KINDER MORGAN
ENERGY PARTNERS, L.P.

SFPP, L.P.
Operating Partnership

File No: 29.39
April 1, 2010

Mr. Paul Cho, P.G.
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Ste. 200
Los Angeles, CA 90013

Subject: Transmittal of Selenium Management Summary Report for the SFPP, L.P. Norwalk Station, 15306 Norwalk Boulevard, Norwalk, California

Dear Mr. Cho:

Please find the attached Selenium Management Summary Report for the SFPP, L.P. Norwalk Station, located at 15306 Norwalk Boulevard, Norwalk, California. The attached report was prepared by Amec on behalf of SFPP, L.P., operating partnership of Kinder Morgan Energy Partners, L.P. (SFPP) for submittal to the Los Angeles Regional Water Quality Control Board (RWQCB) in accordance with the letter from your agency dated February 26, 2010.

If you have any questions regarding this report or wish to discuss other issues concerning the site, please contact me at (714) 560-4802.

Sincerely,

Stephen T. Defibaugh, PG, CHG
Project Manager - Remediation

Attachment

cc: Congresswoman Grace Napolitano, United State Representative
Ms. Shiow-Whei Chou, Amec
Mr. Edward Garcia, City Manager, City of Norwalk
Mr. Steve Harari, Department of Toxic Substance Control
Mr. Redwan Hassan, Parsons
Ms. Conesa Lee, Air Force Real Property, Northrop Grumman
Ms. Mary Jane McIntosh, RAB Chairperson

T:\Work\Environmental\Remediation\Norwalk\Correspondence\Agency Correspondence\Letter from Kinder Morgan to RWQCB re Selenium Management at Norwalk 04-01-10.doc

Memo

To	**Stephen Defibaugh - KMEP**	Project no	**1603.044.0**
From	**Shiow-Whei Chou and Alex Padilla**	cc	
Tel	**(949) 642-0245**		
Fax	**(949) 642-4474**		
Date	**April 1, 2010**		

Subject **Review of Potential Selenium Management Options**
Defense Fuel Support Point Norwalk

Introduction

AMEC Geomatrix, Inc. (AMEC), has prepared this memorandum for SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P. (KMEP), to summarize the selenium management options reviewed for SFPP's groundwater remediation system located at the Defense Fuel Support Point (DFSP) Norwalk located at 15306 Norwalk Boulevard in Norwalk, California (the site). The following sections present relevant project background, a summary of selenium management options reviewed, and recommendations for options that may be evaluated further for potential long-term implementation.

Background

SFPP currently operates remediation systems consisting of soil vapor extraction (SVE), total fluids extraction (TFE), groundwater extraction (GWE), and treatment of extracted soil vapor and groundwater to address two specific areas at and near the site: the south-central area and the southeastern area. SFPP also previously operated a GWE system for remediation of the western off-site area (or West Side Barrier area). Operation of the SVE and treatment system is conducted in accordance with Permit to Operate No. F13759 issued by the South Coast Air Quality Management District (SCAQMD). Operation of the TFE and GWE systems is conducted to:

1. contain and reduce the extent of residual light non-aqueous phase liquid (LNAPL or free product);
2. provide hydraulic capture of dissolved chemicals of concern (COCs); and
3. lower the LNAPL surface (where present) and groundwater table, thus exposing more soil for SVE.

Free product and groundwater extracted by the TFE and GWE wells are conveyed to the groundwater treatment system that currently includes an oil/water separator and liquid-phase granular activated carbon (GAC). Free product, if any, from the oil/water separator is collected in a storage tank and recycled at an off-site location. Water from the oil/water separator is treated using GAC to remove volatile organic compounds (VOCs) prior to discharge to Coyote Creek under a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0063509, CI No. 7497).

