e-FILING REPORT COVER SHEET



COMPANY NAME: NW Natural

| DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No See If yes, submit a redacted public version (or a cover letter) by email. Submit the confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order. |
|--|
| Select report type: RE (Electric) RG (Gas) RW (Water) RT (Telecommunications) RO (Other, for example, industry safety information) |
| Did you previously file a similar report? No Separation Yes, report docket number: UM 1732 |
| Report is required by: Statute Order 15-049 Note: A one-time submission required by an order is a compliance filing and not a report (file compliance in the applicable docket) Other (For example, federal regulations, or requested by Staff) |
| 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. |
| 2019 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. |

250 SW Taylor Street Portland, OR 97204 503-226-4211 nwnatural.com

March 13, 2020

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 2019 Annual Report

In accordance with Rate Schedule 183 and the Commission's Order No. 12-437 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, 2019 and December 31, 2019. 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, CPA

Kyle Walker, CPA Rates/Regulatory Manager (503) 610.7051 kyle.walker@nwnatural.com

Enclosures: Report

Exhibit A Exhibit B

Exhibit C (USB drive by U.S. mail)

NW NATURAL

SCHEDULE 183 - 2019 ANNUAL REPORT ENVIRONMENTAL SITE REMEDIATION AND RECOVERY MECHANISM (SRRM)

JANUARY 1, 2019 – DECEMBER 31, 2019

In accordance with Rate Schedule 183 and the Public Utility Commission of Oregon ("Commission") Order No. 12-437 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, 2019 and December 31, 2019. Subject to that review, NW Natural will include these expenses in the SRRM for rates effective November 1, 2020.

A. 2019 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, 2019 through December 31, of 2019 by site (or activity) are listed below:

| SITE | AMOUNT |
|-----------|---------------|
| Gasco (1) | \$14,685,021 |
| Harbor | 1,224,059 |
| PGM | 1,348,989 |
| Central | 2,588 |
| | \$17,260,657 |

 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 Due to consolidation of two project areas by DEQ the Gasco site includes a portion of the property currently owned by Siltronic Corporation.

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.

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 began implementation of the harborwide remedy through an initial round of baseline sampling. In December 2017, four parties signed an order with EPA agreeing to conduct this initial sampling. NW Natural agreed to provide funding toward this work through the allocation group but was not directly involved performing the sampling. NW Natural paid \$27,500 toward this work in 2019.

In December 2018, EPA requested that Portland Harbor responsible parties, including NW Natural, enter into consent orders to perform remedial design work. EPA offered to delay initiation of consent decree negotiations or other enforcement action for harborwide cleanup in exchange for these remedial design commitments. NW Natural incurred costs in 2019 negotiating with EPA and other responsible parties to address EPA's request for additional remedial design work.

NW Natural also incurred costs in 2019 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 2019, 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. In August 2019, the federal court stayed the case consistent with related litigation over Portland Harbor cleanup costs.

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 plant 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 non-discounted cost of the ROD remedy is \$10.5 million.

The Company prepared remedial design documents for the cleanup in 2019, and worked to obtain necessary permits, access agreements and easements for the cleanup. Construction is expected to be completed in 2020.

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 2019, NW Natural continued work with DEQ to integrate the data sets from the parcel currently owned by Siltronic into the Gasco data set, develop an addendum to the Gasco risk assessment, and addressed DEQ comments on the interim feasibility study submitted in 2018. During 2019, NW Natural also evaluated whether potential source control measures might be appropriate following removal of improvements by a departing tenant and modifications to the liquefied natural gas storage facility.

EPA's January 2017 ROD for Portland Harbor included a selected remedy for the Gasco Sediments site. In 2019, NW Natural worked with EPA to reach agreement on technical approaches for the use of site-specific information and data, including information and data developed for the 2012 Engineering Evaluation/Cost Analysis, to refine technology assignments and other aspects of the ROD. NW Natural also performed remedial design field investigations in 2019; the Company expects to complete those investigations in 2020.

