LINDA S. ADAMS
SECRETARY FOR ENVIRONMENTAL PROTECTION

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

ARNOLD SCHWARZENEGGER
GOVERNOR

1001 I STREET, SACRAMENTO, CALIFORNIA 95814 • P.O. BOX 4025, SACRAMENTO, CALIFORNIA 95812-4025
(916) 341-6000 • WWW.CIWMB.CA.GOV

MARGO REID BROWN
CHAIR
MBROWN@CIWMB.CA.GOV
(916) 341-6051

SHEILA JAMES KUEHL
SKUEHL@CIWMB.CA.GOV
(916) 341-6039

JOHN LAIRD
JLAIRD@CIWMB.CA.GOV
(916) 341-6010

CAROLE MIGDEN
CMIGDEN@CIWMB.CA.GOV
(916) 341-6024

ROSALIE MULÉ
RMULE@CIWMB.CA.GOV
(916) 341-6016

MEMORANDUM

Date: Monday, April 13, 2009

To: Waste Tire Interested Parties and Stakeholders

From: Ted Rauh, Director, Waste Compliance and Mitigation Program

Re: Issue Paper: Consideration of Modifications of Waste Tire Storage Requirements

Attached is an issue paper, Consideration of Modifications of Waste Tire Storage Requirements dated April 13, 2009 and a Memorandum dated September 22, 2008 between Waste Board and State Fire Marshall staff on this subject. This information will be the subject of a workshop to be held on April 27 from 1 PM - 4 pm at the CalEPA Building (1001 I Street, Sacramento 95814) in Room 550. You may participate in person or listen in via the Internet. Additionally, a limited number of conference call lines may be available.

Staff will be seeking input from stakeholders on whether or not to consider modifying the statute and/or regulations regarding the current tire storage requirements for tire shreds and other products derived from waste tires. Staff proposes to discuss the options in the issue paper or others that stakeholders may want to propose. Information received will be reported to the Board along with staff recommendations for any changes to the regulations as may be appropriate.

If you have any questions about the workshop, please contact Jim Lee at (916) 341-6455.

Attachments:

1. Issue Paper: Consideration of Modifications of Waste Tire Storage Requirements , April 13, 2009
2. State Fire Marshal Memo dated 9/22/08

ORIGINAL PRINTED ON 100 % POST-CONSUMER CONTENT, PROCESSED CHLORINE FREE PAPER

April 13, 2009

Publication # IWMB-2009-010

ISSUE PAPER:

Consideration of Modifications of Waste Tire Storage Requirements

Introduction

Several waste tire processors and stakeholders have expressed the need for more waste tire regulation flexibility so they can store and have ready for delivery sufficient amounts of altered tires needed for large Tire Derived Aggregate (TDA) product orders. CIWMB staff is working closely with many state and local agencies to increase the number of TDA projects constructed throughout California, recognizing that these civil engineering uses of tire projects represent major opportunities for significantly increasing waste tire diversion.

Waste tire processors and stakeholders have also looked askance at Board regulations applied to bagged and other "end stage" processed waste tire material at permitted facilities, believing that it should be accorded the same exemption from requirements currently enjoyed by crumb rubber and molded rubber products. At Board hearings last summer on a report to the Legislature on "Options to Increase Waste Tire Diversion Rates", the Board took testimony and gave direction to staff to reexamine the issue.

The Board recognizes the possible need to accommodate large piles of TDA and other forms of processed waste tires must be balanced against the potential environmental and health impacts which inadequate or improper storage of waste tires and waste tire products may engender.

A recent change to the National Fire Code affects the safe handling and storage of flammable waste tires, TDA and other forms of processed waste tires and tire derived products. Staff is consulting with the State Fire Marshall and reviewing Public Resources Code and recently updated Fire Code sections to ensure that waste tire facilities, and all the waste tire products they contain, meet applicable fire prevention standards.

In light of these factors, Staff is soliciting comments from stakeholders on what direction they would like to see the Board take relative to consideration of the revision of the statute and/or regulations regarding current tire storage requirements. To that end, staff intends to hold a workshop for stakeholders in Sacramento. In order to stimulate thought prior to the workshop, staff has summarized the issues surrounding the storage of processed waste tires, and presented some options for discussion.

