

PERIODIC REVIEW

Cascade Natural Gas Facility/Site ID#: 492

512 Decatur Avenue Sunnyside, Washington 98944

Central Region Office

TOXICS CLEANUP PROGRAM

June 2011

PER	IOI	DIC REVIEW	1
1.0	IN	TRODUCTION	1
2.0	SU	MMARY OF SITE CONDITIONS	2
2.1	1	Site Description and History	2
2.2	2	Regulatory Activity	2
2.3	3	Remedial Activities	2
	2.3.	1 Remedial Investigation	. 3
	2.3.	2 Cleanup Action Plan	. 4
2.4	4	Cleanup Levels	5
2.5	5	Points of Compliance	6
2.0	5	Long-Term Monitoring	6
	2.6.	1 Groundwater Monitoring	. 6
	2.6.	2 County Stormwater Drain Sampling	. 7
2.7	7	Restrictive Covenant	7
3.0	PE	RIODIC REVIEW	9
3.1	1	Effectiveness of completed cleanup actions	9
3.2	2	New scientific information for individual hazardous substances for mixtures present at	t
		the Site	10
3.3	3	New applicable state and federal laws for hazardous substances present at the Site	10
3.4 (Current and projected Site use	10
3.5	5	Availability and practicability of higher preference technologies	11
3.6	5	Availability of improved analytical techniques to evaluate compliance with cleanup	
		levels	11
4.0	CO	ONCLUSIONS	12
5.0	RE	FERENCES	13
6.0	AP	PENDICIES	14
6.	1	Vicinity Map	15
6.2	2	Site Plan	16
6.3	3	Groundwater Concentration Time Trend Charts	17
6.4		Environmental Covenant	21
6.5		Photo log	25

1.0 INTRODUCTION

This document is the Department of Ecology's review of site conditions and monitoring data to assure that human health and the environment are being protected at the Cascade Natural Gas property located at 512 Decatur Avenue in Sunnyside, Washington (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 WAC.

Cleanup actions at this Site are being conducted under consent decree No. 98-2-011763. The cleanup actions have resulted in residual concentrations of petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) exceeding MTCA Method A cleanup levels for soil and groundwater established under WAC 173-340-740(2). The MTCA Method A cleanup levels for soil are established under WAC 173-340-740(2). The MTCA Method A cleanup levels for groundwater are established under WAC 173-340-720(3). WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion
- (d) And one of the following conditions exists
 - 1. Institutional controls or financial assurance are required as part of the cleanup
 - 2. Where the cleanup level is based on a practical quantitation limit
 - 3. Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site;
- (b) New scientific information for individual hazardous substances of mixtures present at the Site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site Description and History

The Cascade Natural Gas (CNG) Site is located at the northeast corner of the intersection of Fifth Street and Decatur Avenue in the City of Sunnyside, Yakima County, Washington. The Site is located in the retail center of Sunnyside and is currently occupied by a Cascade Natural Gas office building. A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

Beginning around 1936, several underground storage tanks (USTs) were located on this Site. Yakima County operated the property as a county shop and installed and operated at least two, and perhaps three, of these USTs, one for gasoline and one or two for diesel fuel; the County's ownership and operation of these USTs continued until 1956. From 1956 to 1969 two automobile sales and service operations ("Dealers") occupied the Site.

From the mid-1950s until the mid-1960s, some of the USTs may have been used to store fuel to heat the buildings located on the property. In 1960, a fourth UST, for gasoline, was installed near the three older USTs. By the mid-1960s, all USTs except for the newest gasoline UST were out of service, but all remained at the Site. In the mid-to-late 1960s the Site was covered with asphalt, leaving only the dispenser for the newest gasoline UST visible.

In 1969, CNG began leasing the Site. Then in 1979 CNG purchased the Site. CNG staff have submitted statements that diesel fuel was not used at the Site during their occupancy. CNG did use the new gasoline UST from 1969 until 1988.

2.2 Regulatory Activity

In April 1994, CNG entered into Agreed Order No. DE 94TC-C165, which ordered the performance of a Remedial Investigation/Feasibility Study (RI/FS) at the Site. In 1995, CNG completed a Remedial Investigation/Feasibility Study (RI/FS) at the Site in order to assess potential threats attributable to the contamination. The conclusion of the RI/FS was that long-term groundwater monitoring and natural attenuation and degradation would be sufficient to protect human health and the environment, and was the preferred alternative for cleanup.