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 2019, NW Natural maintained and operated the system. 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. In October of 2018 the company received a Conditional No Further Action (cNFA) determination from Oregon DEQ which outlines the company's continued obligations for a 5-year period extending beyond the issuance of this cNFA.

During the period of January 2019 through December 2019, the Company finalized and submitted to Oregon DEQ a Contaminated Media Management Plan per the conditions of the sites's No Further action Determination. There were no other actions required during this time period.

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, 2019 to December 31, 2019 period, the Company is providing the major reports and communications with environmental regulators related to the activities described above, found in Exhibit C.

Deferred Environmental Remediation Costs and Insurance Proceeds For the period of January 1, 2019 through December 31, 2019 UM 1732 - Exhibit A

NW Natural

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

| (41,248) | 17,260,657 | 2,588 | 1,348,989 | 1,224,059 | 14,685,021 | | с |
|-----------------------|-------------------------|---------|-------------|-----------|------------------|------------|----------|
| (12,202) | 2,574,334 | 513 | 88,473 | 128,859 | 2,356,489 | Dec-19 | 7 |
| | 1,819,447 | 2,075 | 37,873 | 29,519 | 1,749,981 | Nov-19 | |
| 131 | 1,845,947 | | 511,128 | 123,628 | 1,211,192 | Oct-19 | 0 |
| (17,386) | 1,798,908 | | 40,650 | 133,159 | 1,625,100 | Sep-19 | • |
| 22 | 792,486 | | 43,898 | 181,245 | 567,343 | Aug-19 | |
| | 1,269,895 | | 82,934 | 101,558 | 1,085,403 | Jul-19 | |
| (2,782) | 555,523 | | 16,223 | (13,061) | 552,361 | Jun-19 | |
| 1 | 1,929,230 | | 225,331 | 125,492 | 1,578,406 | May-19 | |
| | 985,378 | | 45,083 | 113,526 | 826,769 | Apr-19 | |
| (4,030) | 1,770,780 | | 155,817 | 102,789 | 1,512,174 | Mar-19 | ~ |
| • | 494,232 | | 34,135 | 78,053 | 382,043 | Feb-19 | |
| • | 1,424,497 | | 67,445 | 119,291 | 1,237,761 | Jan-19 | |
| (f) | (a):(a) $= snm(b)$:(b) | (e) | (p) | (c) | (q) | (a) | 9 |
| 3RD PARTY RECOVERY | REMEDIATION SPEND | CENTRAL | FRONT (PGM) | HARBOR | GASCO (1) | Month/Year | 10 |

Notes:

(1) Includes the operating costs of Gasco Source Control. 14 15 16

NW Natural
UM 1732 - Exhibit B
Task Detail - Deferred Environmental Remediation Costs and Insurance Proceeds
For the period of January 1, 2019 through December 31, 2019

Note:

| Exhibit A Summary |
|----------------------|
| the |
| amounts presented in |
| o the a |
| ols by site agree t |
| Monthly tota |

