

Nursery Technical Assistance Campaign Executive Summary

May 2003

In 2002, Thurston County's Business Pollution Prevention team conducted a single- industry campaign focused on nurseries, including tree and turf farms. As is typical of single-industry – type campaigns, the focus was on the risks to public health by improper storage, use, or disposal of hazardous materials. All 27 of the nurseries visited were indeed found to store hazardous materials and /or generate hazardous waste. However, at the time of the initial visit, the majority of the inspected businesses (23 out of 27, or 85%) was in full compliance with the Sanitary Code.

The campaign staff concluded that nurseries are responsible users of pesticides and other hazardous materials, and that nursery owners and operators are very aware of the environment and pollution of surface and ground water. Nurseries tend to use up hazardous products and therefore they produce very little pesticide waste, especially small nurseries. Some nurseries do not use any pesticides or have any hazardous materials onsite. However, small nurseries are harder to identify and track because they may operate seasonally. They also go out of business more frequently than large nurseries; of the 63 nurseries originally identified, only 30 were found open for business when the Business Pollution Prevention team conducted the campaign.

The primary issues were secondary containment and disposal. Secondary containment prevents pesticides and other hazardous materials from contaminating the environment in case the original container leaks, ruptures, or spills. At the start of the campaign, four nurseries were out of compliance for secondary containment. Each of these four businesses had a follow-up visit and three of the sites took steps to achieve compliance. Two nurseries placed 50 gallons within secondary containment, and one turf farm placed 2500 gallons within secondary containment and was thus partially brought into compliance. The fourth site has not yet corrected its secondary containment situation.

None of the nurseries were out of compliance for disposal, however, several did have excessive amounts of unused and unwanted products being stored indefinitely. As a result of the campaign, four nurseries disposed of 234.4 pounds of hazardous waste through HazoHouse. These wastes included fluorescent tubes, paints, flammable liquids, and corrosive materials. Also as a result of the campaign, three nurseries registered to use HazoHouse. Many others received information and encouragement on the proper disposal of fluorescent light tubes and other universal wastes.

Part of the nursery campaign included distributing information on the Washington State Department of Agriculture (WSDA) pesticide turn-in, which took place in June 2002, following the Thurston County visits. This program collected 1,596 pounds of unusable pesticides from eleven customers. These customers include businesses other than nurseries.

Best management practices (BMPs) are voluntary recommendations made to businesses. The Business Pollution Prevention team suggested 18 different BMPs for nurseries to follow in five categories. The categories include recycling, waste disposal, waste reduction, chemical storage, and integrated pest management (IPM). Thirty-seven BMP recommendations were made during this campaign, notably to write and implement a spill plan (suggested 11 times) and to obtain spill kit materials and MSDSs (seven and six times, respectively). Many businesses were already doing these and other BMPs, for a total of 90 that were in practice. Eight of 25 nurseries (32%) reported they practice IPM.

Recommendations for future nursery campaigns include:

- Obtain an accurate inventory of all hazardous materials used in all nurseries and other agricultural operations.
- Concentrate on educating and encouraging nurseries to expand IPM methods in the business operations.
- Try to visit large nurseries in conjunction with WSDA regular inspections.
- Use the Best Management Practice Recommendations form during visits, and include a line about use of proper Personal Protective Equipment when using pesticides or other hazardous materials.
- Conduct follow-up contact with businesses to measure implementation of recommended Best Management Practices.

Although nurseries have been inspected in the past, that information unfortunately was lost. The 2002 campaign establishes a baseline for future campaigns.