Background

Current waste tire storage permits (minor waste tire facility permit for sites with greater than 500 waste tires and less than 5,000 waste tires) place limits on the number of waste tires that may be stored on-site at any given waste tire facility. There are no regulatory limits on the number of tires that can be stored at a major tire facility; however, limits are determined by site specific operational and design conditions, the ability of the facility to comply with the tire storage requirements and financial assurances, and local land use approvals and CEQA

conditions. Some facilities may have waste tire storage limits included within their permits that do not optimize the facilities storage potential.

As defined below, "waste tires" include "altered waste tires" that are counted as "passenger tire equivalents." Whole waste tires and passenger tire equivalents are summed to determine the total quantity of waste tires being stored.

The definitions and regulatory citations below are used in the ensuing discussion.

"Waste tires" are defined in statute at Public Resources Code (PRC) section 42807 as follows:

> " . . . a tire that is no longer mounted on a vehicle and is no longer suitable for use as a vehicle tire due to wear, damage, or deviation from the manufacturer's original specifications. A waste tire includes a repairable tire, scrap tire, altered waste tire, and a used tire that is not organized for inspection and resale by size in a rack or a stack in accordance with Section 42806.5, but does not include a tire derived product or crumb rubber."

Altered waste tires are defined at PRC section 42801.5(a) as:

> "Altered waste tire" means a waste tire that has been baled, shredded, chopped, or split apart. "Altered waste tire" does not mean crumb rubber."

"Tire derived aggregate" (TDA) means shredded tires that meet certain specifications for various civil engineering projects.

"Passenger tire equivalent" as defined in Title 14 California Code of Regulations (14 CCR) section 17225.770 is intended to mean the amount of tire rubber equal to that of a passenger car tire. It is calculated by the following formula: "…means the total weight of altered waste tires, in pounds divided by 20 pounds."

Below are definitions for "Tire derived product," "molded products," and "crumb rubber." None are considered a "waste tire" based on PRC section 42807, and, therefore, they are not regulated as such by the CIWMB at this time. However, the 2007 Uniform Fire Code does specify storage requirements and/or fire suppression requirements associated with the flammability of these materials.

"Crumb rubber" as defined in PRC section 42801.7 "… means rubber granules derived from a waste tire that are less than or equal to, one-quarter inch or six millimeters in size."

"Tire derived product" (TDP) is defined in PRC section 42805.7 "…means material that meets both of the following requirements:

(a) Is derived from a process using whole tires as a feedstock. A process using whole tires includes, but is not limited to, shredding, crumbing, or chipping.
(b) **Has been sold and removed from the processing facility."** (emphasis added)

"Molded Products", although not specifically mentioned in PRC section 42807, are by inference not a waste tire. Molded products include rubber mats and similar items.

Note that at the July 2008 Board Meeting (Discussion Of Calculations Relative To Waste Tire Counts, Including Tire Shreds, Chips, And Bagged Product, At Waste Tire Storage Sites - (Committee Item F), another term, "PDWT", was introduced to describe certain waste tire derived products onsite and their regulatory status. PDWT, or "products derived from waste

tires" is not currently defined in statute or regulation but has relevance for this discussion. Specifically, PDWT is:

"Products derived from waste tires" (PDWT) is material not yet sold and/or removed from the facility and larger in size than crumb rubber. Examples include primary or secondary shreds, final stage or near final stage processed products being prepared for sale, bagged, boxed or bulk shreds or chips greater than ¼ inch nominal size used for mulch, bedding and similar products.

State Minimum Standards – Fire Protection

Title 14 CCR Sections 17350-55 reference State Minimum Standards, including those for fire prevention and waste tire storage at waste tire facilities. Among other requirements are those: specifying minimum setbacks of waste tires from property lines and flammable materials; maximum area and height dimensions for waste tire piles; and amount of available fire fighting water supply. The regulations do allow a local fire authority having jurisdiction over a particular facility to determine that a different requirement is necessary or adequate to meet the intent of these regulations for the prevention of fire and the protection of life and property. Any changes to the State requirements approved by the local fire authority are subject to Board concurrence at the time of issuance or renewal of the permit. It should also be noted that approved changes to the Fire Code in 2007 will have a bearing on these discretionary decisions by local fire departments and any subsequent Board approvals. The 2007 changes to the Fire Code will be outlined later in this issue paper.

