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Public Service Company of New Mexico
Person Generating Station
Groundwater Treatment System

Treatment Effectiveness Report
First Quarter 2002

May 15, 2002

Report Prepared Pursuant to Requirements Contained in:

The Person Generating Station Corrective Action Directive (NMT 360010342)
and
The New Mexico Environment Department Discharge Plan, DP-1006

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Executive Summary

Contour maps of the three primary contaminants of concern, PCE, DCE, and TCA, are shown in Figures 8, 9, and 10, respectively. These contour maps indicate the areal extent of the groundwater plume and the associated contaminant concentrations within the plume. The contour maps are prepared twice per year using data from the spring and fall sampling events.

Figure 8 indicates that the low PCE concentration zone (5 ppb to 20 ppb) and the moderate PCE concentration zone (20 ppb to 100 ppb) have remained approximately the same in size since April 2001. Figure 9 indicates that the low and moderate DCE concentration zones have changed shape slightly since last April. Figure 10 indicates that the low concentration TCA plume has decreased slightly in size.

In July 2001, construction activities began on the installation of a pilot-scale treatment system that uses two in-series granular activated carbon canisters as an alternative to the existing air stripper/acid addition/granular activated carbon system.

Over the past several quarters, the existing system has experienced frequent operational problems and has required extensive maintenance in order to remain in service. The pilot-scale system configuration is a much simpler system. Consequently, if it is able to meet the required treatment effectiveness, it should significantly reduce operational problems and maintenance requirements of the GTS.

The pilot-scale system has operated consistently throughout the first quarter. Analytical results indicate that the pilot-scale system is achieving the necessary treatment effectiveness.

I. Introduction

This report is prepared pursuant to requirements contained in the Person Generating Station Corrective Action Directive (NMT360010342) issued by the New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau, and requirements contained in Discharge Plan DP-1006 issued by the NMED Groundwater Protection and Remediation Bureau.

This report contains information on sampling results and operational activities at the Person Generating Station Groundwater Treatment System (GTS). The GTS is designed to extract volatile organic compound (VOC) contaminated groundwater, treat through an air stripper and granular activated carbon (GAC) filter, and discharge the treated water to an irrigation pond at the UNM Championship Golf Course.

Figure 1 is a site map of the Person Generating Station vicinity and shows monitor well and extraction well locations.