



MONTGOMERY WATSON



September 13, 1999

(Via: FedEx)

New Mexico Environmental Department (NMED)
Hazardous and Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Sante Fe, New Mexico 87502

Attn: Mr. Steve Pullen

Re: Groundwater Monitoring Draft Waiver Request
Triassic Park Waste Disposal Facility

Dear Mr. Pullen:

On behalf of Gandy Marley Incorporated (GMI), Montgomery Watson (MW) is pleased to submit two (2) copies of the above referenced Draft Waiver Request. Qualified individuals have prepared this groundwater monitoring wavier and the proper certification will be included in the final waiver.

If you have any questions concerning this report, please contact us.

Sincerely,

Montgomery Watson

David Ellert for

Patrick G. Corser, P.E.
Principal

Enclosure

cc: Dale Gandy (1)
Ken Schultz (1)
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Montgomery Watson (2)

Prepared for:

TRIASSIC PARK WASTE DISPOSAL FACILITY

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GROUNDWATER MONITORING WAIVER REQUEST

TRIASSIC PARK WASTE DISPOSAL FACILITY

Draft

September 1999

Prepared by:

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1.0 INTRODUCTION

The Gandy-Marley Corporation is requesting that the Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department (NMED) grant a Groundwater Monitoring Waiver for its proposed Triassic Park Waste Disposal Facility. This request is based on a demonstration that the site-specific geologic and hydrologic conditions at the Facility prevent migration of liquids from the regulated unit to the uppermost aquifer.

Triassic sediments in eastern Chaves County, New Mexico were identified as host rocks for this proposed Facility because they (1) contain thick sequences of low permeability clays; (2) occur in remote, unpopulated areas; and (3) locally produce no groundwater. These sediments have been characterized by drilling programs in 1993, 1994, 1995 and 1999. Fifty (50) drill holes have been completed on the proposed site (Figure 1-1, Drill Hole Locations), with lithologic and geophysical logs recorded for each of these holes. Data obtained from these drilling programs have been incorporated into this demonstration.

This demonstration or justification will evaluate the potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer, through:

- A geologic and hydrologic characterization of host sediments,
- A water balance of precipitation, evapotranspiration, runoff, and infiltration; and
- Unsaturated zone contaminant transport modeling

The following sections provide a summary of the regulatory authority to allow modification of the groundwater monitoring requirements and the technical justifications required to support the groundwater monitoring waiver.