Scope of the Board's Waste Tire Storage Standards

Standards apply to waste tire processing facilities but once PDWT are sold and removed from the facility, they are not regulated. For example, when TDA is processed, sold and shipped to a job site, even when it may be stored for an extended period of time before use, it is not regulated by the Board.

Issues and Discussion

Tire Derived Aggregate (TDA):

The State has a vested interest in promoting projects using TDA. CIWMB staff has estimated that annually, over 10 million waste tires still go to landfills. The State is committed to diverting more waste tires from landfills, and TDA projects use large quantities of waste tires.

The rationale for flexibility with TDA storage is that the vast majority of TDA projects are constructed from May through October, which causes a significant spike in demand for TDA during this seasonal period. TDA projects in particular require extremely large amounts of product all at once; for example, the TDA fill for the Dixon Landing Interchange consumed 600,000 waste tires in a very short time window. In these cases, the delivery of TDA must be planned well in advance, necessitating temporary storage of TDA until the required amount is produced and the project is ready for construction. Unfortunately, if a tire processor receives a large order like the TDA needed for a Dixon Landing type project, the amount of TDA it needs to manufacture in advance of the project might put the company over its permitted storage capacity.

While not a permitting issue, it has come to the attention of staff that there have been instances where LEA, state staff and civil engineering contractors have not been aware of the

requirements and exemptions under law relative to the transport and storage of tire derived product. For example, waste tire haulers have the option of seeking an exemption letter from staff so that they can legally haul tire derived product without a manifest (see Section 18451(c). To avoid confusion, some haulers choose not to obtain exemption letters and just use manifests. However, using manifests requires issuance of a TPID number to the end use site. Since TDA projects are temporary sites that must be issued new TPID numbers, this can lead to further confusion for the haulers. Unfortunately, not all construction sites can accommodate the storage of large volumes of TDA in advance of project construction due to timing or available storage space. For certain projects there will still be a need to store large volumes of TDA at processing facilities or other locations in advance of project commencement.

Crumb Rubber, TDP and Molded Rubber Products:

Statute stipulates that crumb rubber (tire shreds less than ¼" in size) are not waste tires. Therefore, the storage of crumb rubber is exempt from the requirement to obtain a waste tire permit, and the amount of crumb rubber is not included in the permit application.

Similarly, molded rubber products such as mats are statutorily excluded from being regulated as a waste tire, and therefore are also not included in the calculation of waste tires onsite (See PRC Section 42807).

Although both crumb rubber and molded rubber products are potentially flammable , neither product type must meet Waste Board imposed State Minimum Standards including fire prevention due to their statutory exemption from permitting requirements. However, these products are subject to local fire agency requirements for the storage of flammable materials. As such, the need for appropriate fire protection with respect to storage requirements for all waste tire products onsite has to be considered by the Board in calculating a site's overall storage capacity for those materials and products under its regulatory purview.

TDP, that is waste tire product material which has been sold and delivered offsite, is not regulated at the delivery or customer location by CIWMB regulations but is subject to local fire agency requirements for the storage of flammable materials if it is to be stored at the receiving location.

Products Derived from Waste Tires (PDTW):

PDWT stands for "products derived from waste tires." PDWT is different from the term tire derived product (TDP). TDP is defined in statute as a material that has been "sold and removed from the processing facility" [Section 42805.7(b)]. **PDWT is material not yet sold and/or removed from the facility and is not crumb rubber (emphasis added)**. Examples of PDWT are intermediate processed products, primary or secondary shreds, final stage or near final stage processed products being prepared for sale, bagged, boxed or bulk shreds or chips greater than ¼" nominal size used for mulch, bedding and similar products including TDA, discussed below.

PDWT is counted as passenger tire equivalents when determining if a permit is required, and/or what type of permit is required (minor or major). Staff recognizes that some stakeholders are or were not clear on the distinction between TDP and PDWT leading to inconsistency in previous permit applications.