AMEC Geomatrix, Inc.
510 Superior Avenue, Suite 200
Newport Beach, CA
USA 92663-3627
Tel (949) 642-0245
Fax (949) 642-4474
www.amecgeomatrixinc.com

During 2009, the concentration of selenium in the treated water (effluent) exceeded the effluent limitations for selenium on two occasions. In January 2009, selenium was detected above its maximum daily effluent limitation (MDEL) of 8.2 micrograms per liter (µg/L) in the treatment system effluent. In November 2009, selenium was detected above its average monthly effluent limitation (AMEL) of 4.1 µg/L. On both occasions, the TFE and GWE systems were temporarily shut down to further evaluate selenium concentrations in groundwater before resuming pumping in selected wells based on results of the selenium evaluation. Selenium evaluation included sampling groundwater at the individual extraction wells, analyzing the samples for selenium, and selecting wells that could be operated to achieve continued groundwater extraction with a an effluent selenium concentration below the AMEL. The selenium results for the groundwater samples collected in 2009 are summarized in Table 1.

AMEC has reviewed information to identify potential options for management of selenium at the site. These include options involving continued discharge of an effluent stream that meets the NPDES discharge limits and also include options that involve discharge to alternative discharge points.

To continue discharging to Coyote Creek under the existing NPDES permit, AMEC has identified three potential options as follows:

- Option 1 – adjust the pumping configuration by operating wells to maintain effluent selenium concentrations below the AMEL,
- Option 2 – blend the extracted groundwater with low-selenium-content water from another source to achieve an effluent selenium concentration below the AMEL prior to discharge, or
- Option 3 – install and operate additional treatment equipment to decrease the effluent selenium concentration to below the AMEL.

Potential options identified for alternative discharge points include:

- Option 4 – discharge to a Publicly Owned Treatment Works (POTW), or
- Option 5 – subsurface re-injection of treated groundwater.

The following sections summarize the preliminary evaluation of each option based on general implementability, effectiveness, and cost considerations.

NPDES Discharge Options

The following options are based on reducing the selenium concentration in effluent to below the AMEL prior to discharge to Coyote Creek. NPDES monitoring and reporting would be required for these options.

Option 1 – Adjust Pumping Configuration

This option involves selectively pumping wells to produce effluents with selenium concentrations less than the AMEL of 4.1 ug/L. Based on December 2009 selenium results, nine of the twenty-two wells in the South-Central and Southeastern remediation areas contained selenium concentrations below 4.1 ug/L. These nine wells include GMW-24, MW-SF-12, MW-SF-13, MW-SF-16, MW-O-2, GMW-O-11, GMW-O-23, GMW-36, and GMW-O-15. Assuming the selenium concentrations remain constant in these wells and pumping rates are the same for each well, operation of these nine wells would produce an average selenium concentration of approximately 2.23 µg/L, which is below the AMEL. In addition, wells with selenium concentrations slightly above 4.1 ug/L may also be operated as long as the average selenium concentration remains below the AMEL. Based on the December 2009 results, up to four additional wells (GMW-22, MW-SF-11, MW-O-1, and GMW-O-21) could be operated to produce an average selenium concentration of approximately 3.11 µg/L, which is below the AMEL. Wells that would cause the effluent selenium concentration to exceed the AMEL would remain off.

Implementability

In order to select wells for operation, information regarding the distribution of selenium in groundwater is necessary. Groundwater samples would be collected from individual extraction wells and analyzed for selenium. The pumping configuration would be adjusted to operate the greatest number of wells while maintaining compliance with the AMEL. Wells containing selenium concentrations that would cause the effluent to exceed the AMEL would be turned off.

As shown in Table 1, the distribution and concentrations of selenium in groundwater change over time. Therefore, sampling from the extraction wells would need to be performed at a frequency that would allow timely adjustments of the pumping configuration to maintain extraction from wells with low selenium and avoid pumping from wells with high selenium. This option is readily implementable and is currently being implemented by KMEP.