In May 1998, Ecology entered into Consent Decree (CD) No. 98-2-01173-3 with CNG with the purpose of providing for remedial action at the Site. This CD required CNG to conduct the remedial action detailed in a Cleanup Action Plan negotiated with Ecology.

2.3 Remedial Activities

In 1990, to comply with Washington's new UST regulations, CNG retained a contractor to excavate the known 550-gallon gasoline UST at the Site. During excavation, CNG discovered

the remaining three other USTs. The presence of the three additional USTs was unknown to CNG prior to this discovery. Additional research indicated the additional USTs were used to store diesel and gasoline, and had capacities of 1,000- to 1,250-gallons. Upon removal, these tanks had obvious visual indications of corrosion. The 550-gallon tank was in good condition.

During tank removal activities, petroleum contaminated soil (PCS) was encountered around each of the USTs. PCS with visual and odor indicators of contamination was excavated and stockpiled at the Site in two phases. Soil samples indicated the presence of gasoline and diesel-range petroleum hydrocarbons (TPH-G and TPH-D, respectively); benzene, toluene, ethylbenzene and xylenes (BTEX); and VOCs. Following the second phase of soil excavation, confirmational soil samples were collected from the limits of the excavation. Samples collected from the sidewalls of the excavation did not contain concentrations of contaminants exceeding MTCA Method A cleanup levels. The bottom of the excavation (approximately 8 feet below ground surface [bgs]) was located just above the ground water table and was saturated. The sample collected from the bottom of the excavation contained TPH-D and TPH-G at concentrations exceeding MTCA Method A cleanup levels.

Following the initial excavation, three monitoring wells were installed at the Site to evaluate potential impacts to groundwater. Samples collected from these wells contained TPH-G, TPH-D, BTEX, and 1,2-dichloroethane (EDC) were detected at concentrations exceeding MTCA Method A cleanup levels.

2.3.1 Remedial Investigation

In 1995, CNG completed a Remedial Investigation (RI) at the Site in order to assess potential threats attributable to the contamination. The RI determined that local shallow groundwater was not used for drinking water, and there were no active water wells in the vicinity of the CNG Site that were completed in the shallow aquifer. Therefore there was no apparent exposure to groundwater in the vicinity of the CNG Site.

None of the contaminants of concern (COCs) were detected in groundwater or soil samples collected downgradient of the Site. None of the soil samples collected during the RI contained TPH-G or TPH-D at concentrations exceeding MTCA Method A cleanup levels. Only benzene was detected in one sample at concentrations slightly exceeding MTCA Method A cleanup levels. It appeared that the vast majority of COC source material was excavated during the remedial excavations conducted following the tank removals.

Data collected during the RI/FS indicated that COCs were not migrating south of the Site beyond a County stormwater drain into soils and groundwater beneath Decatur Avenue. Concentrations of TPH-G, TPH-D, BTEX and EDC were present beneath the Site.

The work plan for RI/FS specified two scenarios for remediation at the Site, based on the results of groundwater analyses. Scenario No. 1 was to be implemented if groundwater samples south of the County drain (MW-7 and MW-8) did not contain TPH-G, TPH-D or BTEX. Under Scenario No. 1, the following actions would be conducted:

- No aquifer testing would be performed;
- No feasibility study would be required;
- In lieu of a feasibility study, a groundwater monitoring program would be implemented at the Site. The monitoring program would include measuring water levels in all wells at the Site, and collecting water quality samples from selected monitoring wells at quarterly intervals for a 3-year period; and
- If, at the end of the 3-year monitoring period, the concentrations of the chemicals of concern in the wells selected for monitoring remain below MTCA Method A cleanup levels, the CNG Site would be considered closed and no further action would be required.

Analysis of data collected during the RI indicated that the conditions were met for Scenario No. 1. It was determined that long-term groundwater monitoring and natural attenuation and degradation would be sufficient to protect human health and the environment, and was the preferred alternative for cleanup. This alternative was implemented through the CD entered into in 1998.