Any time whole waste tires and altered waste tires are stored at a facility there is the threat of mosquito breeding and fires. Mosquitoes may not be a significant issue in this discussion

because in most cases PDTW will not hold water. Fire on the other hand is a threat to both whole tires and PDTW. There was one instance of tire derived product catching fire at Atlos Rubber's facility in Los Angeles years ago on the Fourth of July. These were tire buffings that were ignited probably by fireworks. There was also a fire at Golden By Products in Merced County last year when a fire ignited primary and secondary shreds. According to local fire officials, the fire could have been much worse if not for water supply improvements and product storage requirements imposed by enforcement order and permit modifications. Therefore, the need for large piles of TDA and other forms of processed waste tires ready for delivery must be balanced against the significant environmental and health impacts of potential tire fires.

Relevant Studies:

In 1993, the Board sponsored a study through the State Fire Marshal's Office entitled "Fire Safety Assessment of the Scrap Tire Storage Methods." The study was conducted by Dr. Brady Williamson of the University of California at Berkeley. Whole tires, baled tires, and tire shreds (two inch chips) were burned to assess the Board's waste tire storage standards and to compare the characteristics of tire fires. The study revealed that once ignited, the spread of flames across the pile of tire shreds was much more rapid than across the pile of whole tires; however, the overall temperatures for the burning shreds were about one-third lower than those for the whole tires. The shred pile took on the burning characteristics of a pile of coke. The ash/residue remained on the surface of the pile and the burning/pyrolization of shredded tires moved slowly into the core of the pile. As the ash residue layer covered the surface of the shred pile the flame height diminished. Under undisturbed conditions the shredded pile burned more slowly and cleanly than the pile of whole tires. Based on this information Dr. Williamson suggested that piles of shreds should be no larger than 500 sq. ft. size, because of how rapid fire spreads across a shred pile. However, because of the reduced heat in a burning shred pile, Dr. Williamson did not believe that shred piles needed to be spaced as far apart as specified in the current regulations.

Thus, any proposed change to accommodate the storage of large quantities of PDWT may also need to include changes to how material is stored and under what conditions, which raises several issues related to environmental and public health and safety concerns. The Board's tire regulations are designed to ensure safe, well-managed tire storage facilities that can meet appropriate fire standards and control vectors. There is warranted concern that if the requirements were modified, increased or unrestricted stockpiling of PDWT could adversely impact public health and environmental protection. From a fire prevention standpoint, shreds or packaged product pose a fire potential, as noted above, which suggests the need for clear minimum standards related to fire prevention.

Relevant Waste Board storage standards and local fire authority implementation:

As background, the Board's current waste tire storage standards found in sections 17350-17356, Title 14 CCR, were promulgated in 1993. Both indoor and outdoor storage standards were based on National Fire Protection Association (NFPA) Standard 231D and the Uniform Fire Code. NFPA subsequently replaced this standard with NFPA 230, which was recently replaced by NFPA 1. The Uniform Fire Code (2001 California Fire Code) was replaced by Title 24, Part 9 the 2007 California Fire Code (CFC) which adopts by reference and incorporates the 2006 International Fire Code.

In addition, section 17354(c) allows local fire departments to determine that an alternative waste tire storage configuration outside of the specified width, height, and volume waste tire storage requirements is "adequate to meet the intent of the regulations for purposes of the prevention of fire and the protection of life and property." However, many local fire authorities have had little experience with waste tire storage or tire fires, and would not be willing to take the time and devote the resources to making these determinations without further guidance and technical assistance.

State Fire Code and Opinions of the Office of State Fire Marshall:

As a result of changes in the codes and standards for the storage of waste tires and lack of experience that many local fire authorities have with storage of waste tires, CIWMB staff met with the State Fire Marshal's Office (SFM) (see attached memo).

During the meeting, Supervising Deputy State Fire Marshal Kevin Reinertson expressed concerns about the flammability of tire related products and the variability in implementation of the State Fire Code by local fire districts. He explained that to date the SFM had not been able to initiate work pursuant to AB 1249. Under this statute, codified in PRC 42820 (b), the SFM will develop, in consultation with the CIWMB, fire related regulations for major waste tire facilities. Under AB 1249, the Waste Board in consultation with OEHHA will then adopt regulations including by reference the regulations adopted by the SFM. Deputy Reinertson indicated that it may take up to two years for the SFM to adopt waste tire storage regulations, due to SFM's internal review procedures and the Building Standards Law's rulemaking process (commencing with Health and Safety Code Section 18900). However, as a stopgap Deputy Reinertson suggested preparing a bulletin addressing the storage of waste tires. The SFM routinely prepares bulletins on specific subjects and circulates these bulletins to local fire authorities throughout the state. These bulletins do not carry the weight of regulation, but they do provide direction to local fire authorities on specific issues. A waste tire bulletin could embody proposed standards for both indoor and outdoor storage of waste tires, or could reference existing regulations, codes, and standards that address the storage of waste tires and waste tire product.

