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Department of Ecology
Industrial Section

Shell Oil Products US

Puget Sound Refinery

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October 5, 2004

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

Dear Mr. Dirkx,

Facility: <i>Shell</i>	Year: <i>04</i>	Left	Right
Air	Water	Corr	Reports
NPDIES	WET/Tox	Permit	Eng
DW/RCRA	Clean Up	Sub	
SW	HWP2		

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 3rd Quarter of 2004 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

BDR/br

SWMU 11 STATUS REPORT
Third QUARTER - 2004

Shell Oil Products - Puget Sound Refinery
Anacortes, WA 98221

Summary:

This report is an update of remedial activities completed during the third quarter of 2004 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 subsequent correspondences regarding the SWMU 11 site have been directed to the Department of Ecology.

Activities this Reporting Period:

During the third quarter of 2004, 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 05/04-8/04	Total Water Recovered 12/92-8/04	Product Recovered 05/04-8/04	Total Product Recovered 12/92-8/04
MW-59	0.1 gal	184715.4 gal	0.0 gal	20452.1 gal
MW-64	0.0 gal	48749.1 gal	0.0 gal	238.6 gal

Little or no hydrocarbon was 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 August 12, 2004, 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 the 2nd quarter 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 first quarter of 2004. 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 2004. 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.

Dirkx, Mark

File
Sulliv Cleanup
CORR

From: Dirkx, Mark
Sent: Wednesday, September 08, 2004 12:19 PM
To: 'Mussen, Jeff E SOPUS'
Subject: RE: Shell PSR - Installation of New Lysimeters in Plot 12

Jeff:

Ecology approves reopening of plot 12 as described in your attachments to the email/hardcopy request. Please advise our office should any changes to the described reopening or planned operation of the plot change.

Sincerely,
J. Mark Dirkx P.E.
SWFA - Industrial Section
360-407-6937

-----Original Message-----

From: Mussen, Jeff E SOPUS [mailto:JEMUSSEN@shellopus.com]
Sent: Monday, August 09, 2004 11:47 AM
To: Dirkx, Mark
Subject: Shell PSR - Installation of New Lysimeters in Plot 12

Hi Mark, we would like to install two new lysimeters in Plot 12 to allow us to re-open the Plot. We installed a piezometer in March of this year to demonstrate we had sufficient separation between the treatment zone and the seasonal high water table.

The detail is in the attached letter. I have put a hardcopy in the US mail already. I though I would send a copy to you by e-mail to help expedite the process. We would like Ecology's approval by the end of August so we can install the lysimeters in September. Thanks

<<Ltr to Ecology_Final 080504.doc>> <<Location of New Lysimeter.pdf>> <<Boring Well Log_P24.pdf>>

Jeff Mussen

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