Effectiveness

The results for the effluent sampling performed in February and March 2010 indicate that adjusting the pumping configuration has been effective in achieving compliance with the AMEL. However, pumping from fewer wells may decrease the overall effectiveness of remediation. KMEP has recently performed several well maintenance activities to improve the performance and increase the flow rates of extraction wells. Based on March 2010 operations data, pumping from nine wells produced a combined flow rate of approximately 16 to 18 gallons per minute (gpm) and an effluent selenium concentration of 2.97 ug/L. A capture zone analysis to evaluate the effectiveness of this pumping configuration is in progress. If the results of the capture analysis indicate this pumping configuration will provide adequate capture of dissolved COCs, this option may be appropriate as an interim solution or potentially as a longer-term solution.

Cost Considerations

The additional costs for this option would include costs for additional sampling and analysis for selenium and costs for increased operations and maintenance (O&M) for adjusting and

monitoring new pumping configurations due to changes in selenium concentrations and distribution in groundwater.

Option 2 – Blending Groundwater with Other Water

Blending a sufficient volume of water containing little or no selenium with groundwater extracted from the South-Central and Southeastern areas could produce a blended mixture that meets the NPDES discharge limitations. In doing so, the discharge rate (including groundwater plus water added for blending) would need to be below the permitted 150,000 gallons per day (gpd). Option 2 consists of blending extracted groundwater with groundwater extracted from selected West Side Barrier (WSB) wells (Option 2a) or potable water from a municipal supply (Option 2b). As stated earlier, the WSB system was shut down in August 2006, so use of water from this source would require restarting a portion of the WSB system. This option would potentially allow more extraction wells from the South-Central and Southeastern areas to be operated compared to Option 1.

Based on the December 2009 sampling results, selenium was not detected or was detected at concentrations below the AMEL in three WSB wells: BW-3, BW-4, and BW-6. Operation of these three WSB wells would potentially allow operation of up to five additional wells in the South-Central and Southeastern areas (for a total of eighteen wells in the South-Central and Southeastern areas) while maintaining an effluent selenium concentration below the AMEL. This assumes that selenium concentrations remain constant and wells are pumping at the same flow rates.

In December 2009, KMEP also collected a sample of potable water from the on-site tap for selenium analysis. The potable water sample contained a selenium concentration of 1.73 ug/L, making it a viable source of water to blend with the extracted groundwater. Assuming a combined groundwater extraction rate of up to 50 gpm[1] to operate the remediation system at full scale and an average selenium concentration of 5.77 ug/L (based on November 2009 effluent monitoring results), the minimum flow rate of potable water required to blend would be approximately 35 gpm to yield a selenium concentration in the blended water of 4.1 ug/L and a total discharge rate of 85 gpm, which is within the current permit limit of 104 gpm.

Implementability

Blending groundwater extracted from the South-Central and Southeastern areas with groundwater extracted from the WSB area (Option 2a) could be implemented after returning the inactive WSB wells to service. KMEP is currently assessing the condition of WSB wells and reconfiguring the conveyance piping for the WSB system to route water from the WSB wells to the main groundwater treatment system. Similar to Option 1, this option would require periodic collection and review of data regarding the distribution of selenium in groundwater in order to select wells for operation and frequent monitoring of the extraction wells to allow appropriate adjustments to be made to the pumping configuration.

In order to blend extracted groundwater with the potable water at an adequate flow rate (Option 2b), a new water supply pipeline and water meter may be required at the site.

[1] 50 gpm is assumed here for cost estimating purposes; actual flow rate for this scenario would be expected to vary.

Park Water Company in Downey, California supplies water to this area of Norwalk. AMEC has contacted Park Water Company to confirm services and obtained information regarding existing supply lines that service the site and water rates. Blending with potable water could be implemented after confirming with the RWQCB that blending the extracted groundwater with potable water is an acceptable option for this project, securing the potable water supply, and installing any necessary appurtenances to the treatment system to facilitate blending.