A bulletin would dovetail with our current regulations and provide interim guidance to local fire agencies on alternative standards to apply and enforce pending the adoption of regulation pursuant to AB 1249. This should help to educate local fire agencies on appropriate sections of the current CFC that they may apply and enforce where an alternative to the Board's regulations would be more appropriate. It is staff's intent to propose the Board make formal request of the State Fire Marshall's office to prepare this bulletin to provide direction to local fire authorities on tire storage matters while AB 1249 regulations are being developed.

<u>Summary of Proposed Options</u>

Following is a summary of the proposed options for regulating (or not regulating) TDA, PDWT, and crumb rubber:

Option 1: **Propose a statutory change to include a new definition for Products Derived from Waste Tires (PDWT) and to exempt ALL OF THIS MATERIAL from the**

definition of "waste tire" in PRC section 42807 and the permitting and State Minimum Standard requirements.

Under this option, all Tire Derived Consumer Products would be treated like crumb rubber and would not be regulated. This would require changing the current statute and regulations.

Pro: Operators would be able to store more processed tires (PDWT) on site without increasing the storage quantity in their permit assuming all relevant fire codes and local land use concerns are met.

Con: Fire safety would be an issue unless clear State standards for material storage are in place and enforced.

Financial assurances likely would not cover the costs of remediating the site in the event the business fails.

This broad exemption for PDWT would require statutory and regulatory change.

Exemption would need to be developed in conjunction with and in consideration of proposed State Fire Marshall bulletin providing interim guidance to local fire agencies on alternative standards to apply and enforce pending the adoption of regulation pursuant to AB 1249.

Option 2: **Propose a statutory change to include a new definition for "SELECT" Products Derived from Waste Tires (PDWT) and to exempt this material from the definition of "waste tire" in PRC section 42807 and the permitting and State Minimum Standard requirements.**

This option is predicated on the argument advanced by some in the regulated community that certain PDWT are high "value added" products akin to crumb rubber and thus deserving to share the exemption in statute and regulation currently accorded crumb rubber and molded rubber products. An example of the type of material that might fall under this definition might be bagged mulch which has undergone various processing steps and is being readied for delivery. An example of a product that might not fall under this definition is "single pass" shreds. Staff envisions that the "dividing line" between what is a select PDWT and which is not would be made by the Board and set forth in statute and regulation, taking into consideration comments from the regulated community and other regulatory agencies, such as the State Fire Marshall, among others.

Pro: Operators would be able to store "select" (PDWT) on site without increasing the storage quantity in their permit assuming all relevant Fire Codes and local land use concerns are met.

Con: Fire safety would be an issue unless clear State standards for material storage are in place and enforced.

Financial assurances may not cover the costs of remediating the site in the event the business fails , although the high value added nature of the material may have residual worth mitigating this concern.

This broad exemption for PDWT would require statutory and regulatory change.

Exemption would need to be developed in conjunction with and in consideration of proposed State Fire Marshall bulletin providing interim guidance to local fire agencies on alternative standards to apply and enforce pending the adoption of regulation pursuant to AB 1249.

Option 3: Status Quo: Facilities can modify existing permits to maximize storage and ability to balance PDWT and waste tire permit limits. Crumb rubber and molded rubber products not regulated onsite but PDWT is regulated onsite.

Any permitted Major Waste Tire facility can propose a permit change under current regulation and add storage capacity as long as the CIWMB, local planning, the local fire authority and mosquito abatement district are satisfied that fire risk and vector control are adequately addressed. This option does require the Board to make a site specific determination for each facility and for Board staff to work individually with each local fire authority to assure consistency.

Major facility operators would be encouraged to identify a "temporary storage area" within or adjacent to their permitted boundary. However, instead of "reacting" to a specific project, this area could be "preapproved" to allow the operator to stage any PDWT in accordance with Board and local planning and fire departments requirements. Then once they are awarded a contract to produce a PDWT with a certain material specification, they can place that material in their temporary storage area if the quantity requested exceeds their permitted capacity.

