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COMPANY NAME: NW Natural

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Select report type: RE (Electric) RG (Gas) RW (Water) RT (Telecommunications)
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Did you previously file a similar report? No Yes, report docket number: UM 1732

Report is required by: OAR
 Statute
 Order 15-049

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Is this report associated with a specific docket/case? No Yes, docket number: UM 1732

List Key Words for this report. We use these to improve search results.

2017 Annual Report Site Remediation and Recovery Mechanism, SRRM, Schedule 183, Environmental Prudence Review

Send the completed Cover Sheet and the Report in an email addressed to PUC.FilingCenter@state.or.us

Send confidential information, voluminous reports, or energy utility Results of Operations Reports to PUC Filing Center, PO Box 1088, Salem, OR 97308-1088 or by delivery service to 201 High Street SE Suite 100, Salem, OR 97301.

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March 15, 2018

VIA ELECTRONIC FILING AND US MAIL

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Post Office Box 1088
Salem, OR 97308-1088

**RE: UM 1732 - NW Natural's Site Remediation and Recovery Mechanism
Schedule 183 2017 Annual Report**

In accordance with Rate Schedule 183 and the Commission's Order No. 12-137 in Docket UG 221, implementing NW Natural's Site Remediation and Recovery Mechanism (SRRM), NW Natural provides the enclosed annual report of NW Natural's environmental remediation expenses incurred between January 1, 2017 and December 31, 2017. Exhibit C to the report will be provided via USB drive and physically mailed following the electronic submission of this report due to its voluminous nature.

Please feel free to call if you have any questions.

Sincerely,

/s/ Kyle Walker

Kyle Walker, CPA
Rates Analyst

Enclosures: Report
Exhibit A
Exhibit B
Exhibit C (USB drive by U.S. mail)

NW NATURAL

**SCHEDULE 183 - 2017 ANNUAL REPORT
ENVIRONMENTAL SITE REMEDIATION AND RECOVERY MECHANISM (SRRM)**

JANUARY 1, 2017 – DECEMBER 31, 2017

In accordance with Rate Schedule 183 and the Public Utility Commission of Oregon (“Commission”) Order No. 12-137 in Docket UG 221, implementing Northwest Natural Gas Company’s (“NW Natural” or “Company”) Site Remediation and Recovery Mechanism (SRRM), NW Natural provides the following information to allow the Commission, Staff and any interested stakeholders to review NW Natural’s environmental remediation expenses incurred between January 1, 2017 and December 31, 2017. Subject to that review, NW Natural will include these expenses in the SRRM for rates effective November 1, 2018.

A. 2017 Remediation Activities

NW Natural has seven sites at which the Oregon Department of Environmental Quality (DEQ) or the Environmental Protection Agency (EPA) has required clean-up. These include: Portland Harbor, Portland Gas Manufacturing (PGM), Gasco¹, Central, Eugene Water Electric Board, French American International School, and Oregon Steel. NW Natural also incurred litigation costs related to Portland Harbor cost recovery and natural resource damage litigation and minor litigation costs related to collections under the settlement agreements.

Total costs incurred for the period of January 1, 2017 through December 31, of 2017 by site (or activity) are listed below:

<u>SITE</u>	<u>AMOUNT</u>
Gasco (1)	\$12,148,106
Harbor	1,057,842
PGM	483,399
Central	55,191
	<hr/>
	\$13,744,537

(1) Includes Gasco Uplands, Sediments, operation of Source Control, and Siltronic.

These expenditures are further detailed in Exhibit A and B of this Report. Descriptions of the significant activities at these sites for this period are described below.

¹ The Gasco site includes Siltronic, as the property is now being managed as one area.

B. Portland Harbor

The Portland Harbor site is a stretch of approximately ten miles along the Willamette River that is listed as a Superfund site by the EPA. Investigation of the site has been managed by a consortium of potentially responsible entities known as the Lower Willamette Group (LWG), under EPA's oversight. NW Natural is a member of the LWG and co-funded the work performed with other members of the LWG. The Remedial Investigation and Feasibility Study for the Portland Harbor site has been completed, and EPA certified completion of the administrative order under which the LWG was working in October 2017.

EPA issued its Record of Decision ("ROD") for Portland Harbor in January 2017. EPA estimates the cost of the selected remedy at \$1.05 billion net present value and projects 13 years of construction to complete active cleanup. The ROD indicates EPA will exercise site-specific flexibility during remedial design, and EPA may decide to break the site into smaller "work areas." DEQ may take a lead role in overseeing portions of the cleanup.

