GWOU ADMINISTRATIVE RECORD
SECTION TITLE:
GW-300-303-1.22

REV 60

DOCUMENT CONTROL SYSTEM - CORRESPONDENCE FILE

WELDON SPRING SITE REMEDIAL ACTION PROJECT
S.M. STOLLER CORP. CONTRACT NO. 23929 **(636) 441-8086**
7295 Highway 94 South
St. Charles , MO 63304

Document Number: **94402**

▶Document Type: **LR-SMSW-DOEW**

Originators DCN:

▶SUBJECT **PRIVATE WELL SAMPLING DATA FROM THE DEPARTMENT OF HEALTH AND SENIOR SERVICES**

▶AUTHOR **CATO, REBECCA** ▶TO **FILE** ▶DATE **01/22/04**

▶WBS/SUBJECT CODE **85080/**

REFERENCED DOCUMENT(S)

ACTION ITEM TRACKING

INITIATE ACTION ITEM

INDIVIDUAL ASSIGNED TO ACTION DEPARTMENT

ACTION REQUIRED

DUE DATE ACTION ITEM LOG NUMBER

CLOSE ACTION ITEM

ACTION ITEM LOG NUMBER INITITATING DOCUMENT DIN

COMPLETION DATE APPROVAL

COMMENTS

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Stoller
Weldon Spring Site

established 1959

Memorandum

DATE: January 21, 2004

TO: File

FROM: Rebecca Cato

STATE OF MISSOURI
REBECCA A. CATO
RG0415
REGISTERED GEOLOGIST

1/21/04

SUBJECT: Private Well Sampling Data from the Department of Health and Senior Services

An evaluation of the private wells in the vicinity of the Weldon Spring Chemical Plant was performed in August 2003 in response to a comment from the Missouri Department of Natural Resources - Federal Facilities Group on the DRAFT GWOU Proposed Plan (March 2003). This evaluation consisted of determining if drinking water wells were still in use on the Missouri Department of Conservation property north of the chemical plant (Busch Conservation Area) and obtaining more recent information from the private wells sampled in the Weldon Spring area by the Missouri Department of Health and Senior Services (DHSS).

The DHSS was contacted to obtain data collected since 1998, since the WSSRAP has a summary of previously collected data. I contacted Ms. Rose Basco, Environmental Specialist, who oversees the Weldon Spring sampling program. Ms. Basco provided an electronic copy of the data summary, which is attached.

The summary of wells sampled by the DHSS was considered an extensive summary of private wells in the area since they initiated a sampling program since 1982 to fully investigate the possible impacts to groundwater in the area around the chemical plant and former ordnance works area. The division expanded the number of wells over time and presently it encompasses wells within a 6-mile radius of the chemical plant and former ordnance works area. When a well was no longer used, it was removed from the sampling program. In recent years, wells have been removed from the sampling program when the property was developed and the wells were abandoned or destroyed. This has occurred in the O'Fallon area located northeast of the chemical plant. To supplement this information, a summary of wells in the area that

are registered with the DGLS starting in 1987 was included on the figure.

Review of the well information provided by DHSS indicated that no active private wells are located within 1 mile of the chemical plant (see attached figure). One well, which is used for irrigation at the Missouri Research Park is located within 2 miles, but is cross gradient of the site and therefore does not have the potential for impact. The privately owned domestic water wells that are closest to the site are located 2.1 miles to the north-northeast (Well numbers 35, 36, 48, 67, and 69). These wells are estimate to be 300 ft to 350 ft deep. Although these wells produce water that includes groundwater from the shallow aquifer (Burlington-Keokuk Limestone and Fern Glen Group), the potential for impact from contaminated groundwater originating from the site is low. Subsurface tracer studies and potentiometric maps constructed from monitoring wells at the chemical plant, ordnance works, and Busch Conservation area indicate that the preferential flow direction from groundwater from the site is to the northwest toward Burgermeister Spring and the 6300 Drainage.

Results from DHSS sampling indicate background levels of those parameters analyzed, including radiological parameters (see attached data sheets). Elevated levels of radium-226 have been observed in deeper wells, however, the DHSS has considered this to be naturally occurring and not a result of operations at the chemical plant. The only impacted wells identified were at Twin Island Lakes (now Dardenne Lakes) located north of the chemical plant and ordnance works areas, where elevated nitroaromatic compounds were detected. This impact was not due to the chemical plant site and has since been investigated and addressed by the Army as part of the ordnance works project.

It should be noted that a portion of the attached information contains personal information about the private well owners and this information should be considered confidential. This information will be included in the master copy of the Administrative Record for the Groundwater Operable Unit; however, the information will not be included in the public reading file. A notation will be placed in the record and if asked for this information, inquiries should be directed to the Department of Health and Senior Services.

Attachment: Data Tables and Map

Distribution: Administrative Record for the GWOU - 2 copies

NOTE

The remainder of this letter is confidential and not available to the public. The remainder of this letter is contained in the **confidential portion** of the **controlled** copy of the Administrative Record.