



June, 2005

Treated Wood Waste Revenue Opportunity for California Landfill Operators

In 2004 the California legislature overwhelmingly passed and the Governor signed into law AB 1353, sponsored by Assembly Person Barbara Mathews, to facilitate the disposal of treated wood waste as a solid waste in the landfills of the state. The law modifies the Health and Safety code to allow for the disposal of all types of treated wood waste in the "...composite-lined portion of a solid waste landfill." which meets the basic legal requirements of the water code and are approved to receive designated waste. The law addressed treated wood waste beyond that produced by utilities which was already approved to go to lined landfills (H&S Code 25143.1.50). Currently only a couple dozen facilities in the state have the appropriate WDR (Waste Discharge Requirements) for DW (Designated Waste) and the needed approval to receive the additional treated wood waste.

You recently received a memo (April 13, 2005) from the State Water Resources Control Board and Integrated Waste Management Board reviewing the law and the requirements for you to receive treated wood waste. (A copy is enclosed) **The state agency records indicate your facility is physically qualified to accept treated wood. If you are not currently permitted to receive treated wood waste, we strongly urge that you move forward immediately to get your facility approved!**

Why Should You Get Approval For Treated Wood? Increased Revenue and Low Risk.

Economics. Our research estimates that each year about 370,000 tons of treated wood waste will need to be disposed of in California with potential annual tipping fees in excess of \$20,000,000. There are many potential sources of treated wood waste: residential decks and fencing; parks and landscaping applications; highway and bridges; railroads; and ports and marinas.

Risk. Treated wood placed in the municipal landfills is classed as a *solid waste*, not hazardous.

Treated wood waste generated by the users of the products is not a federal RCRA hazardous waste. If it were, the provisions of AB 1353 would not apply. However, under California's strict state-only waste classification the presence of even small amounts of chemicals such as copper, arsenic, zinc, creosote or pentachlorophenol in the treated wood waste may make the material a state non-RCRA hazardous waste.

An extensive scientific review conducted by Graham Environmental Consulting examined leachate data from landfills that have accepted treated wood in the past under the Utility Exemption or the now defunct variances allowing disposal of other treated wood waste. The study strongly and firmly established that treated wood chemicals in landfill leachate occur at levels below drinking water standards or below the limit threshold concentration values and present no significant risk of contaminating drinking water. The results of this study, with the concurrence of the regulatory agencies, justified the legislature's action which established **that treated wood placed in the municipal landfills is classed as a solid waste, not hazardous.** Enclosed is the Executive Summary of the study and the full report is available on line (*WWPInstitute.org*) and may be useful to you or your RWQCB in approving your application.

Management. The legislation did provide for the development of some interim management standards for the landfills in handling non-utility treated wood waste and established a process for setting management standards into regulation. The requirements were outlined in the recent agency correspondence to you and will be discussed in a Fact Sheet being developed by DTSC and soon to be available at *www.dtsc.ca.gov*. Utility treated wood wastes are exempt by law from these management standards.

Permitting To facilitate the process of permitting more landfills to receive treated wood waste, the State Water Quality Resources Board and Integrated Waste Management Board developed the guidance memo for applying for the needed or modified WDR. They have also provided the Regional Water Resources Control Boards with standardized permitting forms to speed the process. For questions on making application for the needed WDR, contact agency staff as indicated in the memo. For more information and links on the legislation visit <http://www.WWPInstitute.org> and click on "Treated Wood in California."

We hope that this information will be helpful to you in expanding the opportunities for your facility. **When you apply for your WDR please let us know, or make sure that we are on the public notification mailing list, so that we might attend the public hearing and/or submit comments in support of your application.**



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April 13, 2005

To: Owners/Operators of Solid Waste Landfills with Composite-Lined Units

The State Water Resources Control Board (State Water Board) and the Integrated Waste Management Board are jointly authoring this letter to provide owners/operators of solid waste landfills with composite-lined units information and guidance on the implementation of Assembly Bill 1353 (Mathews, Ch. 597, Stats. 2004) related to the management and disposal of treated wood waste (TWW), as defined*. Successful implementation of this important recent legislation depends on the existence of adequately permitted landfills where the operators of such landfills are willing to respond to market demand for adequate disposal.

California's Legislature passed AB 1353 in August of 2004, with large, bipartisan support. Governor Schwarzenegger signed the bill on September 20, 2004, and it became effective on January 1, 2005.

The new law, which replaced all existing hazardous waste variances for TWW granted by the Department of Toxic Substances Control, requires TWW to be disposed of in either:

- 1) A class 1 hazardous waste landfill, or
- 2) A composite-lined portion of a solid waste landfill unit that meets all requirements applicable to disposal of municipal solid waste in California after October 9, 1993 (i.e., is Subtitle D compliant), and that is regulated by waste discharge requirements (WDRs) issued for discharges of designated waste or TWW, as defined.

The law does not affect the existing law (Health and Safety Code, section 25143.1.5) for disposal of utility poles, which allows landfills to accept TWW generated by the utility industries if so authorized in WDRs.

