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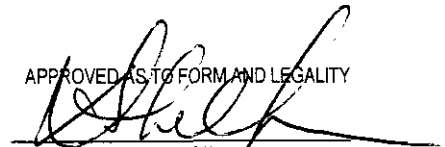
INTRODUCED BY COUNCILMEMBER \_\_\_\_\_

2004 JAN 15 AM 11:50

OAKLAND CITY COUNCIL

RESOLUTION NO. \_\_\_\_\_ C.M.S.

APPROVED AS TO FORM AND LEGALITY

  
City Attorney

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**RESOLUTION SUPPORTING ASSEMBLY BILL 338 REQUIRING THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CAL TRANS) TO USE RUBBERIZED ASPHALT CONCRETE WHICH CONTAINS RECYCLED SCRAP TIRES IN AT LEAST 15% OF ALL STATE HIGHWAY ASPHALT CONSTRUCTION OR REPAIR PROJECTS**

WHEREAS, Thirty-two million scrap tires are generated in California annually and, by the year 2020, more than 43,000,000 scrap tires will be generated in California annually; and

WHEREAS, crumb rubber from recycled scrap tires is used to make Rubberized Asphalt Concrete (RAC) for highway construction and repair, a material proven to produce roads with greater durability and noise reduction than conventional asphalt that can be used in a wide variety of road construction projects; and

WHEREAS, the California State Assembly is considering legislation (Assembly Bill 338) to require Cal Trans to use RAC in lieu of other materials in at least 15 percent of all state highway construction or repair projects; and

WHEREAS, implementation of Assembly Bill 338 would stimulate the demand for RAC by Cal Trans, lowering the cost, and could heighten demand by local governments for using RAC in local roadway projects, thereby lowering the cost further; and

WHEREAS, the City of Oakland would benefit from the reduced cost for RAC and the increased life span of Oakland's roads, thereby extending Oakland's paving budget; and

WHEREAS, increased demand for RAC, by creating a viable and reliable market for scrap tires, would help address tire dumping and landfilling problems currently faced but not solved by jurisdictions statewide; now therefore, be it

RESOLVED that the City of Oakland supports passage of AB 338; and be it

FURTHER RESOLVED: that the City Council directs the City Manager and the City's legislative lobbyist to advocate for the above position in the State Legislature.

In Council, Oakland, California, \_\_\_\_\_, 2004

**PASSED BY THE FOLLOWING VOTE:**

AYES – BRUNNER, CHANG, DE LA FUENTE, BROOKS, NADEL, REID, QUAN, WAN

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ORA/COUNCIL  
JAN 20 2004

**CITY OF OAKLAND  
BILL ANALYSIS FORM**

**BILL NUMBER:** AB 338 (Levine)

**DATE:** January 15, 2004

**TOPIC:** Requirement for Cal Trans to Use Recycled Tires in Roadway Projects

**Contact Person:** Jocelyn Combs

**Department:** CEDA

**Address:** 250 Frank Ogawa Plaza, 2<sup>nd</sup> Floor, Oakland 94612-2033

**Telephone:** (510) 238-3537 **FAX:** (510) 238-6996 **Email:** jcombs@oaklandnet.com

**RECOMMENDED POSITION:** Support.

**SUMMARY OF BILL:** AB 338 would amend Section 42703 of the Public Resources Code to require the California Department of Transportation (Cal Trans) to use Rubberized Asphalt Concrete ("RAC," made with recycled tires) in at least 15% of state highway construction or repair projects that use asphalt. The bill does not require the use of RAC for a particular project if Cal Trans determines that use of that material will not meet engineering standards and specifications for that project, or if it is not cost-effective.

**Discussion:** Despite an ongoing variety of state and local government grants and incentives for tire recycling, the demand for tire-derived products remains weak. Old tires remain a liability in need of expensive state and local government oversight rather than fulfilling their potential as a useful commodity. California continues to landfill and illegally stockpile millions of old tires every year—communities like Oakland continue to be blighted by dumped tires, which in addition to being unsightly, attract mosquitoes and rats and are a significant fire hazard. To address these issues, City Council has approved three state grants since 2001 appropriating over \$300,000 to CEDA to enforce waste tire management and illegal dumping regulations.

