UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Water Management Division

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January 3, 1995

Mr. John D. Kilgore
Supervising Civil Engineer
Industrial Waste Section
County Sanitation Districts of
    Los Angeles County
P.O. Box 4998
Whittier, California 90607-4998

Dear Mr. Kilgore:

This is in response to your September 29, 1994, letter regarding the applicability of the Federal pretretreatment categorical standards to Arias Research Associates, Inc. in Whittier, California. Based upon your letter and our discussions with Mr. David L. Harbaugh at Arias, we conclude that Arias' operations are not subject to the pretreatment categorical standards.

The Environmental Protection Agency (EPA) addressed the applicability of categorical standards to stand-alone research and development facilities in a June 26, 1987, letter to AT&T Bell Laboratories (copy enclosed). In that case, the Agency found that the then currently promulgated categorical standards did not apply to such facilities. The AT&T letter explains that stand-alone research and development facilities are those in which the products made at the facilities are not sold commercially. The categorical standards are located at 40 CFR Subpart N, Parts 405 to 471.

The applicability of categorical standards to stand-alone research and development facilities is an important issue in Region 9 because there are several large stand-alone research and development facilities in our Region. While we agree that the lack of commercial sale of products is one indicator of a facility that should not be covered under the categorical standards, we believe that the individual circumstances for many stand-alone research and development facilities present a complex situation that requires additional analysis.

Stand-alone research and development facilities frequently perform manufacturing processes that match the regulatory applicability description in the pretreatment categorical standards. In some cases, however, stand alone research and development

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facilities operate the regulated processes in ways that are very different from the operations the Agency evaluated as the basis for the categorical standards. At some stand-alone research and development facilities, the regulated process is the subject of the research and development activities. In these cases, the production method, materials or other factors are materially different from the processes the Agency evaluated as the basis for the categorical standards. Under these circumstances, the categorical standards should not apply because the wastewater quality or quantity may differ from the wastewater that EPA analyzed as the basis for the categorical standards.

Arias is an example of a stand-alone research and development facility that is not subject to the categorical standards. The facility performs operations that would otherwise be covered under the battery manufacturing pretreatment categorical standards at 40 CFR Part 461. The facility's research concerns the development of batteries for electric vehicles. Arias is experimenting with battery design, materials and construction with the goal of assembling nine full-size prototype batteries for use in demonstration vehicles. Because the battery design, materials and construction are the subject of the research, many of the factors affecting wastewater characteristics are different from those EPA used as the basis for the categorical standard and, consequently, we find that Arias' operations at this facility are not covered under the categorical standards. In addition, the batteries Arias assembles at this facility will not be sold commercially.

There are circumstances where stand-alone research and development facilities are covered under the categorical standards. We have found that in some cases, stand-alone research and development facilities perform categorical process operations in support of research and development projects. In these cases, the categorical operations are materially the same as the processes EPA intended to regulate. The workpieces, however, are experimental parts associated with a research project. In our view, such categorical operations are subject to the categorical standards. For example, a stand-alone research and development facility may electroplate parts for an experimental laser. The laser parts are highly experimental but the plating operation is materially the same process EPA intended to regulate under the categorical standards. Under these circumstances, the electroplating operation would be covered by the pretreatment categorical standards even though the experimental part is not offered for commercial sale.

Arias' operations are not subject to the battery manufacturing pretreatment standards when it is performing research and development. The following operations at Arias, however, would be covered under the categorical pretreatment standards:

- Low-volume production that is not related to research and development activities by Arias; and

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- Quality control and quality assurance operations that support any production facilities.

Under the first circumstance, Arias would be engaged in production operations, albeit low-volume production, that is subject to the categorical standards. Under the second circumstance, Arias would be supporting production operations. Such activities are not considered research and development and, consequently, are regulated under the categorical standards.

Thank you for your inquiry. If you have any questions regarding this matter, please call me at (415) 744-1907.

Very truly yours,

L. Keith Silva
Pretreatment Coordinator

Enclosure

cc: Mr. David L. Harbaugh
    Arias Research Associates, Inc.

    Mr. Mark Giljum
    County Sanitation Districts of Los Angeles County

    Mr. James Kassel
    California Water Resources Control Board

    Ms. Elaine Brenner
    U.S. Environmental Protection Agency

    Mr. Bryan Holtrop
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