Effectiveness

The use of blending at the site would effectively manage selenium at the site and allow operation of the remediation system at a higher capacity than what Option 1 would allow, potentially up to the full-scale capacity of the remediation system if potable water is used for blending. The use of water to blend with extracted groundwater will increase the overall discharge flow rate. The discharge limit of 104 gpm will limit the amount of water that can be added, and thus limit the groundwater extraction capacity, if the selenium concentrations in groundwater were to increase.

Cost Considerations

Similar to Option 1, additional costs for this option would include costs for additional sampling and analysis for selenium and costs for increased O&M associated with pumping configuration adjustments. In addition, costs associated with reactivating the WSB system and/or securing a potable water supply should be considered.

The cost to receive water from Park Water Company is $3.60 per 748 gallons. Assuming a flow rate of 35 gallons per minute, the annual cost for water delivered to the site for blending would be approximately $90,000 based on an annual use of 18.5 million gallons of water. AMEC inquired with Park Water Company regarding connection fees. According to Park Water Company, they will be responsible for cost up to and including the meter and KMEP would be responsible for facilities from the meter to the treatment system.

The pipeline needed to convey water should be a 1-inch to 2-inch polyvinyl chloride (PVC) pipe. A hydraulic flow control valve may be needed on the potable water line to correctly modulate flow to maintain the correct blending ratio. The flow control valve would be controlled by a new flow meter placed on the treated groundwater pipeline.

Option 3 – Install New Treatment System for Selenium

The third option for maintaining NPDES permitted discharge involves adding new equipment to the existing groundwater treatment system to treat selenium. Ideally, the selenium treatment system would be capable of reliably treating the water stream to achieve effluent selenium concentrations of less than the AMEL.

AMEC has contacted several treatment system vendors to inquire about available technology to remove low levels of selenium in water. Siemens Water Technology stated that their ion-exchange technologies are not capable at this time to lower selenium to the prescribed effluent limit. AMEC also contacted Dow Water and Process Services North America (DOW) but has yet to receive a response. Dow apparently uses a technology similar to Siemens' technology, so a response similar to that of Siemens may be expected.

AMEC also contacted APTwater, Inc. (APT) and discussed a membrane biofilm reactor that APT claims has been proven to work for removing selenium. However, they also stated that they currently do not have any of those treatment systems in operation.

We understand from KMEP that Wayne Perry has implemented a molasses enhanced GAC system that may be effective in treating low concentrations of selenium in groundwater. We have requested information regarding this system and will review the information when we receive it.

Implementability

Additional information regarding availability of proven treatment equipment and it potential applicability to site conditions would be needed to more fully evaluate implementability of this option. Bench and/or pilot-scale testing would be necessary as part of implementation of this option for any of the potential treatment technologies identified. For example, the installation of a membrane biofilm reactor would first require a bench test to confirm treatability. After the test, KMEP would receive details regarding treatment system components, availability, and potential acquisition, construction, and startup steps.

This option may also require a modification to the NPDES permit prior to implementation. The current NPDES permit specifies the treatment system currently in place. Addition of new treatment equipment and changes to the treatment process would likely require an application to modify the permit.

Effectiveness

Based on information we have reviewed to date, many of the currently-available technologies for treatment of selenium in water can meet the Maximum Contaminant Level (MCL) for selenium of 50 ug/L but likely cannot meet the AMEL specified in the NPDES permit for the groundwater treatment system at the site (4.1 µg/L). Although APT claims to have the technology to remove low levels of selenium from water, AMEC has not had the opportunity to verify this claim. APT has indicated that it can provide a performance guarantee based on a bench test conducted on groundwater samples collected from the site.

If the selenium treatment system can effectively reduce the concentration of selenium to less than the AMEL, then this option would allow KMEP to operate the groundwater remediation system at full capacity.

Cost Considerations

The option to construct a treatment system would have the following cost items: treatment system, system modifications, and additional operations and maintenance. System modifications may include new concrete containment pad, valves, piping, electrical components, electrical supply, and appurtenances.

APTwater, Inc. offers the choice of purchasing or leasing the treatment system. Based on a flow rate of 40 to 50 gallons per minute, APTwater, Inc. estimated a purchase cost of $400,000 to $500,000 for the membrane biofilm reactor. Leasing costs would depend on the size and construction cost of the treatment system. A bench scale test to provide data for further

evaluation of implementability and effectiveness would be expected to cost approximately $5,000.

O&M costs could be estimated after the treatment technology system configuration and additional NPDES requirements are known.

Alternative Discharge Scenarios

AMEC has identified two potential options that would reroute discharge to locations other than Coyote Creek, thus avoiding the NPDES effluent limitations for selenium. One potential option would involve discharge to the sanitary sewer under an industrial wastewater permit issued by the Los Angeles County Sanitation Districts (LACSD). The second option would involve injection of treated groundwater into the same groundwater bearing zone being extracted under a Waste Discharge Requirements (WDR) permit issued by the RWQCB. Monitoring and reporting for these options would be performed in accordance with the associated permits. The following sections discuss these options.

Option 4 – Discharge to Publicly Owned Treatment Works

This option involves operating the remediation system at full capacity, treating extracted groundwater using the existing treatment system, and discharging the pre-treated water to the City of Norwalk's sanitary sewerage system. The City of Norwalk's sanitary sewers are operated by the LACSD. The LACSD specifies effluent limitations for several constituents but does not specify an effluent limitation for selenium. Other LACSD effluent limitations that may be applicable to this project, including the effluent limitation for total VOCs of 1000 µg/L, are already being met by the current groundwater treatment system.

Implementability

This option would entail obtaining a permit from the LACSD to allow discharge of treated groundwater to the sanitary sewer and constructing a new pipeline and appurtenances to convey the treated groundwater to the sanitary sewer. Based on information received from LACSD, the groundwater quality does not pose a concern for discharge to the sewer. However, the LACSD will need to determine the feasibility of accepting the additional flow in their system during the permitting process.

If LACSD determines that their system can accept discharge from the groundwater treatment system, a sewer pipeline would be constructed from the treatment system to one of two manholes located between Hopland Street and Molette Street on Norwalk Boulevard. The LACSD would require a flow meter to be installed on the connection to monitor discharge volume. The flow meter would provide flow data that would be compiled into quarterly reports for submittal to the LACSD. The quarterly reports would also require effluent sampling reporting.

Effectiveness

Discharging treated groundwater to the sanitary sewer would eliminate the requirement to treat for selenium, making this option an effective way to manage selenium at the site. This option

would also allow for a more flexible remediation strategy by allowing KMEP to operate pumping wells up to the permitted flow rate.

Cost Considerations

The costs involved with discharging effluent to the sanitary sewer will likely include:

- a one-time connection fee,
- annual surcharge fees based on actual discharge volumes,
- monitoring, sampling, and reporting of discharge volume and quality, and
- construction costs for pipeline connection and appurtenances.

The LACSD would issue a one-time connection fee and annual surcharge fees for the discharge based on volume, peak flow rate, chemical oxygen demand (COD), and suspended solids (SS) content. Based on a flow rate of 50 gallons per minute and estimated concentrations of COD and SS, the one-time connection fee would be approximately $625,000 and the annual surcharge fees would amount to $8,000 per year.

Monitoring and reporting for discharge to the sanitary sewer would be performed on a quarterly basis. Monitoring would involve recording flow rate data from the effluent flow meter and sampling of the discharge on a quarterly basis. Depending on the constituents required to be monitored, the quarterly monitoring and reporting for this option may cost less than the monitoring and reporting required by the current NPDES permit. In addition, because the LACSD discharge limitations appear to be less stringent compared to those specified in the current NPDES permit, the groundwater treatment system could potentially be scaled down if influent concentrations do not increase significantly.