Though AB 338 does not legislate any action by local governments, its implementation could boost demand for RAC, which could have several local benefits. Research by Cal Trans has shown that roadways constructed using RAC in an equivalent thickness last longer and are significantly less noisy than those made with conventional asphalt. RAC has been used by Cal Trans and Oakland quite successfully over the last several years, and has been used internationally for decades. Though RAC is very cost-effective over its long life span, its initial cost can dissuade pavement planners from considering its use or even learning of its benefits. Because Cal Trans paves and repaves hundreds of miles of roadway annually, the mandate, by stimulating demand, could lower RAC's cost, making it at least as cost-effective as conventional asphalt; the state and local governments could build longer lasting, quieter roads at lower cost; and the number of tires dumped, stockpiled, and landfilled would be diminished, saving money and improving health and safety. The bill's modest 15% RAC requirement codifies an internal Cal Trans directive issued last year. AB 338 is a first step toward transforming an ongoing dangerous and expensive liability that burdens our communities and our environment into a valued commodity.

**POSITIVE FACTORS FOR OAKLAND:** Implementation of AB 338 could lower RAC's cost, thereby extending Oakland's paving budget and the life its roadways. By increasing old tires' value, fewer would be dumped, saving money now spent on their collection, transportation, and disposal. The bill could also stimulate the demand for other tire-derived products in which Oakland has shown interest such as rubberized sidewalks. The bill would help Oakland realize Citywide Goal #2, Objective C (implement programs that protect and conserve natural resources) and Goal #3, Objective C (reduce blight and nuisance).

**NEGATIVE FACTORS FOR OAKLAND:** If Oakland's use of RAC increases, local asphalt contractors might be slow to modify their practices. City staff might need to increase oversight to ensure that contract specifications are followed.

**OTHER INFORMATION:** AB 338 is supported by the Sierra Club, California, and Californians Against Waste, and opposed by the California Asphalt Pavement Alliance.

**PLEASE RATE THE EFFECT OF THIS MEASURE ON THE CITY OF OAKLAND:**

Somewhat Important

Distribution: G. Gonzales, C. Cappio, C. Wong, C. Ford (PWA), R. Godinez (PWA)

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**ORA/COUNCIL**  
**JAN 20 2004**

AMENDED IN ASSEMBLY JANUARY 5, 2004

CALIFORNIA LEGISLATURE—2003–04 REGULAR SESSION

**ASSEMBLY BILL**

**No. 338**

**Introduced by Assembly Member Levine**

February 11, 2003

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~~An act to amend Section 2108.1 of the Streets and Highways Code, relating to transportation. An act to add Section 42703 to the Public Resources Code, relating to recycling.~~

LEGISLATIVE COUNSEL'S DIGEST

AB 338, as amended, Levine. ~~Local streets and highways: pavement management program~~ *Recycling: crumb rubber.*

~~Existing law requires the City, County, State Cooperation Committee in the Department of Transportation to develop and adopt by July 1, 1990, a pavement management program to be utilized on local streets or highways that receive funding under the state transportation improvement program.~~

~~This bill would make a nonsubstantive change to these provisions.~~

~~Existing law requires the State Procurement Officer, in purchasing any materials to be used in paving or paving subbase for use by the Department of Transportation and any other state agency that provides road construction and repair services, to make contracts available that utilize recycled materials, including crumb rubber, unless the Director of Transportation determines that the use of the materials is not cost-effective based on specified factors.~~

~~This bill would require the Department of Transportation, to the extent permitted by law, and in consultation with the board, to require the use of asphalt containing crumb rubber in lieu of other materials to~~

*the maximum extent feasible in state highway construction or repair projects that use asphalt, but not less than 15% of these projects. The bill would provide that it does not require the use of asphalt containing crumb rubber for a particular project if the Department of Transportation determines that use of that material will not meet engineering standards and specifications for that project or if it is not cost-effective.*

