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Arnold Schwarzenegger
Governor

June 2, 2004

Mr. Dale M. Timmons, R.G.
President
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SPECIAL WASTE DETERMINATION – FORMER FORT ORD, MONTEREY COUNTY

Dear Mr. Timmons:

Thank you for your email of March 25, 2004, commenting on DTSC's proposal to approve a request by the Monterey Regional Waste Management District (MRWMD) on behalf of the Fort Ord Reuse Authority (FORA) to classify and manage the waste generated from the demolition of 573 WWII-era wooden buildings at former Fort Ord as "special waste."

You pointed out in your email that "[m]any surfaces, particularly the siding, window sashes and even some of the interior surfaces of the buildings at Fort Ord were repeatedly painted with lead based paint (LBP)" and that "samples of wood siding ... shows that wood siding originating from recently deconstructed Fort Ord buildings fails the Toxicity Characteristic Leaching Procedure (TCLP) test by a considerable margin (39.8 ppm in the test extract)."

DTSC also found that TCLP extract concentrations of lead from wood siding were above 5 mg/L for siding (see the following table).

| <i>Wood siding from:</i> | <i>Average TCLP lead (mg/L)</i> |
|--------------------------|---------------------------------|
| 1A (Enlisted barracks) | 20.0 |
| 1B (Officer's barracks) | 18.0 |
| 2 (Clinic/mess hall) | 19.0 |
| 3 (Day room) | 18.0 |
| 5 (Motor pool) | 12.0 |

However, you further stated that "consequently, the material that is painted with lead based paint and that fails the TCLP is a RCRA Characteristic Hazardous Waste."

If the siding were generated as a separate waste stream, DTSC would agree with your assessment. However, DTSC understands that the siding will be generated as a part of

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a larger waste stream, the waste generated from the demolition of 573 WWII-era wooden buildings, less concrete, salvage, and hazardous materials such as fluorescent lamps and tile flooring. When taken in total, the estimated average concentration of TCLP-extracted lead in the demolition waste, less the above mentioned items, does not exceed the federal regulatory threshold of 5 mg/L (with 90% probability). One must keep in mind that because of the heterogeneity of typical waste streams, some subsamples or components of that waste stream may exceed hazardous waste thresholds if subsamples or components are small enough. To account for this heterogeneity, waste classification decisions are normally made for the "average" properties of an identified waste stream.

You further state that "[t]he proposed practices at Fort Ord that involve mixing the RCRA hazardous waste with the non-hazardous materials that constitute the remainder of the building constitutes dilution of the RCRA [hazardous] waste specifically for the purpose of achieving favorable leach rates to attaining special waste designation for the purpose of reducing waste management costs. Dilution of RCRA hazardous waste for this purpose is specifically disallowed under 40 CFR Part 261."

DTSC disagrees with your assessment. The siding and the rest of the wooden buildings, less concrete, some salvage, and other hazardous materials (e.g., asbestos-containing tile), are part of the waste stream. No material has been mixed with this waste stream for the purpose of "dilution." In fact, former Fort Ord has proposed to do just the opposite by *removing* concrete from the waste stream, which will, in effect, *increase* the average concentration of lead in the demolition waste.

You further point out that lead is a highly toxic metal and that children are most at risk.

DTSC certainly agrees. As they stand right now, the wooden buildings at former Fort Ord are a potential threat because of lead-based paint and soil contamination due to weathering of lead-based paint. Whether these buildings are demolished and placed in a landfill in total or whether parts of these buildings are recycled and reused prior to demolition and disposal, the removal of these buildings and any contaminated soil will mitigate current potential health risks to the public.

You further point out that the Army Construction Engineering Research Laboratory has developed "methods [that] have been proven effective at reclamation and recycling of building materials from military structures including the lead based paint" and that "recovery and reclamation can be accomplished economically."

DTSC also encourages recycling and reuse of waste materials as much as possible. The approval given by DTSC for FORA to classify and manage the demolition waste from 573 WWII-era wooden buildings as a "special waste" does not preclude recycling and reuse of wood siding or other materials. However, if FORA desires to recycle and reuse components of the demolition waste as described in the application, such as the wood siding, the waste stream will be modified from that described in the current

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application and FORA will have to reapply for a special waste determination for the redefined waste stream. Whether or not the former Fort Ord wastes are recycled or reused is a decision of the waste generator.

