying employees of applications, the use of personal protective equipment and restrictions on entry into treated areas. Specific personal protection equipment information is available on the product label and in the safety data sheets. Personnel who have any contact with pesticides shall follow all personal protective equipment requirements.

16.2 Procedure

The Worker Protection Standard requires that steps are taken to reduce the potential risk of pesticiderelated illness and injury to handlers and workers with possible exposure to pesticides. It is therefore essential that all requirements be satisfied for all employees involved with entry into areas where pesticides may be applied.

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17.0 **Waterways Pest Management**

17.1 Goals and Philosophy

NCTD recognizes the special importance of the rivers, streams, ponds, water quality facilities and wetlands that fall under our stewardship. The sensitive nature of such habitats, their plant and animal communities, and their direct link with other waterways require that we establish specific policies to ensure their health. It establishes clear guidelines and limitations regarding maintenance methods and materials for both these waterways and the lands adjacent to them. As in the rest of NCTD's pest management program, integrated pest management principles will be employed in all landscape management decision making. Management of unwanted vegetation, diseases and pests will follow the integrated pest management decision making rationale:

- Proper planning and management decisions
- Cultivation practices
- Mechanical means
- Biological methods
- Botanical and synthetic pesticides, using the least toxic and most effective pesticide for the task

17.2 Management Practices, Materials and Limitations for Waterways and Buffers

NCTD's handling of public inquiries should be prompt, professional and well supported. While NCTD can answer general questions, NCTD does not have medical professionals on staff to address specific medical questions relevant to accidental exposure. This expertise is readily available in the health care community. Therefore, the Contractor should refer concerns of this nature to qualified medical personnel for resolution.

17.2.1 Definitions

The buffer zone referred to in this section is defined as a corridor of land that is 25 feet in width on the sides of a stream or other body of water, including all storm drain inlets pursuant to MS4 General Permit section F.5.f.9.(ii)(b)(2)(e). Measurement of this buffer zone begins at the edge of the water line at the time of application. Anticipated seasonal or weather-related changes affecting water level will be included in the decision making process when dealing with buffer zones.

17.2.2 Application Equipment Used

Pesticide delivery within buffer zones will be carried out by hand with directed, low volume, single wand sprayers, wiping, daubing and painting equipment, injections systems or drop spreaders. Typically, this is done by backpack sprayers, but may also include sprayers with larger fill tanks as long as the same kind of hand application methods are used. These methods of delivery result in low volume applications and low pressure spraying. This minimizes the formation of fine mists that might be carried off target. These practices ensure that applied materials will reach targeted plants or targeted soil surfaces.

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17.2.3 Pesticide Drift

When applications of pesticides are being made within a buffer zone, great care will be exercised in the process. Managing drift is of particular importance when surface waters are nearby. Equipment used in the application shall employ all necessary methods to limit drift. Nozzle size, pressure regulation, droplet size and height of spray wand, are all techniques that can be modified to reduce unwanted drift of pesticides.

Spray applications will not be allowed in the buffer zone when wind speed is above 5 mph, or wind direction or activity would carry pesticides toward, or deposit them, upon open water.

17.2.4 Materials Available for Tree Injections in Buffer Zones

In the event a pest or disease threatens the health of important and valuable trees within a buffer zone, there may be a need to treat them. Instances of this occurring are rare. However, in these special cases, the use of injectable pesticides may be employed when necessary, with the following limitations. The pesticide applied must be delivered by methods that inject or otherwise distribute the material entirely within interior tree tissues. Pesticides will not be injected into the soil surrounding the tree. Tree surfaces will not be sprayed or treated with pesticides. The insecticides and fungicides used in these injection systems shall be approved by the NCTD IPM Project Manager. The intent and limit of this exception to the approved chemical list is to allow only the insecticides or fungicides necessary to combat direct threats to the health of valuable trees.

17.2.5 Changes to the Procedure

A need may arise for modifications or additions to the NCTD waterways procedure. There are several methods available to accomplish this. There may be situations where NCTD cannot wait for the formal review process to take place. An example is the unlikely, but possible introduction of a new and destructive pest that needs to be treated within in a short time frame. In such a case, NCTD representatives will develop an integrated pest management strategy to deal with the threat.

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18.0 References

University of California (UC), 2015, Definition of Integrated Pest Management, web site: http://www.ipm.ucdavis.edu/GENERAL/ipmdefinition.html

United States Environmental Protection Agency (USEPA), 2015, Integrated Pest Management Principals, web site: http://www.epa.gov/opp00001/factsheets/ipm.htm

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APPENDIX A

Integrated Pest Management Plan

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APPENDIX B

Request for Addition to Approved Chemical List (DRAFT)

Request for Addition to Approved Chemical List

All requests should include a copy of the label, SDS and related documents

Preparer's Name/Organizations:
Requester's Name/Organization:
Date Submitted:
Product Name/EPA #
Active Ingredient(s):
Inert Ingredients (if known):
Target pest(s):
Request for Inclusion of the following Expected Uses:
Does the product replace a currently approved pesticide?
Pesticide Characteristics (attach additional information if necessary):
Toxicological:
Ecological:
Physical Properties:
Environmental fate:
Comparative costs, efficacy, etc.:
Other considerations: