

Field observations of the condition of inserts, excluders and CDS systems in the Westlake and Park Grove areas of Los Angeles, CA – 4/4/08

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The City of Los Angeles installed three large CDS systems around 2002 which were intended to control trash in medium to high trash generating areas of the city. A PSW70_70 was installed in the Los Angeles Coliseum area, a PSW 70_70 in the Westlake area and a PSW 100_100 in the downtown area on Park Grove. Subsequently the City installed catch basin inserts and retractable excluder screens in the catchment areas draining to these CDS systems as part of trash TMDL compliance efforts. Inspection of the Coliseum CDS system on Vermont Ave. revealed that the excluder screens and the horizontal inserts were typically not operating as intended. As a result the downstream CDS system with a capacity of about 14 cubic yards was full.

To determine whether the Coliseum conditions were typical, the other two CDS systems were inspected along with a few randomly selected retrofitted catch basins upstream. In these locations, vertical inserts were installed in the catch basins instead of the horizontal inserts typical of the Coliseum drainage area. From these observations a few conclusions can be drawn:

- The two areas inspected in this report are not generating as much trash as the Coliseum area.
- The vertical inserts appear to work slightly better than the horizontal inserts in that they were more likely to have some remaining open screen area and hydraulic capacity
- The excluder screens were about 50% reliable with some stuck in the open position, some with accumulated material on their faces, and some in the closed position but with gaps around them.
- Where the excluder screens are malfunctioning the inserts are much more likely to become occluded and fail.
- Some of the vertical inserts appear to be losing trash and debris even when most of the screen area is open.
- Some vertical inserts appear to have buckled under the pressure of water pooled in the catch basin.
- A large amount of trash and debris is passing by both the excluders and the inserts and is captured in the CDS systems.

Sample photos and field notes are included below. All photos are available on request.



Excluder stuck partially open apparently not due to trash wedged in the opening.



Vertical insert screen totally occluded with evidence of materials passing downstream. About 1"-2" of material on the floor of the catch basin.



Vertical insert with sediment and debris stapled to the surface. About 10% of the screen area is visible. Materials clearly passing downstream. Less than 1" of material in the catch basin.



A vertical insert without much material in the screen, but it appears to have buckled under pressure from water pooled in the catch basin. Debris tray is installed under inlet because pipe exits toward street. About 2" of material on the floor of the catch basin.



View of 7' diameter CDS separation chamber with a floating Styrofoam mat about 1' thick. Westlake System.



View of 10' diameter CDS separation chamber with a floating Styrofoam mat about 1' thick. Park Grove System.