

**City of Santa Barbara**  
**MATERIAL EXEMPTION REQUEST FOR PESTICIDE APPLICATION**

Dept Public Works IPM Coordinator Jim Dewey Phone 564-5568  
Pesticide Applicator (employee or company) Name \_\_\_\_\_ Phone \_\_\_\_\_  
Application Site 7.3 miles of sanitary sewer mains Specific Location See attached map  
Date(s) Estimated project duration will take place in March of 2014 and will take 2-3 weeks to complete.  
Product Name Sanafoam Vaporooter II Active Ingredient Metam-Sodium and Dichlobenil  
Number of Applications:  One-time  Other Once every 3 years or as needed.

• Type:  Emergency  Trial  Programmatic  Other

Product type:  Herbicide  Insecticide  Fungicide  Other \_\_\_\_\_  
Application:  Ornamental  Turf  Golf  Vector Control  Park Tree  Street Tree  
 Right of Way  Vertebrate pest  Other Sanitary Sewer Mains

Is the pesticide on the *Tiered Materials List*?  No  Yes If yes, provide the Tier \_\_\_\_\_

If the pesticide is not on the *Tiered Materials List*, provide the following screening information. See the IPM Strategy and the *Tiered Materials List* for instructions on screening the pesticide.

EPA Reg # 1015-70 Signal \_\_\_\_\_ Estimated Tier \_\_\_\_\_

Restricted  No  Yes/Describe Keep out of lakes, ponds or streams. Toxic to humans, livestock, and aquatic life.

P Waste \_\_\_\_\_ PBT \_\_\_\_\_ WA PBT \_\_\_\_\_ Persistant \_\_\_\_\_ Mobil \_\_\_\_\_  
Cancer \_\_\_\_\_ Repro \_\_\_\_\_ Neuro \_\_\_\_\_ Endocrine \_\_\_\_\_  
Bird \_\_\_\_\_ Fish \_\_\_\_\_ Bees \_\_\_\_\_ Wildlife \_\_\_\_\_

Attach product label and MSDS to this form.

**Describe the pest problem.**

Root intrusion occurs in sanitary sewer mains. This happens when tree roots burrow their way into pipe walls through cracks, holes, joints, etc. Root intrusion in sewer mains can cause sanitary sewer overflows (SSO). In SSOs, sewage can flow into nearby creeks, neighborhoods, or the ocean, all of which are unfavorable locations for sewage to reside.

**Describe the management goals and objectives for this site.**

The goal for this site is to have reduced root growth and mass in sanitary sewer mains and therefore an overall reduction of SSOs in the collection system.

**What is the damage threshold for this pest at this site?**

The damage threshold for root intrusion in sewer mains is when it causes a SSO. SSOs due to root intrusion occur when roots block the flow of sewage.

**Describe the monitoring of the pest and potential predators that was conducted and the control methods previously used at the site.**

City sewer system maintenance crews have performed routine cleaning maintenance by hydro-jetting and CCTV inspection on the site. Hydro-jetting is performed by Vactor trucks.

**Describe how the product would be applied including frequency, concentration, and method of application.**

The product is applied in a similar matter as routine sewer cleanings are done by the City through use of Vactor trucks. Root foaming contractors apply the foam through a 800 ft jetting hose after it has been propelled by water through the sewer main. Although more applications are not required, Vaporooter is typically applied on a 2-3 year basis by other cities. For the sewer mains being treated in this project, there are about 0.3 pounds of Metam-Sodium and 0.09 lbs of Dichlobenil being applied per 100 feet. Pacific Sewer Maintenance will apply Vaporooter to a total of 38,729 ft of sewer mains. In addition, they will apply foam to manholes. Pacific Sewer Maintenance foams manholes that they see have root intrusion.

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**What non-target impacts are anticipated?**

The El Estero Wastewater Treatment Plant receives the discharge from the sewer mains that will be treated with Vaporooter. High concentrations of Vaporooter may adversely affect the biological sewage breakdown process in wastewater treatment plants. To counter this problem, Pacific Sewer Maintenance will notify El Estero Wastewater Treatment Plant prior to applications. Treatment plant operators will notify applicators in event that adverse affects begin in the treatment process, and applications will stop.

**How does the use of this product help achieve the site management goals? Note if this is curative or preventative.**

This product inhibits root growth and kills roots in sewer mains and therefore lessens the frequency of SSOs due to root intrusion. This is a preventative solution.

**How will the effectiveness of this product be monitored? Include expected results and indicators of success.**

City CCTV crew will inspect various treated sewer lines within a year of application or will clean sewer mains to determine if root growth has decreased due to the application of Vaporooter. It is expected that the CCTV will show little or no root growth in the sewer mains. Another indicator of success is if the sewer main does not cause an SSO in the upstream manhole do to root intrusion within the three year guarantee period.

**Describe site conditions, for example consider the following: restricted access, distance from a creek or body of water, degree of runoff, site is a pesticide-free zone, etc.**

The sewer mains that are selected for root foaming applications are located throughout the City. In particular, the Riveria, the Mesa, and the upper business district of the City have been selected for this treatment.

**List alternatives considered, alternatives implemented and why they were eliminated.**

Other alternatives for root intrusion control in sewer mains are an increased frequency in the current method of sewer cleaning: hydro-jetting. This method is currently being done at different frequencies based on variables like pipe diameter and the presence of grease, root, or debris in the sewer main. It is a great way of reducing root mass in sewer mains. However, for small diameter pipes, roots can grow to block the pipe before the next scheduled cleaning, even if the pipe is scheduled for cleaning at a high frequency. In addition, simply hydro-jetting the sewer main does not reduce the roots growth rate. There are other brands of root foaming herbicides that are specifically used for sewer systems in the United States. Among them are Razorooter and Root-X. Another company, Duke's Root Control, proposed on this project with the use of Razorooter. The City chooses to implement Razorooter along with Vaporooter at equal amounts for comparison purposes.

**Justification: describe why is applying this pesticide is the best solution and why a less-hazardous chemical, non-chemical option or taking no action is not feasible.**

There is no method to inhibit root growth and kill roots in sewer mains besides chemical root foaming. Other chemicals for root foaming have a similar hazard level. A non-chemical option will not adequately lower the amount of SSOs due to root intrusion.

**Was outside expertise utilized?  No  Yes / Describe**

Pacific Sewer Maintenance is utilized to apply Vaporooter. Crew members from PSM have qualified application licenses from the Department of Pesticide Regulation Licensing/Certification Program. PSM has been applying Vaporooter for over 30 years and has completed similar projects in cities throughout California.

**Describe future plans to prevent using the chemical again.**

To prevent using this chemical again, the sewer mains will be cleaned at 12 month or less frequencies. CCTV from crew will determine if the treated sewer mains are growing at a rate too fast compared to cleaning frequencies, and will raise the frequency or recommend another treatment of Razorooter.

**Signatures** \_\_\_\_\_

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Department IPM Coordinator

City IPM Coordinator

**Completed by the IPM Advisory Committee**

Vote Tally \_\_\_\_\_ Disposition:  Approved    Denied/Reason \_\_\_\_\_

If approved, follow the attached best management practices.

Comments:

**Completed by the City of Santa Barbara Staff IPM Committee**

Vote Tally \_\_\_\_\_ Disposition:  Approved    Denied/Reason \_\_\_\_\_

If approved, follow the attached best management practices.

Comments: