



Department of Ecology Industrial Section

Shell Oil Products US

Puget Sound Refinery
P.O. Box 622
Anacortes, WA 98221
Tel 360.293.0800
Fax 360.293.0808
Email pugetsound@ShellOPUS.com
Web-Plant www.shellpugetsoundrefinery.com

Web-Corporate www.shellus.com

October 1, 2003

Mark Dirkx WDOE – Industrial Section P.O. Box 47600 Olympia, WA 98504-7600

Dear Mr. Dirkx,

Re: Remedial action status report for SWMU 11, Shell Puget Sound Refinery, EPA/Ecology ID# WAD 00927 6197

Please find attached, a status report of ongoing remedial activities conducted during the 1st Quarter of 2003 at RCRA Facility Permit Number WAD009276197, SWMU 11, Shell Puget Sound Refinery.

Shell appreciates WDOE's ongoing assistance regarding the Remediation of the site. Questions or comments regarding this matter may be directed to Mr. Brian Rhodes at (360) 293-1761.

Sincerely,

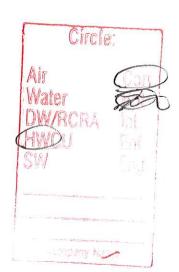
Mark J. Koslicki

Manager - Health, Safety and Environment

Mach of Phontest

BDR/br

rcra\2003\RFI\swmu11\10_Sep_2003.doc



SWMU 11 STATUS REPORT THIRD QUARTER - 2003

Shell Oil Products - Puget Sound Refinery Anacortes, WA 98221

Summary:

This report is an update of remedial activities completed during the third quarter of 2003 at Solid Waste Management Unit 11, Shell Puget Sound Refinery, Anacortes, Washington - RCRA Facility Permit No. WAD009276197. SWMU 11 was identified during an EPA RCRA facility assessment (RFA) in 1988. During the subsequent RCRA Facility Investigation, hydrocarbons were identified in soils and groundwater at the site. Since the RFA was completed, the SWMU 11 basin was cleaned and lined. In addition, a groundwater monitoring and remediation system was installed that consists of seventeen wells and two product - groundwater recovery systems.

Numerous detailed reports have been submitted to WDOE and EPA that describe the operation and progress of remedial activities at the site. The EPA, in a letter dated April 7, 1997, designated the Washington State Department of Ecology as the lead agency for this project. EPA stated that WDOE could regulate the site under either MTCA (the State's Model Toxic Control Act) or RCRA at the discretion of the Department of Ecology. Consequently, all future correspondences regarding the SWMU 11 site have been directed to the Department of Ecology.

Activities this Reporting Period:

During the third quarter of 2003, Puget Sound Refinery completed groundwater monitoring at the site. Since the start up of the LNAPL/groundwater recovery system, groundwater monitoring has occurred on a quarterly basis and groundwater sampling has been conducted every six months.

2.1 GROUNDWATER SURFACE AND FREE PRODUCT MEASUREMENTS

Groundwater surface level measurements were collected from fifteen wells in the vicinity of SWMU 11. The free product/groundwater recovery system continues to operate at the site. The system pumps groundwater intermittently based on groundwater recharge rates and the presence of free product in recovery wells as determined by sensors in the wells. Quantities of product and groundwater recovered by the systems is as follows:

SWMU 11 - RECOVERY SYSTEM DATA						
Well Number	Water Recovered 05/03-9/03	Total Water Recovered 12/92-9/03	Product Recovered 05/03-9/03	Total Product Recovered 12/92–9/03		
MW-59	0.1 gal	184645.4 gal	0.4 gal	20452.0 gal		
MW-64	0.2 gal	48739.1 gal	0.0 gal	238.6 gal		

Only small quantities of groundwater and hydrocarbon were removed during the period. When the pumps were last removed from the wells, only a trace of free product was found in MW-59 or MW-64. With the recent dry summer and associated drop in groundwater levels, it may be that the liquid levels have dropped below the pumping systems for the time being.

Groundwater levels and free product measurements were collected on September 3, 2003, using a Solinst water level meter and Keck KIR-89 Oil water interface probe. In general, the groundwater levels have risen in most wells since the last measurement in May of 2003. Groundwater flow direction appears to be to the southwest as per previous determinations.

In addition to the free product recovery systems in wells MW-59 and MW-64, wells MW-63 and piezometer P-21 have intermittently contained free

product. MW-63 did not contain any measurable amount of free product during the third quarter of 2003. Historically, free product has been measured in well P-21. Piezometer P-21 is located less than 10 feet from product recovery well MW-59. P-21 was previously determined to be within the capture zone of the recovery system in well MW-59.

Planned Activities

The operation and monitoring of the free product/groundwater recovery will continue during the remainder of 2003. Groundwater sample collection and analyses are scheduled for the 4th quarter. Groundwater/free product measurements will be collected prior to the sample collection. Data regarding the progress of remedial activities at the site will be submitted quarterly or as warranted by significant findings at the site.