Construction costs for the sanitary sewer connection would include costs for a 4 or 6-inch PVC pipeline to Norwalk Boulevard, flow meter, vault, and connection to sewer in Norwalk Boulevard.

Option 5 – Re-injection of Treated Groundwater

The second option to reroute discharge would be to re-inject treated groundwater into the same groundwater bearing zone via infiltration galleries or injection wells. According to the Revised General WDRs (ORDER NO. R4-2007-0019), treated groundwater that exhibits general mineral content that are naturally occurring and exceeds Basin Plan Objectives may be returned to the same groundwater formations from which it is withdrawn, with concentrations not exceeding the original background concentrations for the site. Because selenium appears to a naturally occurring constituent at the site, treated groundwater could potentially be returned to the subsurface under this permit. Similar to Option 4, this option would involve operating the remediation system at full capacity and treating extracted groundwater using the existing treatment system to meet the discharge requirements of the WDR.

Implementability

This option is dependent upon the results of a thorough hydraulic analysis, access to the discharge locations (some of which may be beyond the control of KMEP), and ability of the subsurface to receive treated groundwater at a rate equal to or greater than the discharge rate.

In order to determine feasibility of re-injection, AMEC would model the infiltration gallery or injection wells along with the currently operating pumping wells. Output from the model would be used to appropriately locate the injection facilities that would not adversely affect groundwater flow conditions or interfere with remediation activities at the site. The introduction of re-injected water also has the potential to create unwanted migration of constituents in the groundwater; therefore, the location of re-injection is critical.

The method of re-injection would also require analysis and design. The analysis would entail determining the soil type, permeability, and infiltration rate to design an effective infiltration gallery or injection wells.

The re-injection of treated groundwater would require obtaining a WDR permit from the RWQCB.

A significant amount of O&M would be required to keep the injection facilities operational. Groundwater extraction would be dependent not only on the operation of the groundwater extraction system but also on operation of the reinjection system.

Effectiveness

Re-injection of treated groundwater would be an effective alternative to discharging to Coyote Creek. However, re-injection has the potential of adversely affecting groundwater flow conditions and/or interfering with remediation objectives at the site.

Cost Considerations

Additional costs associated with this option would include costs for modeling, analysis, and design of the infiltration gallery or injection wells; obtaining a WDR permit from the RWQCB if results of the analysis indicate this option is feasible; construction of the injection facilities; and additional O&M of the injection facilities.

Recommendations

Based on this preliminary evaluation of selenium management options, Options 1, 2, and 4 appear to be feasible. Because treatment technologies for treating low levels of selenium appear to be limited, Option 3 will not be considered for further evaluation at this time but will considered further if additional information regarding the ability and effectiveness of selenium treatment systems becomes available. Also, the effectiveness of reinjecting treated groundwater into the subsurface depends on several factors, some of which are beyond the control of KMEP. Therefore, Option 5 also will not be considered for further evaluation at this time.

AMEC recommends implementing Option 1 (adjusting pumping configurations) because this option is readily implementable and effective for managing selenium. Because Option 1 may

not allow the system to operate at full capacity, this option is initially considered an interim option. Depending on the capture zone analysis and system performance, however, it may also be suitable for consideration as a longer-term option.

Option 2 (blending) and Option 4 (discharge to a POTW) are feasible to implement and will allow the system to operate at a higher capacity than Option 1, potentially up to full capacity. Options 2 and 4 should be considered for further evaluation while Option 1 is being implemented.

AMEC recommends performing a more detailed evaluation for Option 2a (blending using WSB wells) to determine how many wells can be brought online without resorting to blending with municipal water. If additional capacity is needed to achieve remediation objectives, Options 2b and 4 will be further evaluated based on additional criteria such as schedule, technical issues, detailed cost estimates, or other relevant criteria. The results of the detailed evaluation will be used to select a long-term selenium management option. The additional evaluation of Option 2a is expected to be completed by May 30, 2010.