For a permitted Minor Waste Tire facility the operator would have to apply for a Major Waste Tire facility permit in order to increase capacity if the 5000 waste tire permit limit is exceeded.

Pro: No changes to statute or regulations necessary.

This option allows for the maximum, safe utilization of a specific facility.

Site operators have operational flexibility to manage waste tire and PDWT inventories as market conditions allow to the maximum capacity of the site.

"Temporary storage area designation" allows the operator to be proactive rather than reactive to supplying PDWT to a specific project and, in the case of TDA,

minimize the need for temporary staging areas when delivering large amounts of material.

Major waste tire facilities have ability under current regulations to amend a permit to accommodate increased PDWT storage needs. (It should be noted that despite the availability of this option to major waste tire facilities, none have approached the Board to date to utilize it).

Regulating PDTW, if not crumb rubber and molded rubber products, is supportive of the Board's goal of protecting health, safety and the environment.

Con: Operators might have difficulty meeting large TDA demands in a timely fashion unless they have planned in advance and had this operational flexibility incorporated and approved in their permit.

Timeliness of major facility permit modifications to accommodate increased PDWT storage needs may not be adequate to meet operators needs.

Requests for additional storage capacity at minor tire facilities may exceed major permit thresholds and trigger additional permit requirements

Obtaining necessary local land use and CEQA clearances can be difficult and time consuming especially when permit changes or revisions are being requested that have not been explicitly endorsed in previously approved planning and CEQA documents.

Some civil engineering projects could be delayed or jeopardized by time required to amend permits and/or obtain local land use and fire department clearances.

Stated needs of Operators for maximum latitude in storing waste tire products other than crumb rubber and molded rubber products are only met through the permit process.

Doesn't address Operators belief that it is unfair that waste tire products such as bagged and colored bark that are ready to ship are regulated but other waste tire products, e.g., crumb rubber have statutory exemption from permitting and State Minimum Standard (e.g., fire prevention) requirements.

Board's increased waste tire diversion goals are arguably not supported.

Inconsistency in statute and regulation is not addressed and the various waste tire products, which all have fire potential and other adverse environmental threats have dissimilar local and state regulatory oversight.

Option 4: **Propose change to waste tire storage regulations to allow for a temporary increase in waste tire or PDWT storage at permitted waste tire facilities where (1) Board pre-approved criteria are met including pile size/height, water supply, financial assurances and linkage via contract to a planned product delivery or civil engineering application; and (2)where this additional storage has been approved by the local fire and/or planning authority and appropriate fire prevention measures can be employed.**

Under this option, a permitted facility would apply for and receive a waiver from Board staff to temporarily store, in excess of permitted limits, more TDA or PDWT onsite as long as it meets certain Board pre-approved criteria such as: meeting material specification for proposed project or use; appropriate pile configuration; adequate water supply; local planning and fire department approval; and adequate financial assurances. The waiver request would have to be for a limited period of time (e.g, 3-6 months) and correspond to specific project and/or product delivery schedule and need. The waiver request would trigger a permit modification and the waiver time period could be extended by the Board to allow for completion of the permit modification. The request would have to include a certification by the owner/operator that local land use authorization and 2007 Fire Code requirements are being met.

Pro: Option can be implemented administratively (after initial regulatory change approvals), potentially offering more flexibility and timeliness.

Civil engineering projects will potentially be able to acquire the TDA they need on a more timely basis. This may minimize the need for temporary staging of TDA at the construction sites thus allowing more civil engineering projects to use TDA, to support the Board's strategic directives.

Can be accomplished at present at larger facilities with adequate space requirements through permit modifications and adherence to Board or local fire storage standards.

Con: Would require initial regulatory change to implement.

There may be a problem with getting local fire approval for storing, even temporarily, a large volume of TDA.

Smaller size facilities more likely to not have space and/or water supply available to store additional material and provide appropriate environmental safeguards.

This option does not address issue of appropriate storage and standards for other waste tire derived products.

Option 5: Status Quo: Allow the temporary storage of TDA at civil engineering construction sites.

Under this option, the temporary storage of 500 or more PTE of tire shreds of a specified size (e.g., 6" minus, 4" minus, or 1/2" minus) is allowed at approved construction sites, in accordance with tire storage standards. Under this approach, a permit would not be required if tire pieces are stored temporarily before being used in such approved construction projects by the new owners of the material.

