US ERA ARCHIVE DOCUMENT



MERCURY RECOVERY SERVICES, INC.

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April 19, 1996

MRS

Mr. Paul Borst (5307) USEPA Office of Solid Waste 401 M Street SW Washington, DC 20460

Dear Mr. Borst:

With reference to our telephone conversation of this date, this will confirm that:

- 1. Mercury Recovery Services (MRS) has a cost-effective, commercially-proven mobile process for the removal and recovery of mercury from mercury-contaminated soil and industrial wastes.
- The MRS Process has been successfully used to remove and recover mercury from more than 6,000 tons of mercury-contaminated soil excavated from over 5,000 metering sites along the natural gas pipeline system in New Mexico. During this project, (a) the total mercury content of the incoming soil was 500-2,000 ppm, (b) the total mercury content of the soil after processing was 1 ppm, or less, (c) all TCLP readings on the processed material were below detection limits, (d) approximately 4,200 pounds of 99% pure mercury were recovered and sold to mercury refiners, (e) all processed soil was utilized as fill with the approval of the New Mexico regulators, and (f) MRS' nominal 12-ton/day mobile unit, which is mounted upon two over-the-road trailers, operated 24-hours/day, seven days/week, for 18 months with downtime of less than 0.5% and no lost-time accidents.
- 3. Due to lack of demand from natural gas pipeline companies, the above 12-ton/day mobile unit has been moved to a metals smelter where it will treat intermediate process streams beginning in May, 1996.
- 4. MRS is currently building a smaller 4-ton/day mobile processing unit (mounted on a single over-the-road trailer) which is scheduled to begin commercial operation in the United Kingdom in June, 1996.
- 5. MRS has recently entered into an agreement whereby a modular fixed-site processing unit will be installed at a TSD facility in the Midwest sometime during the Fall of 1996. This unit is intended to take in volumes of soil and waste that are too small to justify

- 6. MRS' modular equipment design provides a cost-effective method of handling jobs of any size ... i.e., from the 4-ton/day operation referred to above, to a 76-ton/day operation recently quoted by MRS for clean-up of a large mercury-contaminated site. Facilities having capacities greater than 76 tons/day are economically and operationally viable.
- 7. In addition to the above commercial operations, the efficacy of the MRS Process to treat chlor-alkali, fluorescent bulb, battery, industrial carbons, mercury catalysts, and low-level mixed radioactive wastes has been proven in numerous pilot-scale treatability studies.

Based upon the above experience and proven commercial capability of the MRS Process, MRS is willing to prudently expand its commercial mobile and fixed-site mercury removal/recovery capacity in response to market demand and, based upon past experience, is anxious to process natural gas pipeline metering site soils.

Additional details regarding the MRS Mercury Removal/Recovery Process are contained in the enclosed brochure, newsletter, technical paper, and month-by-month summary of results obtained when treating natural gas metering site pipeline soils. As you will note, the MRS Process:

- consistently reduces the mercury content of the treated material to less than one part per million (<1 ppm) regardless of the level of mercury in the contaminated waste,
- produces a 99% pure metallic mercury suitable for direct refining to high purity metal,
- recovers mercury from compounds such as mercury oxide, mercury chloride, mercury sulfide, and mercury sulfate,
- prevents the sulfur and/or chlorine from entering the process exhaust,
- operates without generating any secondary gaseous, liquid, or solid waste,
- produces a gaseous effluent that meets all clean air and OSHA standards,
- · efficiently processes materials having high moisture contents, and
- effectively utilizes "double-containment" for added worker and environmental safety

The MRS Mercury Removal/Recovery Process (a) has been designated as Best Demonstrated Available Technology (BDAT) for the treatment of mercury-contaminated materials by the U.S. Environmental Protection Agency, (b) has been classified as "Recycling" by the EPA and

regulatory agencies in several states, thereby simplifying permitting, and (c) based upon its low emission rate and absence of secondary wastes, MRS' commercial unit was exempt from air and solid waste permitting requirements by the State of New Mexico.

The MRS Mercury Removal/Recovery Process was accorded an R&D 100 Award and named by R&D magazine as one of the most technologically significant new products in 1994. The company and the technology were also featured in a special supplement to Forbes Magazine listing the 25 top new environmental companies to watch.

I trust that the information presented above and in the attachments is responsive to your request. If you have any questions or require additional information, please call or fax.

Sincerely,

William F. Sutton

President

WFS/bjd Enclosures