Department of Ecology Industrial Section

Part Fying File

Shell Oil Products US

Puget Sound Refinery P.O. Box 622 Anacortes, WA 98221 Tel 360.293.0800 Fax 360.293.0808

Email pugetsound@ShellOPUS.com Web-Plant www.shellpugetsoundrefinery.com Web-Corporate www.shellus.com

Circle:

moany Name

Air

March 6, 2003

Mark Dirkx WDOE – Industrial Section P.O. Box 47600 Olympia, WA 98504-7600

Dear Mr. Dirkx,

Re: Remedial action status report for SWMU 11, Shell Puget Sound Refinery, EPA/Ecology ID# WAD 00927 6197

Please find attached, a status report of ongoing remedial activities conducted during the 1st Quarter of 2003 at RCRA Facility Permit Number WAD009276197, SWMU 11, Shell Puget Sound Refinery.

Shell appreciates WDOE's ongoing assistance regarding the Remediation of the site. Questions or comments regarding this matter may be directed to Mr. Brian Rhodes at (360) 293-1761.

Sincerely,

Mark J. Koslicki

Manager - Health, Safety and Environment

Mal J Phosled

BDR/br

rcra\2003\RFI\swmu11\03Mar_rpt.doc

SWMU 11 STATUS REPORT FIRST QUARTER - 2003

Shell Oil Products - Puget Sound Refinery
Anacortes, WA 98221

Summary:

This report is an update of remedial activities completed during the first quarter of 2003 at Solid Waste Management Unit 11, Shell Puget Sound Refinery, Anacortes, Washington - RCRA Facility Permit No. WAD009276197. SWMU 11 was identified during an EPA RCRA facility assessment (RFA) in 1988. During the subsequent RCRA Facility Investigation, hydrocarbons were identified in soils and groundwater at the site. Since the RFA was completed, the SWMU 11 basin was cleaned and lined. In addition, a groundwater monitoring and remediation system was installed that consists of seventeen wells and two product - groundwater recovery systems.

Numerous detailed reports have been submitted to WDOE and EPA that describe the operation and progress of remedial activities at the site. The EPA, in a letter dated April 7, 1997, designated the Washington State Department of Ecology as the lead agency for this project. EPA stated that WDOE could regulate the site under either MTCA (the State's Model Toxic Control Act) or RCRA at the discretion of the Department of Ecology. Consequently, all future correspondences regarding the SWMU 11 site will be directed to the Department of Ecology.

Activities this Reporting Period:

During the first quarter of 2003, Puget Sound Refinery completed groundwater monitoring at the site. Since the start up of the LNAPL/groundwater recovery system, groundwater monitoring has occurred on a quarterly basis and groundwater sampling has been conducted every six months.

2.1 GROUNDWATER SURFACE AND FREE PRODUCT MEASUREMENTS

Groundwater surface level measurements were collected from fourteen wells in the vicinity of SWMU 11. The free product/groundwater recovery system continues to operate at the site. The system pumps groundwater intermittently based on groundwater recharge rates and the presence of free product in recovery wells as determined by sensors in the wells. Quantities of product and groundwater recovered by the systems is as follows:

SWMU 11 - RECOVERY SYSTEM DATA						
Well Number	Water Recovered 10/02-2/03	Total Water Recovered 12/92-2/03	Product Recovered 10/02-2/03	Total Product Recovered 12/92–2/03		
MW-59	0.0 gal	184645.4 gal	0.3 gal	20451.1 gal		
MW-64	0.1 gal	48738.9 gal	O.1 gal	238.6 gal		

Only small quantities of groundwater and hydrocarbon were removed during the period. When the pumps were last removed from the wells, only a trace of free product was found in MW-59 or MW-64. With the recent dry winter and associated drop in groundwater levels, it may be that the liquid levels have dropped below the pumping systems for the time being.

Groundwater levels and free product measurements were collected on February 3, 2003, using a Solinst water level meter and Keck KIR-89 Oil water interface probe. In general, the groundwater levels have dropped in most wells since the last measurement in the 4th quarter of 2002. Groundwater flow direction appears to be to the southwest as per previous determinations.

In addition to the free product recovery systems in wells MW-59 and MW-64, wells MW-63 and piezometer P-21 have intermittently contained free product. MW-63 did not contain any measurable amount of free product during the first quarter of 2003. Historically, free product has been measured in well P-21. Piezometer P-21 is located less than 10 feet from product recovery well MW-59. P-21 was previously determined to be within the capture zone of the recovery system in well MW-59.

Planned Activities

The operation and monitoring of the free product/groundwater recovery will continue during the remainder of 2003. Groundwater sample collection and analyses are scheduled for the 2nd quarter. Groundwater/free product measurements will be collected prior to the sample collection. Data regarding the progress of remedial activities at the site will be submitted quarterly or as warranted by significant findings at the site.