The State Water Board and the IWMB are not certain that the number of solid waste landfills currently meeting the above criteria is sufficient to accommodate the disposal demand. There are approximately seventy landfills statewide with composite-lined units, but only a small percentage of those meet the requirements of the new TWW law. In other words, few landfills have WDRs that allow discharge of designated waste or TWW

To help meet the demand for TWW disposal in your region, we are ensuring that you have the information you need should you desire to amend WDRs for your landfill to specifically allow discharge of TWW. We will strive to help you through the WDR amendment process, but please be aware that due to statutory and regulatory requirements it typically takes four to six months. The process includes the following steps:

California Environmental Protection Agency

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- The landfill owner/operator submits a request to the Regional Water Quality Control Board (Regional Water Board) to amend the WDRs.
- After the request is submitted, the Regional Water Board has 30 days to review for completeness. If the request is complete, the Regional Water Board begins writing amended WDRs.
- Once accepted, the Regional Water Board prepares (usually two to five weeks) and circulates tentative WDRs for public review and comment (30 days).
- Regional Water Board staff addresses comments about three weeks before the final, proposed WDRs are circulated for the public meeting.
- The Regional Water Board considers and votes on the WDRs at a public meeting.

When the WDRs are considered is very dependent on when Regional Water Board meetings are scheduled. Most of the Regional Water Boards meet eight times per year, or about every six to seven weeks.

In addition, most solid waste facilities permits prohibit wastes that are not specifically identified in the landfill's Report of Disposal Site Information. If TWW is not specifically identified in a Report of Disposal Site Information, the owner/operator must file an amendment to the Report of Disposal Site Information with the Local Enforcement Agency. This action does not constitute a permit revision and may be completed concurrently with the WDR amendment process.

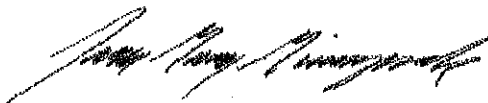
Please also be aware that AB 1353 requires that landfills accepting TWW: 1) manage the TWW so as to prevent scavenging; 2) ensure that any management of the TWW at the solid waste landfill prior to disposal, or in lieu of disposal, complies with applicable Health and Safety Code requirements; and 3) discontinue discharge of TWW to a composite-lined portion of a landfill unit, until corrective action results in cessation of the release, if monitoring of the landfill unit indicates a verified release.

Please address questions regarding this letter to the staff listed below:

State Water Resources Control Board: Joe Mello, jmello@waterboards.ca.gov, (916) 341-5622
Integrated Waste Management Board: Robert Holmes, rholmes@ciwmb.ca.gov, (916) 341-6376

In closing, we again urge you to take the steps needed to make your landfill part of the solution to the TWW disposal dilemma.

Respectfully,



James George Giannopoulos, P.E.
Groundwater Quality Branch Chief
Division of Water Quality
State Water Resources Control Board



Howard Levenson, Ph.D.
Deputy Director
Permitting & Enforcement Division
Integrated Waste Management Board

* For the purposes of AB 1353, treated wood means wood that has been treated with a chemical preservative to protect the wood from insects, microorganisms, fungi, and other environmental conditions that can lead to wood decay and the chemical preservative is registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act. The bill applies only to TWW that is a hazardous waste, solely due to the presence of the preservative, and to which both of the following requirements apply:

- The TWW is not subject to regulation as a hazardous waste under the federal Resource Conservation and Recovery Act.
- Health and Safety Code, section 25143.1.5 (related to wood waste removed from electric, gas, or telephone service) does not apply.

The most common types of wood preservatives are chromated copper arsenate (CCA); creosote; pentachlorophenol; and other copper containing chemicals (e.g., ammoniacal copper quaternary, copper azole). Other common surface applied coatings such as paint, varnish, and oil stain are not considered wood preservatives.

cc: Regional Water Board Land Disposal Program Managers
Local Enforcement Agencies

WOOD PRESERVING CHEMICALS IN CALIFORNIA LANDFILL LEACHATE:

Executive Summary

This study responds to concerns related to the disposal of treated wood waste in lined portions of Class 2 and Class 3 (non-hazardous) landfills in California. To evaluate possible environmental impacts of current methods of disposal, leachate monitoring data from a variety of California landfills has been reviewed and concentrations of chemicals used in treated wood have been compared to screening levels. Data have been gathered both from landfills that accept treated wood waste and from those which do not.

Lined Class 2 and 3 landfills are engineered and managed to minimize the impact of leachate from any type of waste on ground and surface water. They provide a secure, monitored environment for disposal of many types of waste.

While this study's focus is on the chemicals used to treat wood, treated wood waste is clearly not the only potential source of these chemicals in landfills. The metals, arsenic, chrome, copper, and zinc, exist naturally in soil and groundwater, and in many types of municipal and industrial waste. The polycyclic aromatic hydrocarbons, naphthalene and benzo(a)pyrene exist naturally in petroleum and coal, as combustion by-products and in normal municipal and industrial waste. Although the fraction of chemicals contributed by treated wood waste to landfill leachate is not known, conclusions about the levels of these chemicals found in leachate can still be made.

These results support a conclusion that most metals from treated wood chemicals in landfill leachate are below drinking water standards and, therefore, present no significant risk of contaminating drinking water. Arsenic and the organic chemicals which might result from treated wood products were either below the drinking water standard or below the Limit Threshold Concentration Value modeled for landfills with composite liners using the U.S. Environmental Protection Agency's Tier I Industrial Waste Management Evaluation Model. In summary, the study supports the safety of the current practice of disposal of treated wood waste in Class II or Class III composite-lined landfills. Current practice does not create a threat to human health or the environment.

Wood Preserving Chemicals in California Landfill Leachate March, 2004

Prepared by: Graham Environmental Consulting