Pro: Would allow a construction site with enough space to store TDA for civil engineering application

Current regulation (PRC section 42805.7) exempts all "tire derived product" (i.e., that which is processed, sold and delivered offsite) including TDA which meets these requirements; therefore, no regulatory modifications are necessary to implement.

Con: Although not required in current regulation, meeting desirable fire storage standards at construction sites may be difficult because of space and/or water supply considerations.

Option 6: Propose a statutory change to remove the specific exemption for crumb rubber and add molded rubber products to the definition of a waste tire at PRC section 42807 to allow application of State Minimum Standards, and/or permitting requirements to crumb rubber and molded rubber products.

Pro: Uniform regulation of any size material produced from waste tires including material generated by slicing, cutting, shredding, chipping, ambient grinding and cryogenic grinding. Because of its flammability, crumb rubber poses a threat to health and safety and the environment just as larger particle sizes do. The current crumb rubber exemption means that there are no Board fire safety standards for storing crumb rubber.

Molded rubber products are also flammable but because of reduced surface area would be expected to be less so than crumb rubber (note binders and fillers in the rubber product could conceivably make the product more or less flammable).

Creates a level playing field for all materials derived from tires.

Con: Would be disruptive to those operators presently storing crumb rubber or molded rubber products.

Stated needs of operators for latitude in storing waste tire products other than crumb rubber and molded rubber products not met.

Some operators may have to have their permits revised to count all waste tire materials onsite and provide additional financial assurances.

There may also be local land use and CEQA considerations.

There may be additional water supply and/or space needs to accommodate appropriate setback and separation requirements.

This option would require statutory and regulatory change to implement.

Option 7: Prepare guidance document on TDA use and storage on construction sites

Under this option, separate guidance would be developed for tire enforcement staff, LEAs and operators of construction sites where TDA will be utilized so that both enforcement staff and construction site operators know what is expected prior to start of a TDA related project. This guidance would include using the manifest system or applying for exemptions as appropriate.

Pro: Will help to ensure that all TDA project participants are aware of requirements and/or exemptions under current regulations to allow storage of TDA at construction sites with recommendations for doing so in an environmentally sound way.

Cons: None

Next Step:

Staff is seeking input from stakeholders on whether or not to consider modifying the statute and/or regulations regarding the current tire storage requirements for tire shreds. Any recommendation for change in the current tire storage requirements should include appropriate mitigations to avoid potential tire fires that may occur from the storage of large quantities of TDA or other tire derived product ready for delivery and appropriate financial assurance.

Staff proposes to hold a workshop to further explore these issues and to discuss the options in this issue paper or others that stakeholders may want to propose. Information received will be reported to the Board along with staff recommendations for any changes to the regulations as may be appropriate.

State of California

California Environmental Protection Agency

M E M O R A N D U M

To: Kevin Reinertson, Deputy State Fire Marshal III
Office of the State Fire Marshal

Date: 9/22/08

From: _____
Jim Lee, Manager, Waste Compliance and Mitigation Program

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: **RECORD OF COMMUNICATION: SEPTEMBER 7, 2008, MEETING REGARDING CAL FIRE / CIWMB COORDINATION IN UPDATING WASTE TIRE STORAGE REQUIRMENTS**

Tom Micka and I met with Office of State Fire Marshall (SFM) officials to solicit their opinion of appropriate fire related conditions for waste tire product storage to include in an issue paper to be vetted with the regulated community in public workshops. Those present from the SFM were: Supervising Deputy State Fire Marshal, Kevin Reinertson; Supervising Deputy State Fire Marshal, Steve Guarino; and Division Chief, Vickie Sakamoto, Fire and Life Safety, Northern Region.

As background, the current waste tire storage standards found in sections 17350-17356, Title 14 CCR, were promulgated in 1993. Both indoor and outdoor storage standards were based on National Fire Protection Association (NFPA) Standard 231D and the Uniform Fire Code. NFPA subsequently replaced this standard with NFPA 230, which was recently replaced by NFPA 1. The Uniform Fire Code (2001 California Fire Code) was replaced by Title 24, Part 9 the 2007 California Fire Code (CFC) which adopts by reference and incorporates the 2006 International Fire Code.