2.3.2 Cleanup Action Plan

The CD filed in 1998 implemented a CAP that followed the recommendations of Scenario No. 1 from the Remedial Investigation work plan. The CAP was based on the following decisions:

- 1. Exposure to contamination remaining at the Site would be limited to construction workers contacting subsurface soils. Institutional controls would effectively protect these workers.
- 2. A restoration time of 30 years is expected for the Site.
- 3. Groundwater near the Site is not used for domestic purposes. City residences are required to use city-provided water. Ecology laws and regulations will prevent the placement of an inappropriate water supply well in the vicinity of the Site.
- 4. Future uses of the Site are not expected to change.
- 5. Institutional controls at the Site will be implemented as a deed restriction.
- 6. A deed restriction will prevent groundwater withdrawal wells from being placed on the Site.
- 7. Contamination migrating from the Site can be effectively monitored through monitoring wells established at the Site. Periodic monitoring of these wells will insure that groundwater will not pose a threat to human health and the environment.
- 8. The toxicity of the hazardous substance at the Site were considered when choosing this cleanup alternative. Due to the low probability of exposure and the institutional controls which will be placed upon the Site Ecology determined that the chosen alternative is protective of human health and the environment.
- 9. The contaminants found at this Site are well documented to be readily remediated at sites with similar conditions. Therefore intrinsic bioremediation will be an effective cleanup alternative at the Site.

The Cleanup technology selected for the Site was intrinsic bioremediation in conjunction with institutional controls and monitoring of the groundwater. This technology was chosen because, due

to Site-specific conditions, it provided an overall protectiveness of human health and the environment.

2.4 Cleanup Levels

Cleanup levels established for the Site are Federal Maximum Contaminant Levels (MCLs) and the MTCA Method B cleanup levels as appropriate. When MCL and appropriate Method B cleanup levels, whichever is most stringent, (as shown in Table 1, below) have been achieved, cleanup will be considered complete and no further cleanup action will be necessary. Method B cleanup levels also allow the use of Method A tabular values from WAC 173340-720 and Practical Quantitation Limits (PQLs) as appropriate.

Constituent	Groundwater Cleanup Level (mg/l) Mg/l	Soil Cleanup Level (mg/kg)	Surface Water Cleanup Level (mg/l) Majl		
TPH-g	1,000 (Method A)	100 (Method A)	NA		
TPH-d	1,000 (Method A)	200 (Method A)	NA		
Benzene	5 (Method A)	0.5 (Method A)	43 (Method B)		
Toluene	1,600 (Method B)	160 (Method B- Groundwater Protection) ¹	48,500 (Method B)		
Ethyl Benzene	800 (Method B)	80 (Method B- Groundwater Protection)	6,910 (Method B)		
Xylenes	16,000 (Method B)	1,600 (Method B- Groundwater Protection)	NA		
1,2-Dichloroethane	5 (Method A)	0.005 ²	59.4 (Method A)		

Table 1Site Cleanup Levels

 Model Toxics Control Act Cleanup Regulation WAC 173-340-740(3)(a)(ii)(A)and Model Toxics Control Act Cleanup Levels and Risk Calculation (CLARC II) Update August 31, 1994. Soil cleanup level is equal to 100 times the Method B groundwater cleanup level.

2 PQL for 1,2-Dichloroethane.

Several of these cleanup levels were modified by Ecology in 2001, however WAC 173-340-702 (12)(a) states that, 'For cleanup actions conducted by the department, or under an order or decree, the department shall determine the cleanup level that applies to a release based on the rules in effect under this chapter at the time the department issues a final cleanup action plan for that release'. Therefore, the original cleanup levels in Table 1 will be used to determine whether the remedy at the Site remains protective of human health and the environment.

A table presenting current MTCA Method A and Method B groundwater cleanup levels applicable to the Site is available in Section 3.3.

2.5 Points of Compliance

The points of compliance for the Site were defined as the contaminated area, including soil and groundwater, in its entirety. Monitoring points, consisting of monitoring wells, were installed around the facility to insure that contamination does not increase with time or migrate toward potential receptors.