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~ yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1    ~~SECTION 1. Section 2108.1 of the Streets and Highways~~  
 2    SECTION 1. *The Legislature finds and declares all of the*  
 3    *following:*  
 4    (i) *Thirty-two million scrap tires are currently generated in*  
 5    *California each year.*  
 6    (ii) *By the year 2020, more than 43,000,000 scrap tires will be*  
 7    *generated each year in California.*  
 8    (iii) *There are currently up to 6,000,000 tires in legal and illegal*  
 9    *scrap tire piles.*  
 10    (iv) *Twenty-five percent of California scrap tires, more than*  
 11    *8,000,000 tires, are disposed of in landfills or stockpiled in legal*  
 12    *or illegal dumps.*  
 13    (v) *Crumb rubber from recycled scrap tires can be used as an*  
 14    *additive for making asphalt for highway construction and repair.*  
 15    (vi) *It is state policy to not discard scrap tires in landfills or legal*  
 16    *or illegal stockpiles, and to find alternative uses for recycling tires*  
 17    *that have been generated in California.*  
 18    SEC. 2. *Section 42703 is added to the Public Resources Code,*  
 19    *to read:*  
 20    42703. (a) *The Department of Transportation, to the extent*  
 21    *permitted by law, and in consultation with the board, shall require*  
 22    *the use of asphalt containing crumb rubber in lieu of other*  
 23    *materials to the maximum extent, but not less than the amount*  
 24    *specified in subdivision (b), that is feasible in state highway*  
 25    *construction or repair projects that use asphalt.*  
 26    (b) *In at least 15 percent of all state highway construction or*  
 27    *repair projects subject to subdivision (a), the Department of*

1 *Transportation shall require the use of asphalt containing crumb*  
2 *rubber in lieu of other materials.*

3 (c) *This section does not require the use of asphalt containing*  
4 *crumb rubber for a particular project if the Department of*  
5 *Transportation determines that use of that material will not meet*  
6 *engineering standards and specifications for that project or if the*  
7 *use is not in accordance with any findings made pursuant to*  
8 *subdivision (a) of Section 42701.*

9 ~~Code is amended to read:~~

10 ~~2108.1. By July 1, 1990, the City, County, State Cooperation~~  
11 ~~Committee in the department shall develop and adopt a pavement~~  
12 ~~management program to be utilized on local streets or highways~~  
13 ~~that receive funding under the state transportation improvement~~  
14 ~~program.~~

15 ~~The pavement management program shall be transmitted to~~  
16 ~~every county and city for possible adoption or incorporation into~~  
17 ~~an existing pavement management program.~~

18 ~~The City, County, State Cooperation Committee shall solicit~~  
19 ~~recommendations from transportation planning agencies and any~~  
20 ~~other entity the committee deems appropriate.~~



Date of Hearing: January 12, 2004

ASSEMBLY COMMITTEE ON TRANSPORTATION

John Dutra, Chair

AB 338 (Levine) - As Amended: January 5, 2004

SUBJECT : Highway Construction Material: crumb rubber

SUMMARY : Requires the Department of Transportation (Caltrans) to use crumb rubber asphalt on at least 15% of state highway construction and repair projects, to the extent feasible and allowable by law. Specifically, this bill :

- 1) Makes legislative findings regarding the number of scrap tires generated in California each year and the projected growth in the number in the future, the number of tires currently in scrap piles, and the use of "crumb rubber" from recycled tires as an additive for highway asphalt.
- 2) Requires Caltrans, in consultation with the State Resources Board, to mandate the use of crumb rubber asphalt in lieu of other materials to the maximum extent possible and feasible in the construction and repair of state highways.
- 3) Requires Caltrans to use such crumb rubber asphalt in lieu of other materials on at least 15 percent of such state highway construction and repair projects.
- 4) Exempts Caltrans from these requirements when it determines that such material will not meet engineering standards and specifications for specific projects or where it determines that the use of such material does not meet cost-effectiveness standards.

EXISTING LAW provides that Caltrans has full possession and control of all state highways for state highway purposes and provides for a pavement management program to be utilized on local streets and highways that receive funding under the State Transportation Improvement Program.

The law gives Caltrans the authority to determine the methods of highway construction, improvement and maintenance best adapted to the various sections of the state and the best methods of construction and maintenance of highways, making experiments with respect to those methods from time to time.

Under this authority, the U.S. Department of Transportation tests new or alternate procedures, methods and materials on a continuing basis to improve the effectiveness and efficiency of its highway construction and maintenance operations.

FISCAL EFFECT : Unknown

COMMENTS : Crumb rubber is obtained through the recycling of used tires, which are shredded and then run through magnets and filters to separate steel belting and nylon mesh. Continued shredding and filtering reduces the rubber particles' size to an

inch or less in diameter, at which time the material constitutes "crumb rubber" and is suitable for various purposes, including mixture in road asphalt.

