

Mobile Contractor Illicit Discharge Education & Outreach Effectiveness Study

City of Wenatchee (Lead Agency)

Participating Partners: City of East Wenatchee, Douglas County, Chelan County, City of Kennewick, City of Pullman, City of West Richland, City of Richland, City of Spokane Valley

Study Completed January 30, 2020

Project Description

In 2010, the Dump Smart program for mobile contractors was implemented in six eastern Washington Communities. The goal of this study was to assess the effectiveness of the Dump Smart education and outreach program in eastern Washington specifically for carpet cleaners. Carpet cleaning businesses in jurisdictions were surveyed as well as business in areas that did not participate in the Dump Smart Program. A separate survey of mobile contractor education and outreach and illicit discharges was also conducted with the jurisdictions in the test and control areas.

The effectiveness of the program was evaluated based on the number of businesses who were disposing of wastewater in accordance with the “Dump Smart Tips for Properly Handing Waste Water when Carpet Cleaning” and how many businesses were carrying spill kits. Responses from the test population were compared to the control population to determine if there was a significant difference in the wastewater disposal practices and spill preparedness between the two groups.



Carpet cleaner emptying waste water into driveway, Wenatchee.



Example of carpet cleaning van showing different phone number than website

Study Methods

Action Research was hired to conduct the surveys and provide all statistical analysis of results. All of the data was collected by the consultant following standard operating procedures provided by the Lead Agency.

Activities Implemented:

- A pilot test was conducted in the City of Pullman to validate the survey instrument for both mobile contractors and the jurisdiction.
- Following the survey in Pullman, the survey procedure was modified to include a postcard to be sent to carpet cleaning businesses in the test and control areas from the lead agency to assure respondents that this was not a scam or telemarketing.
- The consultant administered the mobile contractor survey and the jurisdiction survey in the test areas, City of Wenatchee, City of East Wenatchee, Douglas County, and Chelan County, which had implemented the Dump Smart Program
- The consultant also administered the mobile contractor survey and the jurisdiction survey in the control area, City of Kennewick, City of Richland, and City of West Richland, which had not implemented the Dump Smart Program.

Study Results

Action Research compiled and analyzed the survey data. The final report was prepared by the City of Wenatchee.

- All seven of the jurisdictions completed the survey. All of jurisdictions had extensive general illicit discharge prevention education and outreach programs but specific education for mobile contractors was less frequent.
- A total of 83 businesses in the test and control group were provided to the consultant with only 16 completed surveys. Due to the limited number of surveys, the consultant was unable to complete a statistical analysis. The limited number of completed surveys was due in part to a high volume of wrong, disconnected, and out of business phone numbers. While double-checking the list of phone numbers, it was discovered that different websites had different phone numbers for the same business and pictures of carpet cleaning vans displayed different phone numbers than what was listed on the websites.
- A total of 35 business were called in the test area, with 9 completed surveys. Seven of the respondents carry a spill kit. Of the 9 respondents, 1 disposes of wastewater on the job site, 3 report disposing of wastewater off site, and 5 report disposing both on and off the job site. Disposal locations ranged from “In storm grate near client’s location” to the “clients’s location sewer system or RV dump”.
- In the control area, 48 businesses were called, with 7 completed surveys. In the control area, 6 of the businesses carry a spill kit. Of the 7 respondents, 5 report disposing of waste water off-site and two report both on-site and off-site disposal. Disposal locations in the control area ranged from “business dump station” to “large gravel pit- fibers are filtered out with screens”

Recommendations for the Dump Smart Education & Outreach Program

More education for proper wastewater disposal methods for carpet cleaning wastewater are required in the test area. Based on this study, the recommended improvements to the Dump Smart Education and Outreach Program include:

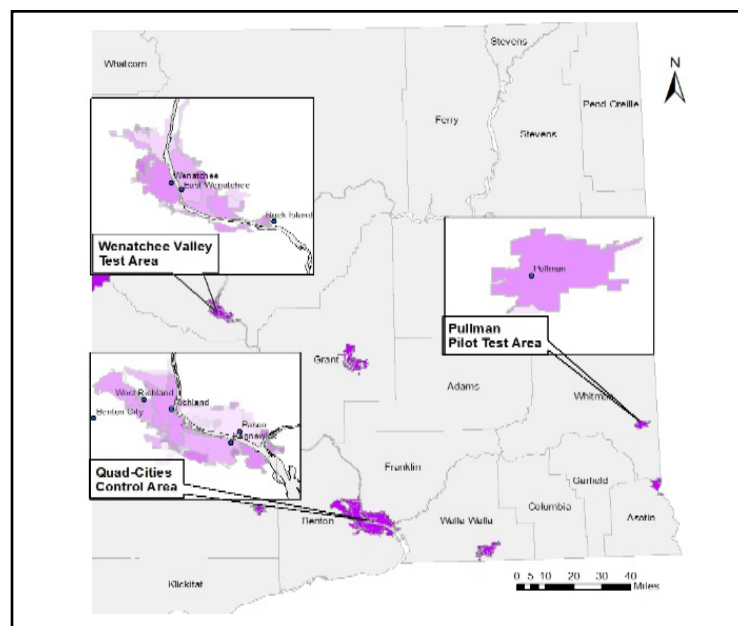
- Edits to literature to clarify disposal practices, especially concerning discharging wastewater to the ground.
- Consider limiting the number of tips and focus on no more than three issues. The current tip sheet includes three tips for waste disposal and six tips for spill prevention and cleanup
- Provide jurisdiction contact information on the tip sheet
- Convert the tip sheet into a magnet or sticker that could be placed inside the van to prompt employees to use the correct disposal methods and evaluate other types of stickers in lieu of the Dump Smart window cling to reinforce the company’s implementation of best management practices

Lead Agency Contact Information



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Final Report Available at
Wenatchee Valley Stormwater
Program webpage:
www.wenatcheewa.gov/WVSTAC



Project Areas: Pilot Test Area, Test Area, and Control Area.