2.6 Long-Term Monitoring

2.6.1 Groundwater Monitoring

It was determined that groundwater would be evaluated at the Site in comparison to baseline concentrations. The baseline concentrations are equal to the maximum concentrations of COCs at the Site detected in each well during 1993 and 1994 sampling events. The baseline concentrations for the Site are available in the table below:

Table 2Baseline Concentrations

	MW-1*	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-11	CD-E	CD-W	NEW MTCA A
TPH-D	500	500	7900	1200	1100	500	500	500	5100	500	500	500	500
TPH-G	800	800	5200	4100	5700	800	800	800	800	800	800	800	800
1.2-Dichloroethane	5	<10	460	27	5	5	5	5	10	11	5	5	5
Benzene	5	<1	2900	120	78	<0.5	<0.5	<0.5	<1	<1	<2	30	5
Ethylbenzene	700	700	700	700	700	700	700	700	700	700	700	700	700
Toluene	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Xvlenes	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Table 1. Groundwater and County Drain Baseline Concentrations in ug/L, Revised 2003

* There is no established baseline for MW-1; MTCA A values are substituted

EDC had not been tested in water samples from MW-6, MW-7 and MW-8, when the initial baseline concentrations were established. Following the first round of sampling, a baseline of 5 micrograms per liter (ug/L) was established for EDC in these wells.

The Sampling and Analysis Plan created from CD No. 98-2-01173-3 required that all wells shall be sampled once every three months (quarterly). The frequency of sampling was to be evaluated by Ecology on a yearly basis and could be reduced or maintained depending upon the results of previous analytical results. In addition, if after a five-year period the monitored wells exhibit a trend of decreasing concentrations of the chemicals of concern, then the monitoring program should be re-evaluated by Ecology to assess the potential to terminate the program. In 2007,

Ecology agreed to reduce sampling frequency in wells MW-6, MW-8, and MW-9 to an annual basis. Groundwater sampling was discontinued in MW-2 and MW-10, and sampling continued on a quarterly basis for MW-1, MW-3, MW-4 and MW-5.

The CAP requires that the Ecology Site Manager be notified within 10 days of receipt of final written analytical results which show that any of the agreed upon baseline levels have been exceeded. If the baseline level has been exceeded by 1% or greater, CNG is required to submit an exceedance report to the Ecology Site Manager within 60 days. The exceedance reports are required to assess the cause and significance of the exceedance and are required to propose a response. The Ecology Site Manager may specify responses to be implemented by the PLPs.

A discussion of groundwater monitoring results is located in Section 3.1. Time trend charts of groundwater analytical results for MW-1, MW-3, MW-4 and MW-5 are available as Appendix 6.3.

2.6.2 County Stormwater Drain Sampling

Underground drains were installed by the City of Sunnyside to the south of the Site. The drains were installed to lower the groundwater in the vicinity of the Site and to provide for surface water runoff. The drains were sampled in 1999 and 2001 to determine whether contamination from the Site was infiltrating the drain system. Sample results indicated that contamination, similar to the contamination found in the on-Site groundwater, is present in the drains. The downgradient drain sample point, CD-West, contained TPH-D at concentrations up to 7,200 ug/L. The eastern drain sample point, CD-East, contained TPH-D up to 2,100 ug/L.

It was determined that these drains effectively provide a barrier that prevents contamination from spreading south of the Site. This has been confirmed by sample results from monitoring wells located upgradient and downgradient of the drain.

The drains have not been sampled since 2001. Per the CAP, Continued monitoring of the county drain will be required if a significant increase above the baseline concentration of a COC is identified in well MW-3.

Groundwater sampling data is available as Appendix 6.3.

2.7 Restrictive Covenant

A Restrictive Covenant was recorded for the Site in 1998. The Restrictive Covenant imposes the following limitations:

1. Halogenated organic compounds and petroleum compounds have been found in the soil and groundwater located under the paved portion of the Cascade Natural Gas property and East Decatur Avenue located south of the Site. Remediation or removal of any residually contaminated soil must occur before 'the owner or successor owner alters, modifies, or removes the paving or existing building in any manner that exposes the contamination. Any plans for alteration, modification or removal that may expose the contamination shall be submitted to and approved by Ecology or its successor agency prior to such actions.