EPA will begin implementation of the harborwide remedy through an initial round of baseline sampling. During the period of January through December 2017, the Company responded to EPA's demand that responsible parties perform this baseline sampling. Ultimately, in December 2017, four other parties signed an order with EPA agreeing to conduct this initial sampling. NW Natural has agreed to provide \$55,000 in funding toward this work through the allocation group but will not be directly performing the sampling. NW Natural's funding contribution will be paid out over two years (2018 and 2019). NW Natural also incurred costs in 2017 in preparation for the harborwide allocation.

NW Natural also participates in the Portland Harbor Natural Resource Damage (NRD) cooperative assessment process. During the period of January through December 2017, the Company worked with the Natural Resource Trustees in the NRD cooperative process on pathways to reach settlement. On January 30, 2017, the Confederated Tribes and Bands of the Yakama Nation filed a lawsuit against NW Natural and 29 other potentially responsible parties for alleged Portland Harbor response costs and natural resource damage assessment costs related to the Portland Harbor Superfund Site, as well as natural resource damage assessment costs related to the Multnomah Channel, Lower Willamette and Columbia Rivers. The defendants, including NW Natural, have filed several motions to dismiss some or all claims in the case. NW Natural, the Port of Portland, the City of Portland and the United States have also filed motions to stay any portions of the case that survive the motions to dismiss.

C. PGM

The PGM site covers approximately 3.7 upland acres and is located on the Willamette River near the Steel Bridge. The location of the former PGM is now a fully developed part of downtown Portland. NW Natural is managing this site as the PGM Project under DEQ's oversight.

The Oregon Department of Environmental Quality issued a Record of Decision for the PGM Site in July 2017. The selected remedy requires dredging of one area of tar-like material and a few other areas of shallow sediment and installation of a treatment cap in the dredged areas. Other areas will be capped without dredging, will be allowed to recover naturally, or will be covered by sand to accelerate the natural recovery process. The remedy also requires institutional controls,

and long-term inspection and maintenance. The estimated net present value cost of the ROD remedy is \$9.9 million.

The Administrative Consent Order for the PGM site was amended in August 2017 to allow remedial design work for the PGM site to begin without delay. Accordingly, pre-design investigations were completed in late 2017, and remedial design is now underway.

D. Gasco

The Gasco site covers approximately 45 acres and is located on the Willamette River between the St. Johns Bridge and the Railroad Bridge. The manufacturing facility is gone, and the site is currently occupied by the Company's Portland liquefied natural gas storage facility and two tenant facilities. Work at this site consists of various projects: the Uplands Project (which, due to DEQ project restructuring in 2016, also includes a 38.5 acre portion of the adjacent property previously owned by Portland Gas & Coke and currently owned by Siltronic Corporation), the Sediments Project (which addresses sediments in the adjacent Willamette River), and the Source Control Project. These projects are subject to EPA and DEQ oversight.

The Gasco Upland site is now in the feasibility study phase. In 2017, NW Natural continued work with DEQ to integrate the data sets from the parcel currently owned by Siltronic into the Gasco data set and develop an addendum to the Gasco risk assessment, as well as to complete additional tasks associated with development of the feasibility study. Field investigations to support the Gasco Feasibility Study and groundwater monitoring activities were performed in 2017. During 2017, NW Natural also evaluated potential stormwater source control options for the Gasco property and worked to complete a source control evaluation of Doane Creek.

EPA's January 2017 ROD for Portland Harbor included a selected remedy for the Gasco Sediments site. In July 2017, NW Natural submitted a "Basis of Design" work plan to EPA. The work plan proposes the development of multiple technical memoranda describing how site-specific information and data, including information and data developed for the 2012 Engineering Evaluation/Cost Analysis, will be used to refine technology assignments and other aspects of the ROD. Following submission of the work plan, NW Natural worked with EPA, DEQ and other EPA partners to resolve details necessary to prepare the technical memoranda. NW Natural also completed some remedial design field work in 2017.

The Company also conducted monthly visual monitoring of the shoreline area in the direct vicinity of the pilot cap area.

Construction of the Source Control wells and groundwater treatment plant was completed in October 2013. Following a period of optimization, DEQ approved the system for long-term operation on December 30, 2016. In 2017, NW Natural operated the system and began preparation of an application to renew the discharge permit for the system, which expires in 2018. The Company will continue to incur costs associated with operating the wells and environmental regulatory oversight.