The author's office cites that 32 million scrap tires are currently generated in California each year, and that approximately 6 million such tires currently sit in legal and illegal scrap tire piles. Furthermore, it is estimated that by the year 2020, the state will generate over 43 million scrap tires.

In addition, it is argued that state policy currently discourages discarding such tires in either legal or illegal stockpiles and encourages both recycling and alternative uses.

The use of rubber-modified asphalt has spread throughout several countries and the 50 states. Its use in the road-paving arena has received mixed reviews. Australian studies, for example noted pavement fatigue.

Nevertheless, several studies, including a University of Illinois study conducted in 2000, concluded that rubber modified asphalt has been known to improve the rheological properties at low and high temperatures and provide a life up to three times longer than conventional asphalt. However, rubber modified asphalt may cost up to 100 % more than regular asphalt. Consequently, its use depends on funding support by government.

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) section 1038 was passed into law. This act required that starting in 1994, 5 % of the roads built with

federal funds use a pavement made with crumb rubber, processed recycled tires, or modified asphalt. By 1997, 20 % of the roads built with federal funds would be required to use recycled tires in the pavement. However by 1995, due to heavy opposition from states, the rubber mandate and all associated penalties, were removed.

Caltrans began using rubberized asphalt as early as 1978. It has used rubberized asphalt concrete on numerous state highway repaving projects (such as on a 10 mile stretch of Interstate 10 near Blythe, as well as a segment of Interstate 880 in the San Francisco Bay Area). And it has found that this cost-effective pavement overlay process increases the life of the roadway and reduces maintenance because rubberized asphalt concrete provides a long-lasting, durable pavement that resists cracking.

A directive was issued last year by Caltrans setting a rubberized asphalt-paving target of at least 15% of state highway construction and repair projects. This bill would mandate this 15% goal.

Despite the positive implementation of this paving technique, several issues do exist that might limit or influence its utilization. It doesn't work well on distressed pavement, it doesn't perform well in areas of the state subject to severe temperature variation, and it must be delivered quickly from plants to construction sites because it is only effective when

used at specific temperature levels.

Furthermore, policy considerations might weigh against the use of this paving material on specific projects. One such instance is where a highway-widening project might occur within a 5-year period. It would obviously not be cost effective to utilize rubberized asphalt in this situation.

The California Asphalt Pavement Alliance opposes the 15% mandate imposed by this bill. While it supports the use of rubberized asphalt paving, it argues that engineering and policy reasons exist that make it difficult for Caltrans to attain the mandated

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target with regularity. It stresses that Caltrans should remain free to determine, based on engineering and cost factors, whether rubberized asphalt pavement can or should be utilized on specific projects.

Industry sources have also noted that this bill would not eliminate most existing tire piles, because rubberized asphalt production facilities can only utilize crumb rubber from immediately recycled tires. Corroded rubber cannot be utilized in pavement production.

The Senate Advisory Committee on Cost Control issued a report in November of 2003 in which it recommended legislation requiring Caltrans to increase rubberized asphalt usage by 20% on all projects in fiscal year 2003-2004, increasing to 40% by 2005. The report also recommends Caltrans follow the example set by Arizona and require use of California crumb rubber.

A recent Los Angeles Times article on the subject of tire recyclers and crumb rubber production reported that a glut of crumb rubber on the market, combined with heavily subsidized Canadian producers, has driven its price down to 10 cents a pound. And rubberized asphalt - the major market for crumb rubber - has fallen because budget concerns have reduced demand from potential major customers, such as the California Department of Transportation.

Related Legislation : SB 1488 (Polanco), introduced in 2002, would have required Caltrans to utilize crumb rubber asphalt on all non exclusively state funded highway construction and road repair projects to the extent feasible. It also would have exempted the use of crumb rubber in these projects if Caltrans determined that its use didn't meet the projects' engineering standards and specifications or was not cost effective. That bill failed passage in the Assembly Transportation Committee.

Author's Amendments : It is the author's intent to present amendments in the Assembly Appropriations Committee that will require Caltrans to utilize crumb rubber asphalt pavement derived from California scrap tires.



REGISTERED SUPPORT / OPPOSITION :

Support

City of Union City  
Sierra Club California

Opposition

California Asphalt Pavement Alliance

Analysis Prepared by : Joseph Furtado / TRANS. / (916)  
319-2093

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