Finally, you state that "approval of dilution of the RCRA hazardous waste components of the Fort Ord buildings raises legal questions and is a step backward in terms of waste management practices. Considering that viable alternatives are available to simply dumping all of the waste into landfills, approval of this special waste classification should be seriously reconsidered. At a minimum, the siding should be reclaimed and recovered because this is where the vast majority of the lead resides."

As previously stated, DTSC contends that it believes that the waste stream is not being diluted, since no materials are being added to the waste stream. DTSC would also like to iterate that it encourages recycling and reuse of waste materials as much as possible. However, in this case, DTSC cannot compel FORA to recycle and reuse components of its wooden buildings.

Again, DTSC would like to thank you for your comments. I hope our responses clarify any misunderstandings that you may have had. If you have any additional questions or comments, please contact Dr. James Frampton of my staff at (916) 327-2522 or email at jframpto@dtsc.ca.gov.

Sincerely,



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Regulatory Program Development Branch

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From: "Dale Timmons" [REDACTED]
To: <jframpto@dtsc.ca.gov>
Date: 25 Mar 2004 (Thu) 11:25:13 AM
Subject: Comments on Special Waste Determination, Former Fort Ord, Monterey County, CA

This comment is in response to DTSC's proposal to approve an application to manage 573 World War II era wooden buildings located at former Fort Ord pursuant to the web page:
http://www.dtsc.ca.gov/OMF/Fort_Ord/Fort-Ord_PN_Waste-Determination.pdf

Many of the surfaces, particularly the siding, window sashes and even some of the interior surfaces of the buildings at Fort Ord were repeatedly painted with lead based paint (LBP). Samples of the wood siding analyzed by Analytical Resources in Tukwila, Washington shows that wood siding originating from recently deconstructed Fort Ord buildings fails the Toxic Characteristic Leach Procedure (TCLP) test by a considerable margin (39.8 ppm in the test extract). Consequently, the material that is painted with lead based paint and that fails the TCLP is a RCRA Characteristic Hazardous Waste.

Pursuant to Section 66261.122, 22CCR a waste cannot be designated as a special waste if it is a RCRA hazardous waste.

While the EPA temporarily suspended this designation in 1998, this temporary suspension does not apply to military or commercial structures.

The proposed practices at Fort Ord that involve mixing the RCRA hazardous waste with the non-hazardous materials that constitute the remainder of the building constitutes dilution of the RCRA waste specifically for the purpose of achieving favorable leach rates to attaining special waste designation for the purpose of reducing waste management costs. Dilution of RCRA hazardous waste for this purpose is specifically disallowed under 40 CFR Part 261. Hence, the special waste designation should not be approved for the portions of the building that are painted with LBP, particularly the siding which is where most of the lead is.

The estimated quantities of lead contained in the siding from just one barracks at Fort Ord is approximately 200 pounds. This lead is leachable and regardless of how it is diluted, all of the lead will be disposed of in an unsuitable manner. Disposal of all of the buildings at Fort Ord represents improper disposal of approximately 300,000 pounds of leachable lead.

According to the U.S. Environmental Protection Agency:

"Lead is a highly toxic metal that was used for many years in products found in a wide variety of consumer products. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Children 6 years old and under are most at risk, because their bodies are growing quickly. Research suggests that the primary sources of lead exposure for most children are:

- deteriorating lead-based paint,
- lead contaminated dust, and
- lead contaminated residential soil."

The Army Construction Research Engineering Laboratory in Champagne, IL has conducted extensive research and development into methods have been proven effective at reclamation and recycling of building materials from military structures including the lead based paint. The data generated from these efforts strongly suggest that recovery and reclamation can be accomplished economically. Employment of these reclamation activities offers significant advantages when compared to land disposal including:

1. Highly toxic and leachable lead is kept out of municipal solid waste landfills
2. If implemented on a national level, millions of board feet of valuable old growth timber would be reclaimed rather than discarded
3. The volume of the waste will be reduced by over 99%
4. The toxic lead will be recycled into new lead products
5. Potential for contamination of ground water supplies with leachable lead is eliminated.

Approval of dilution of the RCRA hazardous waste components of the Fort Ord buildings raises legal questions and is a step backward in terms of waste management practices. Considering that viable alternatives are available to simply dumping all of this waste into landfills, approval of this special waste classification should be seriously reconsidered. At a minimum, the siding should be reclaimed and recovered because this is where the vast majority of the lead resides.

Thank you for the opportunity of commenting on this proposed action.

Regards,
ARI TECHNOLOGIES, INC.

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