E. Central

The Central Service Center is the former site for company operations including as a gas holder site and other activities. At the end of 2006, the Central Service Center site was identified by DEQ for cleanup and ranked as a high priority site.

During the period of January 2017 through December 2017, the Company completed the following tasks:

- 1) Completed the decommissioning of a historical water well at the request of DEQ.
- 2) Completed the placement of an “environmental cap” over an area potentiall contaminated with arsenic in the soil at the request of DEQ.
- 3) Submitted final reporting for groundwater monitoring.
- 4) Submitted a revised Remedial Investigation / Risk Assessment Report following the completed of the above activities (and some 2016 year activities previously completed).

F. Major Reports and Communications with Environmental Regulators

To assist the Commission, Staff, and any parties in reviewing NW Natural’s costs for the January 1 2017 to December 31 2017period, the Company is providing the major reports and communications with environmental regulators related to the activities described above, found in Exhibit C.

NW Natural
UM 1732 - Exhibit A
Deferred Environmental Remediation Costs and Insurance Proceeds
For the period of January 1, 2017 through December 31, 2017

1 Refer to Exhibit B for the deferred costs for each site broken out by work tasks

2
3 Debit (Credit)
4

5	Month/Year	GASCO (1)	SILTRONIC	HARBOR	FRONT (PGM)	CENTRAL	TOTAL REMEDIATION SPEND	INSURANCE & 3RD PARTY RECOVERY
6	(a)	(b)	(c)	(d)	(e)	(f)	(h) = sum (b):(f)	(g)
1	Jan-17	806,259	350	96,797	12,186	4,963	920,555	-
2	Feb-17	1,030,279	1,155	93,298	19,350	1,800	1,145,883	-
3	Mar-17	1,208,916	1,330	124,234	31,287	-	1,365,767	(109)
4	Apr-17	890,129	-	98,267	10,155	3,489	1,002,040	(9,889)
5	May-17	1,027,610	-	92,921	51,491	15,193	1,187,216	-
6	Jun-17	1,105,838	-	83,786	10,425	7,995	1,208,044	(2,335)
7	Jul-17	879,358	-	93,211	9,031	-	981,600	-
8	Aug-17	932,248	-	61,494	24,682	18,360	1,036,784	-
9	Sep-17	1,521,177	-	83,026	32,708	3,392	1,640,303	(8,153)
10	Oct-17	512,998	-	78,455	5,655	-	597,109	-
11	Nov-17	983,498	-	84,746	35,080	-	1,103,324	-
12	Dec-17	1,246,960	-	67,607	241,348	-	1,555,914	(7,937)
13		12,145,271	2,835	1,057,842	483,399	55,191	13,744,537	(28,422)

14
15 Notes:

16 (1) Includes the operating costs of Gasco Source Control.

NW Natural
UM 1732 - Exhibit B
Task Detail - Deferred Environmental Remediation Costs and Insurance Proceeds
For the period of January 1, 2017 through December 31, 2017

Note: Monthly totals by site agree to the amounts presented in the Exhibit A Summary