TABLE 1
SELENIUM MONITORING RESULTS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Remediation Area	Remediation Well ID	Installation Date	Top of Well Casing Elevation (ft msl)	Well Screen Interval (ft bgs)	Selenium Concentration (µg/L) in February 2009[1]	Selenium Concentration (µg/L) in December 2009[2]	Selenium Concentration (µg/L) in February 2010[3]
South-Central	GMW-9	7/8/1991	74.44	20 - 50	7.7	12.30	--
	GMW-22	8/2/1991	74.17	25 - 60	5.4	5.75	--
	GMW-24	8/5/1991	74.04	25 - 60	27.0	0.947 J	--
	GMW-25	1/10/1992	74.29	20 - 50	6.6	6.27	--
	GWR-3	1/10/1992	74.93	20 - 50	6.3	7.48	--
	MW-SF-2	6/18/1990	78.53	25 - 40	6.3	8.02	--
	MW-SF-3	6/18/1990	78.12	25 - 40	14.0	8.86	--
	MW-SF-6	9/19/1990	76.80	25 - 40	3.3 J	6.75	--
	MW-SF-11	6/19/2007	78.56	20 - 40	8.1	4.65	--
	MW-SF-12	6/18/2007	78.07	20 - 40	--	1.04	5.05
	MW-SF-13	6/19/2007	73.40	20 - 40	7.0	1.16	--
	MW-SF-14	6/21/2007	78.16	20 - 40	5.1	7.83	--
	MW-SF-15	6/21/2007	78.27	20 - 40	5.7	8.53 and 1.19[4]	--
	MW-SF-16	6/20/2007	78.21	20 - 40	4.6 J	3.31	--
	MW-O-1	1/22/1991	75.48	25 - 40	--	5.48	--
	MW-O-2	1/23/1991	71.90	25 - 40	<5.0	3.96	--
	GMW-O-11	5/20/1992	74.17	20 - 50	4.5 J	3.79	--
	GMW-O-20	6/15/1995	73.32	--	11.0	7.68	--
	GMW-O-21	10/1/1997	71.43	26 - 46	3.8 J	4.54	--
	GMW-O-23	6/25/2007	73.63	20 - 40	9.4	<1.00	--
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	4.7 J	--[5]	2.71
	GMW-36	4/11/1994	74.53	20 - 50	2.6 J	2.39	3.29
West Side Barrier	BW-2	5/20/1996	73.57	27 - 47	--	4.00	--
	BW-3	5/17/1996	74.16	31 - 50	--	<1.00	--
	BW-4	5/20/1996	74.61	28 - 47	--	3.35	--
	BW-5	5/23/1996	73.59	27 - 46	--	4.56	--
	BW-6	5/22/1996	73.48	28 - 47	--	1.65	--
	BW-7	5/22/1996	74.65	27 - 46	--	5.77	--
	BW-8	5/21/1996	75.08	27 - 46	--	4.60	--
	BW-9	5/21/1996	76.19	27 - 46	--	5.70	--
Potable Water		--	--	--	--	1.73	--

Abbreviations
-- = information not available or well not sampled
< = selenium was not present at a concentration above the shown detection limit
BTS = Blaine Tech Services
ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929.
ft bgs = feet below ground surface
J = concentration is estimated
µg/L = micrograms per liter

Notes
1. Samples were collected by Envent Corporation on February 10, 17, and 24, 2009.
2. Samples were collected by Kinder Morgan and Blaine Tech Services between December 9 and December 15, 2009.
3. Samples were collected by Kinder Morgan on February 12, 2010.
4. Two samples were collected from MW-SF-15 during December 2009. The first sample was collected on December 9 and the second sample was collected on December 31. The sample collected on December 31, 2009 was half water and half product and the laboratory was directed to analyze the water fraction.
5. GMW-O-15 was not sampled in December 2009, but previous selenium results have shown similar concentrations to GMW-36.