- 2. The integrity of monitoring wells placed on the property for the purpose of groundwater monitoring shall be maintained during the period that monitoring is required in Consent Decree No. 98 201173 3. Should future construction activities on the property require abandonment or removal of monitoring wells, such removal or abandonment shall not occur without the prior written approval of Ecology. Said monitoring wells shall be abandoned and replaced in a manner approved by Ecology.
- 3. The owner of the property must give written notice to Ecology, or to its successor agency, of the owner's intent to convey any interest in the property or any portion of the property. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for continued groundwater monitoring and compliance with this restrictive covenant. Copies of this restrict covenant shall be furnished to any transferee of such, real property interest.
- 4. The owner or a successor owner shall allow authorized representatives of Ecology, or its successor agency, the right to enter the property at reasonable times for the purpose of evaluating compliance with the CAP and carrying out its duties under chapter 70.1050 RCW. Duties include but are not limited to the right to take samples inspect remedial actions conducted at the property relating to the contamination identified in the above-referenced RI/FS, and to inspect record that are related to the Cleanup Action.
- 5. Until the appropriate MTCA cleanup levels, as specified in Consent Decree No. 98 201173 3 and CAP, are attained in both soil and groundwater, this property shall not be utilized for residential use.
- 6. The owner must notify and obtain approval from Ecology or its successor agency prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant, or the Consent Decree and its attachments and amendments. Ecology or its successor agency may approve any inconsistent use only after public notice and comment.
- 7. The owner of the Site and any successor owners reserve the right under WAC 173-340-440 to record an instrument which provides that this Restrictive Covenant shall no longer be of any further force or effect. However, such an instrument may be recorded only with the consent of Ecology or its successor agency. Ecology, or its successor Agency, may consent to the recording of such an instrument only after appropriate public notice and comment.

The Restrictive Covenant is available as Appendix 6.4.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

Cleanup actions at the Site have included the following:

- Remedial excavation
- Long-term groundwater monitoring

Cleanup actions began at the Site in 1990 following a UST system removal. In 1998, a CAP was implemented that included long-term groundwater monitoring to monitor natural attenuation of groundwater contamination. This CAP specified groundwater cleanup levels, and groundwater baseline concentrations that would trigger action if exceeded.

Quarterly groundwater monitoring has been conducted at the Site from 1998 through the present, as required by the CAP. There are three primary contaminants of concern remaining consistently above baseline levels in two wells: Benzene and TPH-D in MW-4 (at maximum concentrations of 750 ug/L and 2,000 ug/L, respectively, during the past 4 quarters), and benzene and EDC (at maximum concentrations of 110 ug/L and 11 ug/L, respectively, during the past 4 quarters) in MW-5. These contaminants continue to fluctuate near the baseline concentrations, without significant reductions in the past 13 years.

The CAP states: "If the baseline level has been exceeded by 1% or greater the PLPs may be required to submit an exceedance report to the Ecology Site Manager within 60 days. The exceedance report will assess the cause and significance of the exceedance and will propose a response. The Ecology Site Manager may specify responses to be implemented by the PLPs."

The PLP continues to submit exceedance reports to Ecology; however, a response has not been proposed, as required by the CAP. Additionally, the CAP states that the restoration timeframe for the Site could be as high as 30 years. Approximately 13 years have passed, and contaminants at the Site generally remain stable; though, based on the concentration trend chart in Appendix 6.3, TPH-G concentrations for MW-5 may be increasing. Some contaminants remain slightly above baseline concentrations and well above Site cleanup levels. It is becoming apparent that the 30-year restoration timeframe may be exceeded.

Additionally, drain sample locations CD-East and CD-West have not been sampled since 2001. Results from the 2001 sampling event indicated the presence of TPH-D at concentrations exceeding MTCA Method A groundwater cleanup levels. However, the CAP only requires CD-East and CD-West to be sampled in the event that contaminant concentrations in MW-3 exceed baseline concentrations, which has not occurred.

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits the extraction of groundwater for domestic use and prohibits activities that will result in

the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new relevant scientific information for the contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

MTCA Method A and Method B cleanup levels were selected for the Site. Cleanup levels for several of the contaminants of concern at the Site changed when MTCA Method A and Method B cleanup levels were modified in 2001. These changes are identified in red in the table below.

