

ADVANCED HVAC SYSTEMS FOR IMPROVING INDOOR ENVIRONMENTAL QUALITY AND ENERGY PERFORMANCE OF CALIFORNIA K-12 SCHOOLS

List of School Districts with UVC Technology

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Table of Contents

DISTRICTS WITH UVC – BEFORE PIER STUDY PERFORMED1

Districts with UVC – Before PIER Study Performed

District ID	District	County	Contact	Phone
33669930000000	Beaumont USD	Riverside	Bill Bruce	(909) 845-1787
19645680000000	Glendale USD	Los Angeles	Ken Gilleland	(818) 507-0201
36678190000000	Ontario Montclair SD	San Bernardino	Ralph Arrington	(909) 459-2500 x 4555
30666210000000	Orange Unified	Orange	Steve Harlin	(714) 936-3738
36750690000000	Upland Unified School District	San Bernardino	Mike Jacques	(909) 982-3236
19650940000000	West Covina USD	Los Angeles	Jake Jacobson	(626) 939-4060

Jake Jacobson, **West Covina USD**

UVC was installed as a part of a modernization. The lights were added to the new packaged units the prior HVAC were window units. Lighting T-8's were included in the modernization. They have approximately five schools with 4-5 ton units servicing 960ft² portable classrooms (almost 100% positive about this). UVC lights serve 100% of the conditioned area. Not all schools in the district are equipped with UVC. Installation of the lights has occurred through out the summer of 01, (2-sites) 02, (2-sites) 03 (1-site). Some sites have 20-30 classrooms I believe these are portable buildings. Those sites that have no UVC are on the agenda, which is dependant on a bond measure. There is about 1-year until installation with the exception of one site that is in progress.

Ralph Arrington, **Ontario Montclair USD**

UVC was installed due to IEQ complaints from portable classrooms (only). They have approximately 500 classrooms in the district with approximately 400 installations. Three years ago they changed the HVAC system in three of their schools. One school has a chilled water plant with some packaged units. I believe the UVC lighting has been in place for about 6 months. Lighting & HVAC has been modernized for the majority of the installations. Some schools have all areas with UVC and other schools have partial. I'm not 100% positive if the buildings are individually metered. They're likely to have a few meters at each school rather than on each building.

Ken Gilleland, **Glendale USD**

UVC was installed as a part of a modernization and new construction. They have done this for preventative maintenance and predict there will be some energy savings attributable; they also believe the ADA will increase (something he mentioned before I did). Their new school 7/03 they installed through out the entire building they are meters for the entire building. There are approximately 70units installed with a 4-ton compressor in a 5-ton frame. They also have larger buildings with 15-ton units installed. These installations are not specific to portable classrooms. Where there is modernizations they have installed HVAC where is didn't exist prior and improved the lighting to T-8's they have also upgraded to programmable T-stats. Some of their schools have been modernized but there is no UVC lighting. There are other schools that are on the agenda for modernization.

Steve Harlin, Orange USD

UVC was installed due to IEQ complaints from portable classrooms. They have 44 schools and approximately 2000 AC units. Mold issues have appeared to subside. They have approximately 15 schools with 10-15 portables with UVC lighting. They are waiting on a bond measure to see if they can do more, which is about one year away, if the bond passed more UVC lighting would be installed. They have 1-2 meters per school. In some extreme cases (not all they had to remove carpets, rip out rotten wood).