



Community Protection and Hazardous Waste Reduction Initiative Pilot Project Proposal for Petroleum Refinery Waste

INTRODUCTION:

The Community Protection and Hazardous Waste Reduction (Initiative) is a two-year effort that was established and funded through a Budget Change Proposal that was approved for the 2015/16 and 2016/17 fiscal years. The Initiative is designed to effectively leverage DTSC's goal of a 50 percent reduction of hazardous waste generated in California and disposed into hazardous waste landfills by 2025. Under the Initiative, DTSC is to select up to three pilot-scale projects to reduce hazardous wastes that are generated in significant quantities, can pose substantial risks or hazards to human health or the environment, and are treated or disposed in communities that are disproportionately burdened by multiple sources of pollution. To assist in the implementation of the Initiative, an Advisory Committee has been formed, comprised of individuals with relevant but diverse expertise in issues related to hazardous waste, hazardous waste management, and the impacts of hazardous wastes on Californians.

BACKGROUND:

The California Department of Toxic Substances Control (DTSC) regulates the generation, handling, transportation, storage, treatment and disposal of hazardous wastes in the State. The petroleum refining industry is one of the largest generators of hazardous waste in California. These wastes are shipped under hazardous waste manifest to offsite treatment, storage or disposal facilities. Many different types of hazardous wastes are generated by petroleum refineries, including organics, spent catalysts, baghouse waste, aqueous waste with organics, and aqueous waste with metals. In addition, many refineries in California are located in or near communities already burdened by multiple sources of pollution.

DTSC, through its former Pollution Prevention Program, selected the refinery industry for three separate source reduction assessment reports between 1990 and 2001. This pilot project would continue with previous efforts by DTSC to evaluate source reduction measures for petroleum wastes. When appropriate, DTSC will coordinate with other member agencies of the CalEPA Interagency Refinery Task Force and other stakeholders and interested parties for obtaining information and leveraging resources.

PILOT PROJECT GOALS AND OBJECTIVES:

The broad goals and objectives of this pilot project are to achieve the following:

- Gather all available information related to the evaluation of waste reduction opportunities and barriers, including:
 - Technologies and practices to reduce generation
 - Regulatory and legal tools
 - Economic tools and factors
 - Environmental factors
- Identify and evaluate of one or more substantive waste reduction proposals.
- Develop the following work products:



- A description of preferred hazardous waste management practices, programs, incentives, requirements, prohibitions, or other measures necessary to reduce the generation and disposal of petroleum refinery waste;
- A baseline of state-wide petroleum refinery waste disposal and generation data, from which reductions can be measured;
- A list of those waste reduction measures that have been determined to be technically feasible, an assessment of the potential for the amount of waste reduction that might be achieved if implemented, costs, economic impacts, and an evaluation of factors that could influence the achievement of those reductions for petroleum refinery waste;
- Proposal of long term numeric goals for the reduction of petroleum refinery waste, including interim targets and milestones, costs, economic impacts, and the recommendations needed to achieve those milestones and the long-term numeric goals; and
- Recommendations of the most cost-effective strategies to carry out the identified reductions.

PILOT PROJECT SUMMARY:

To achieve the goals and objectives stated above, a pilot project focused on petroleum refinery waste would entail; (1) data gathering; (2) identification and exploring implementation of waste reduction opportunities or technologies; and (3) analyzing the available data and making recommendations.

Data Gathering:

The data gathering portion of this project would involve collecting directly, and through solicitation from the affected California refineries, the petroleum refining industry at large, other governmental agencies (local, state, federal as well as other nations), academia, affected communities and community advocates, and other interested stakeholders, all available data related to hazardous waste generation and management at petroleum refineries.

Identification and Evaluation of Substantive Proposals:

This portion of the project would involve the solicitation and evaluation of substantive waste reduction proposals. The types of proposals to be considered would include not only California petroleum industry identified or sponsored proposals, but also proposals that could require DTSC to seek participation or partnerships, or the securing of additional financial resources. Proposals would need to be identified and selected within a time frame during the Initiative that allows for the proposal to be initiated and its progress evaluated, although they would not need to be fully completed within the planned time frame of the Initiative.

Analysis and Recommendations:

At the conclusion of the Initiative, DTSC staff will draft a report summarizing the information gathered, progress made, and findings and recommendations as they relate to waste reduction measures for petroleum refinery waste. The final report will include a



baseline analysis of the state-wide volume of the waste generated by the petroleum refining industry. The report may include recommendations to propose new regulations, develop or monetize incentive programs, or other methods of reducing the generation of hazardous wastes at petroleum refineries.

By June 30, 2017, the final report and recommendations will be sent to the Secretary of the California Environmental Protection Agency and to the relevant legislative committees with jurisdiction over the regulation of hazardous waste.

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