| Central Study (1) Gasco Sediments | | | | | | • | • | × | ת | 2 | 11 | 12 G | 12 Grand Total |
|--|-----------|---------|-----------|---------|------------|----------|-----------|----------|-----------|-----------|-----------|-----------|----------------|
| Study Gasco Sediments | | | | | | | | | | | 2,075 | 513 | 2,588 |
| Gasco Sediments | | | | | | | | | | | 2,075 | 513 | 2,588 |
| | 155,977 | 4,330 | 236,296 | 956'59 | 222,022 | 970 | 199,352 | 126,056 | 212,541 | 192,336 | 772,778 | 1,178,905 | 3,367,517 |
| DEQ | 2,368 | 1,812 | 4,407 | 7,317 | 12,241 | | 20,939 | 13,987 | 25,678 | 22,394 | 10,924 | 8,412 | 130,478 |
| EE/CA and Data Report | 101,102 | 969 | 197,293 | 465 | 220,545 | | 124,751 | 92,118 | 106,701 | 150,168 | 502,388 | 1,114,260 | 2,610,487 |
| EPA | | | | | | | | | | | 240,887 | | 240,887 |
| Legal - PLG - Gasco Sediments Remedy | -3,845 | 1,822 | 7,790 | 58,173 | -33,370 | 970 | 4,664 | 10,575 | 6,828 | 7,538 | 8,115 | 5,375 | 74,633 |
| Meetings, Budget, Schedule | 13,570 | | 26,807 | | 22,606 | | 7,772 | 9,375 | 10,233 | 9,657 | 10,464 | 14,834 | 125,318 |
| Trustees | 42,782 | | | | | | 41,226 | | 63,102 | 2,580 | | 36,024 | 185,714 |
| Gasco Source Control | 511,949 | 257,824 | 452,838 | 604,269 | 617,289 | 374,583 | 470,982 | -172,691 | 937,672 | 457,414 | 455,837 | 512,184 | 5,480,149 |
| Groundwater Study | 33 | 37 | 37 | 36 | 35 | 35 | 35 | 35 | 35 | 37 | 37 | | 392 |
| Legal - PLG - Gasco Source Controls | 3,750 | 1,470 | 1,350 | -270 | 3,810 | 1,560 | 510 | 5,815 | 1,830 | 2,250 | 270 | 4,320 | 26,665 |
| NWN Direct Costs | 7,652 | 12,771 | 5,059 | 8,421 | 30,256 | 8,770 | 7,040 | 3,551 | 21,912 | 7,376 | 10,589 | 10,503 | 133,900 |
| Operation of Water Treatment Plant | 500,514 | 243,546 | 446,392 | 596,083 | 583,188 | 364,217 | 463,397 | -182,092 | 913,894 | 447,751 | 444,940 | 497,361 | 5,319,193 |
| Gasco Uplands | 569,834 | 119,889 | 823,040 | 156,544 | 739,095 | 176,809 | 415,069 | 613,978 | 474,887 | 561,442 | 521,366 | 665,400 | 5,837,354 |
| DEQ | 15,857 | 29,573 | 22,649 | 68,037 | 46,410 | | 19,455 | 58,586 | 48,158 | 18,348 | 8,725 | | 335,799 |
| Final RI | 148,401 | 40,629 | 107,512 | 52,703 | 90,963 | 24,229 | 52,360 | 110,488 | 39,565 | 45,563 | 96,934 | 52,939 | 862,286 |
| Finalize Risk Assessment | 16,157 | | 138,415 | 103 | 113,854 | | 81,152 | 103,672 | 38,939 | 172,995 | 98,466 | 80,338 | 844,090 |
| Gasco Other | 15,000 | | | | | | 2,000 | | | | | | 20,000 |
| Insurance Litigation | | | | 0 | 0 | | | | | | | 0 | 0 |
| Insurance Recovery | | | | 4,372 | | | | | | | | 208 | 4,580 |
| Interim Action Maintenance | 2,590 | 2,272 | 3,746 | 2,993 | 10,986 | 3,229 | 1,372 | 1,504 | 10,322 | 973 | 1,124 | 6,577 | 47,687 |