Sum of Amount	Column Labels												Grand Total		
Row Labels	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	Grand Total
Central	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Dec-17	Dec-17	
Study	4,963	1,800	3,489	3,489	15,193	7,995	(0)	18,360	3,392						55,191
Central Total	4,963	1,800	3,489	3,489	15,193	7,995	(0)	18,360	3,392						55,191
Gasco Sediments															
DEQ						497			714	22,471				4,057	27,739
EE/CA and Data Report	14,232	6,999	90,971	24,281	42,932	74,045	89,050	77,703	166,608					78,107	921,393
Legal - PLG - Gasco Sediments Remedy	2,415	1,538	2,738	4,763	3,038	300	5,968	2,200	12,788	17,390	3,225			(563)	55,798
Meetings, Budget, Schedule	15,810	1,995	19,979	11,334	17,779	7,370	10,402	10,502	9,833	4,681	8,796			35,713	154,194
EPA			131,855												131,855
Trustees								14,624	41,226						55,850
Gasco Sediments Total	32,457	10,532	245,542	40,377	63,749	81,715	105,916	105,029	231,168	44,542	90,128	295,673	1,346,829		
Gasco Source Control															
NWN Direct Costs	12,263	10,227	11,007	8,518	30,448	5,207	10,610	9,790	11,484	10,956	11,089	11,337	142,936		
Legal - PLG - Gasco Source Controls	8,275	3,450	2,677	4,723	8,148	7,645	2,755	7,038	4,270	2,830	3,875	15,570	71,255		
Groundwater Study	29	28	28	27	27	53		26	26	19	28	29	320		
Operation of Water Treatment Plant	429,464	605,456	242,851	503,405	299,940	254,519	367,853	280,695	536,485	272,730	350,245	359,804	4,503,446		
Gasco Source Control Total	450,030	619,160	256,563	516,673	338,563	267,370	381,271	297,549	552,265	286,535	365,236	386,739	4,717,957		
Gasco Uplands															
DEQ	30,658	56,624	77,409	110,749	110,749	54,069		45,899	49,797	59,253			51,900	536,359	
Final RI	54,983	136,305	77,121	33,377	47,916	17,501	20,225	61,211	75,771	20,936	69,110	76,091	690,548		
Finalize Risk Assessment	54,414	75,726	168,739	69,210	77,106	74,992	70,547	38,992	62,642	51	43,261	39,625	775,305		
Gasco Other	10,000							5,000	5,000				20,000		
Interim Action Maintenance	7,780	903	6,513	1,907	1,627	2,909	838	9,239	972	256	2,905	4,297	40,144		
Legal - PLG - Gasco Site Remedy	(21,643)	1,603	16,847	6,981	7,673	4,968	15,023	1,693	22,305	9,313	12,958	1,158	78,875		
Restoration Evaluation			4,349										4,349		
Site Wide FS	28,678	17,633	101,058	89,062	217,069	355,196	79,620	167,297	327,784	71,439	75,897	120,589	1,651,322		
Technical Coordination	84,348	50,898	173,486	76,439	72,867	80,372	76,825	54,152	73,633	10,658	71,124	31,640	856,442		
Technical Support for Allocation Process	55,156	13,735	18,225	33,086	69,421	93,965	49,249	85,174	54,526	22,420	71,694	566,652			
Site-Wide Technical Services	19,395	47,160	63,065	23,016	20,870	72,781	79,843	61,013	65,314	10,015	230,460	167,554	860,488		
Gasco Uplands Total	323,771	400,587	706,811	333,078	625,299	756,752	392,171	529,670	737,744	181,921	528,134	564,547	6,080,485		
Harbor															
Legal - PLG	97,437	73,107	41,394	75,345	54,469	62,160	51,082	48,890	32,780	33,249	53,764	58,893	682,569		
Lower Willamette Group	9,532		19,810										29,342		
Legal - PLG NRD	(20,210)	14,573	59,724	18,479	31,283	7,095	36,123	12,012	47,340	41,525	21,877	5,599	275,417		
Legal - Crowell and Mooring	10,038	5,619	3,306	4,444	7,169	14,531	6,006	592	2,906	3,681	9,106	3,115	70,513		
Harbor Total	96,797	93,298	124,234	98,267	92,921	83,786	93,211	61,494	83,026	78,455	84,746	67,607	1,057,842		
PGM															
DEQ	6,374	10,893	17,034	4,163	33,358	5,791	4,540	5,043	5,526	4,193			4,614	92,826	
Legal - PLG	263	4,425	(600)		2,513	(640)		1,835	38	1,463	75		-	18,073	
Sediment Investigation 2nd Ph Work Plan	3,465													3,465	
Upland Investigation 2nd Ph Work Plan	2,084	4,033	14,852	5,992	15,620	5,274	3,967	1,872	196	1,035	3,703		58,629		
Permitting							525	2,916	10,792	2,804	1,405		18,442		
Design								13,016	16,156	31,166	231,626		291,964		
PGM Total	12,186	19,350	31,287	10,155	51,491	10,425	9,031	24,682	32,708	5,655	35,080	241,348	483,399		
Siltronic															
DEQ	928	1,155	1,330										3,413		
Legal - PLG - Gasco Siltronic MGP R/FS	(578)												(578)		
Siltronic Total	350	1,155	1,330										2,835		
Grand Total	920,555	1,145,883	1,365,767	1,002,040	1,187,216	1,208,044	981,600	1,036,784	1,640,303	597,109	1,103,324	1,555,914	13,744,537		
Σ(1) Total Gasco (SC, Uplands, Sediments, Siltronic)	806,609	1,031,434	1,210,246	890,129	1,027,610	1,105,838	879,358	932,248	1,521,177	512,998	983,498	1,246,960	12,148,106		