We pointed out that there were significant differences between some of the fire related provisions in the waste tire regulations and the current CFC (e.g., 10 foot separation between waste tires and property lines in Board regulation and 50 foot setback in CFC). We explained that under existing Board regulations, fire related permit conditions are often deferred to local fire officials to utilize their discretion in applying appropriate fire standards. For example, Section 17355, Title 14 CCR, states:

> Waste tires stored indoors must be stored under conditions that meet or exceed those in "The Standard for Storage of Rubber Tires", National Fire Protection Association, NFPA 231D-1989 edition, published by the National Fire Protection Association, which is incorporated by reference. <u>This requirement shall apply unless the local fire authority having jurisdiction over a particular facility determines that a different requirement is necessary or adequate to meet the intent of these regulations for fire control and the protection of life and property</u>… (underline for emphasis).

We explained that there appeared to be considerable variation among the local fire agencies over how and when to utilize their discretion with regards to which provisions of the Board regulation that they would apply and enforce with regard to both whole tires and waste tire products.

Kevin and the other OSFM representatives expressed a concern that waste tires, whole or in part, do constitute a fire threat. They acknowledged the wide variation in enforcement of the CFC between local fire agencies. They stated that some provisions of the CFC were provided as guidance to local fire agencies for local adoption and had not been adopted by SFM as minimum standards that must be applied

and enforced statewide. These provisions are part of the base model code (2006 International Fire Code) that have been incorporated into the CFC for adoption by the local fire agencies. For example, CFC, Chapter 25 "Tire Rebuilding and Tire Storage" has not been adopted by the SFM.

Furthermore, they went on to explain that to date they had not been able to initiate work pursuant to AB 1249. Under this statute, codified in PRC 42820 (b), the SFM would develop, in consultation with the CIWMB, fire related regulations for major waste tire facilities. Under AB 1249, the Waste Board in consultation with OEHHA would then adopt regulations including by reference the regulations adopted by the SFM. SFM officials indicated that it may take up to two years for the SFM to adopt waste tire storage regulations, due to SFM's internal review procedures and the Building Standards Law's rulemaking process (commencing with Health and Safety Code Section 18900). However, as a stopgap SFM officials suggested preparing a bulletin addressing the storage of waste tires. The SFM routinely prepares bulletins on specific subjects and circulates these bulletins to local fire authorities throughout the state. These bulletins do not carry the weight of regulation, but they do provide direction to local fire authorities on specific issues. A waste tire bulletin could embody proposed standards for both indoor and outdoor storage of waste tires, or could reference existing regulations, codes and standards that address the storage of waste tires and waste tire product.

A bulletin would dovetail with our current regulations and provide interim guidance to local fire agencies on alternative standards to apply and enforce pending the adoption of regulation pursuant to AB 1249. This should help to educate local fire agencies on appropriate sections of the current CFC that they may apply and enforce where an alternative to the Board's regulations would be more appropriate. There are numerous examples of where the CFC provisions differ from the Board's regulations. For example, the CCR, Title 14 requires 40 ft. separation from vegetation; whereas, the CFC requires 40 ft. for grass and weeds, and 100 ft. for brush and forested areas.

At the upcoming workshops, we expect to receive input not only on the storage of waste tires and waste tire product, but also the storage of product at point of sale. For example, tires may be shredded and sold as a mulch or chips at large retailers. The argument has been advanced by some in the regulated community that since the Waste Board does not regulate waste tire products at the retail point of sale that imposition of fire and storage regulations of this same material at the processing location is not appropriate. However, you brought to our attention that the CFC addresses the storage of all types of material in buildings at the retail end, often requiring sprinkler systems for buildings containing this or other combustible products. It would be helpful for the CIWMB if a bulletin could also summarize the existing standards for the storage of waste tire product at the point of sale.

We realize that new regulations, and even a bulletin, are somewhere in the future. However, for our upcoming issue paper we would appreciate if you would advise us if this memo accurately captures the SFM's position on the regulation of waste tires and products made from waste tires and the schedules for preparing an advisory bulletin and for considering regulatory changes. If there are edits that you would want to propose or other issues that we did not raise in this memo, please provide them in writing so that we may include them in our issue paper discussion.

If you have any questions please contact me at (916) 341-6455 or Tom Micka at 341-6420.