DEPARTMENT OF
BUILDING & SAFETY,
PUBLIC WORKS
AND HOUSING

22795 Barton Road
Suite B
Grand Terrace
California 92313-5295
Civic Center
(909) 825-3825
Fax (909) 825-7506

JUN 06 2008
REAL ESTATE
SERVICES DIVISION

June 2, 2008

California Department of General Services, Real Estate Services Division
Professional Services Branch, Environmental Services Division
707 Third Street, Third Floor, MS 509
West Sacramento, CA 95605-9052

Attn: Valerie Namba, Senior Environmental Planner

RE: Comments on Draft Environmental Impact Report on Pex Tubing.

My comments on the DEIR are as follows:

As Building Official for numerous jurisdictions over the past 16 years, I have been exposed to pipe failures in domestic water supply systems that incorporated the use of copper pipe and the installation of new domestic water systems using nonmetallic pipe. Over the years, I have been involved with the expanded use of CPVC piping.

Pex Tubing has become very popular due to its ease of use and the lack of any glue for connections. I have been approving the use of Pex Tubing since 1996 when it was first introduced in our region from plumbing contractors who were using this pipe in Nevada and Arizona on dwelling construction.

Pursuant to the plumbing code, an alternative material approval is required to allow Pex Tubing that is now widely used across the Inland Empire. I have allowed this materials use in many home projects using the alternative approach and have never seen or have ever received any evidence of product failure do to the correct installation of Pex Tubing materials. I have never received complaints or experienced any odors or bad taste generated from Pex Tubing. However, I have received complaints regarding copper pipe having a metallic taste and odor.

At this present time, I require each applicant to provide a water test examining the make up of the water for corrosion reasons. Each time a report is provided, the water is defined as hard in nature and corrosive. The recommendations in the reports are to use a nonmetallic material for domestic water supply. The code only recognizes CPVC which is a good nonmetallic material alternative. However, Pex Tubing is a better choice due to the ease of installation in its ability to be installed in tight areas for re-piping and new construction. Requiring the project applicants to pay additional money for testing and research coupled with time loss is not fair when Pex Tubing is already approved in manufactured homes and in most parts of the country.

In the past jurisdiction that I have worked, there was a company that rehabilitated kidney dialysis machines from all over the world. As you know, these machines are used to circulate blood for patients with kidney problems. I was shocked when I was informed by the owner of company that these machines use Pex Tubing in the circulation system because of its lack of carcinogens. If Pex Tubing is used in kidney dialysis machines with no effect on the patient, why would we not be able to approve its use for domestic water supply in the plumbing code. And, if Pex materials are already widely used in our state for other product uses we may not have been informed about, then an environmental study should support its continued expanded use.

When Pex pipe is installed on a project it is not likely to be stolen and recycled as is copper pipe today. The effects of copper pipe being stolen is far more of an environment problem than Pex tubing being placed in land fill areas or burning in an accidental home fire that are limited in nature. Much like CPVC piping material, Pex will be existing in homes it was originally installed in for many years beyond metallic pipe life because it is immune to corrosion attacks from aggressive water. There have been no documented failures reported or tracked in the rest of the country that has been shared with the building industry that would change minds on Pex Tubing performance. Only unsubstantiated talk that rodents have eaten through the pipe in an attic. If this is true, the pipe would not have been eaten if the attic was properly protected as required by code to stop rodents from entering.

I attended a water symposium that reported, in order to kill new bacteria showing up in water systems today, chloramines are being used to kill this bacteria that can harm human consumption. The chloramines are attacking the Patina build up inside the copper pipe. Patina protects the pipe from corrosive attacks. Pursuant to water experts, the loss of Patina builds up in the pipe allows the pipe to be exposed to hard water and eventually pin hole leaks appear. Only having one additional solution to re-piping a home using CPVC application is not fair or reasonable when there is Pex piping that can be used to access hard to get areas and is generally easier to install in any type of application, new or re-pipe.

As a building official I highly recommend that the use of Pex Tubing be allowed in the plumbing code not only to allow more choices in domestic water material but to also mitigate the problems of failing metallic pipe that continues to evade property owners.

I strongly encourage the adoption of Pex Tubing into the California Code.

Should you have any questions, please feel free to contact me at (909) 825-3825.

Sincerely,

Richard Shields

Richard Shields, CBO
Building Official