| Legal - PLG - Gasco Site Remedy | 10,743 | 13,598 | 12,720 | 1,025 | 16,472 | 8,143 | 3,830 | 5,295 | 5,155 | 33,758 | 26,535 | -2,805 | 134,467 |
| Restoration Evaluation | 24,621 | | 109,732 | | 84,811 | | 13,822 | 6,839 | 9,845 | 9,187 | 44,770 | 104,235 | 410,860 |
| Site Wide FS | 101,465 | 1,365 | 121,202 | 1,951 | 128,277 | 1,155 | 58,883 | 75,098 | 95,144 | 112,371 | 79,158 | 172,143 | 948,212 |
| Site-Wide Technical Services | 179,277 | 11,501 | 164,588 | 6,519 | 120,394 | 119,952 | 100,593 | 159,765 | 147,798 | 76,633 | 90,744 | 158,162 | 1,335,927 |
| Technical Coordination | 15,831 | 20,952 | 36,894 | 18,841 | 32,793 | 20,101 | 28,480 | 27,941 | 26,233 | 37,427 | 34,644 | 28,528 | 328,664 |
| Technical Support for Allocation Process | 39,894 | | 105,583 | | 94,136 | | 50,123 | 61,790 | 53,728 | 54,187 | 40,267 | 65,075 | 564,782 |
| Harbor | 119,291 | 78,053 | 102,789 | 113,526 | 125,492 | -13,061 | 101,558 | 181,245 | 133,159 | 123,628 | 29,519 | 128,859 | 1,224,059 |
| Legal - Crowell and Mooring | 10,269 | 4,650 | 6,781 | 696- | 12,206 | 9,288 | 6,975 | 8,331 | 1 | 4,456 | 236 | 5,189 | 67,413 |
| Legal - PLG | 105,173 | 66,063 | 87,437 | 105,895 | 110,176 | 118,529 | 93,371 | 100,149 | 112,457 | 94,126 | 28,895 | 120,363 | 1,142,632 |
| Legal - PLG NRD | 3,850 | 7,340 | 8,571 | 8,600 | 3,110 | -213 | 1,213 | 3,755 | 3,483 | 13,733 | 388 | 3,308 | 57,135 |
| Trustees | | | | | | | | 69,011 | 17,219 | 11,314 | | | 97,544 |
| Lower Willamette Group | | | | | | -140,665 | | | | | | | -140,665 |
| PGM | 67,445 | 34,135 | 155,817 | 45,083 | 225,331 | 16,223 | 82,934 | 43,898 | 40,650 | 511,128 | 37,873 | 88,473 | 1,348,989 |
| Construction | | | | | | | | 2,006 | | 453,981 | | | 455,987 |
| DEQ | 8,524 | 13,605 | 8,061 | 10,831 | 18,129 | | 15,651 | 5,908 | 1,175 | 2,442 | 200 | 8,592 | 93,616 |
| Design | 16,199 | 5,736 | 75,998 | 18,319 | 123,077 | | 36,119 | 14,788 | 23,103 | 18,090 | 18,030 | 26,974 | 376,433 |
| Legal - PLG | 12,528 | 14,795 | 7,403 | 15,933 | 23,890 | 16,223 | 2,925 | 3,928 | 4,008 | 25,263 | 13,180 | 13,733 | 153,805 |
| Permitting | 11,980 | | 28,377 | | 41,298 | | 15,661 | 6,112 | 5,003 | 3,261 | 1,896 | 24,901 | 138,487 |
| Sediment Investigation 2nd Ph Work Plan Upland Investigation 2nd Ph Work Plan | 9,385 | | 35,979 | | 18.938 | | 12,579 | 11,157 | 7.362 | 8.091 | 4.067 | 14.274 | 9,385 |
| Grand Total | 1 424 497 | 494 232 | 1 770 780 | 985 378 | 1 929 230 | 555 573 | 1 269 895 | 792 486 | 1 798 908 | 1 845 947 | 1 819 447 | 2 574 334 | 17 260 657 |
| | 101111111 | 101/10 | 201101111 | | 2001/000/1 | | 20000000 | 200 | 000/000/1 | 1100000 | 1000 | 10011001 | 1000001 |
| Σ(1) Total Gasco (SC, Uplands, Sediments, Siltronic) | 1,237,761 | 382,043 | 1.512.174 | 826 769 | 1 579 406 | 170 021 | 1 001 | 27.77.7 | 700 | | | | |