BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT BOX 390 270 ELM ROAD BOLINAS CA 94924

WHAT IS GROUND ASPHALT?

Asphalt is the standard accepted material for surfacing roads because of its many desirable properties. It consists of gravel bound together with tar, tar being what's left over after distilling gasoline and other volatile components out of crude petroleum. Over decades on a road, asphalt decomposes in the sun, and it also loses its residual volatile components to evaporation and its watersoluble ones to leaching (washing out) out by rain. Then the asphalt gets brittle, crumbles, and needs to be topped with a new layer. In preparation for this repair, the old asphalt is ground down to a level and roughened surface, and the resulting ground asphalt is removed.

Most petroleum products, including those we commonly encounter such as tar, gasoline, paint thinner and oil, contain materials having varying degrees of toxicity. Breathing their fumes, getting them on skin, and spreading them into the natural environment should be minimized. Despite this long-known drawback, asphalt is almost universally used on roads including the Mesa's Countymaintained roads, because no alternative has yet been found that performs as well and is more benign. However, compared to fresh asphalt, ground asphalt contains far less toxicity, because most of its volatile or leachable material has already been removed during its decades of original service.

We have found that for topping the dirt roads of the Mesa, ground asphalt lasts much longer than gravel before developing potholes, because it packs together more tightly and becomes bound together by the tar, so that it does not shift around and also lets less water through to soften and destabilize the underlying soil.

From time to time, truckloads of ground asphalt become available for free delivery to Bolinas from road-resurfacing projects in the vicinity, because it costs the road contractor less to haul it to somewhere local, whereas the cost of gravel including delivery from our nearest quarry runs around \$40 per cubic yard (enough to cover 7 linear

feet of road). For this reason, the Mesa Park and BCPUD Boards have decided to receive a large quantity of this material for their use and for the use of our neighborhood road-maintenance groups and individual residents in road-resurfacing projects. We welcome you to examine the material and its performance on our roads and urge you to take advantage of its availability. It seems that the cost of gravel and the frequency with which it needs to be redone has been one of the main impediments to neighborhoods maintaining their roads to a safe level of drivability, so we are hoping that the availability of this excellent and free material will reduce this barrier.

Don Smith BCPUD Board Member