Analyte	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)				
Benzene	5	5				
Ethylbenzene	30	700				
1,2 Dichloroethane (EDC)	5	5				
Toluene	40	1000				
Total Xylenes	20	1000				
ТРН	1000	NL				
TPH-Gas	NL	1000/800				
TPH-Diesel	NL	500				
TPH-Oil	NL	500				

NL = None listed

However, cleanup levels were specified in the CAP in 1998. WAC 173-340-702 (12)(a) states that, 'the department shall determine the cleanup level that applies to a release based on the rules in effect under this chapter at the time the department issues a final cleanup action plan for that release'. Therefore, the original cleanup levels selected in the CAP will be used to determine whether the remedy at the Site remains protective of human health and the environment.

3.4 Current and projected Site use

The Site remains occupied by Cascade Natural Gas and is used for commercial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented at the Site included limited remedial excavation and long-term groundwater monitoring. These methods do not appear effective at reducing concentrations of contaminants of concern in groundwater at the Site. It is apparent that additional source removal or other active remedial actions may be necessary to achieve Site cleanup within a reasonable restoration timeframe.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection well below MTCA Method A cleanup levels for the contaminants of concern. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The cleanup actions completed at the Site fail to be protective of human health and the environment.
- Groundwater baseline concentrations continue to be exceeded, and Site cleanup levels specified in the CAP have not been met at the Site.
- The PLP has notified Ecology of quarterly exceedances to baseline groundwater concentrations, but they have not provided responses to address these exceedances.
- Contamination was present in samples collected in 2001 from the drains located adjacent to the property. The CAP does not require additional sampling from these locations, and the current status of contamination is unknown.
- Additional remedial actions may be necessary to ensure ground water cleanup levels are met in a reasonable restoration timeframe.
- The Restrictive Covenant for the property is in place. The covenant serves to help prevent exposure to the contaminants remaining in soil and groundwater at the Site.

Based on this periodic review, the Department of Ecology has determined that the remedial actions at the Site fail to be protective of human health and the environment. The requirements of the Restrictive Covenant are being met at the Site; however additional remedial actions may be required by the property owner to meet Site cleanup levels within a reasonable restoration timeframe. It is the property owner's responsibility to continue to inspect the Site to assure that the requirements of the Restrictive Covenant are being met.

5.0 **REFERENCES**

Ecology. Agreed Order No. DE 94-TC-C165. April 15, 1994.

Ecology. Consent Decree No. 98-2-01173-3. April 2, 1998.

Ecology. Restrictive Covenant. July 7, 1999.

Pacific Groundwater Group. Results of June, 2010 Groundwater Sampling. August 10, 2010.

Ecology. Site Visit. June 2, 2011.

6.0 **APPENDICIES**

6.1 Vicinity Map



6.2 Site Plan



6.3 Groundwater Concentration Time Trend Charts









*** *

CASCADE NATURAL GAS FS 492

6.4 Environmental Covenant

.

,

Recording Requested By And When Recorded Return To: Ralph Boyd Cascade Natural Gas Corporation 222 Fairview Avenue North Seattle, Washington 98109 Document Title(s) (or transactions contained herein): Restrictive Covenant (Ground Lease) Grantor: Cascade Natural Gas Corporation Granter: The Public

Legal Description (abbreviated):

Additional on page ____

Encompassing Lots 15 through 26 and the south half of Lot 27, Block 13, Sunnyside, Washington according to the official plat thereof recorded in volume "A" of Plats, page 59, records of Yakima County, Washington.

Assessor's Tax Parcel ID#: 221025-24406



RESTRICTIVE COVENANT Cascade Natural Gas Corporation 512 East Decatur, Sunnyside, Washington

The property that is subject to this Restrictive Covenant is the subject of a remedial action under Chapter 70.105D RCW. The cleanup action to be performed at the Cascade Natural Gas property (hereinafter referred to as the "Site") is described in the Cleanup Action Plan ("CAP") which is Exhibit B of Consent Decree No. 98 201173 3 ("Decree") entered in <u>State of Washington Department of Ecology v. Cascade Natural Gas Corporation and County of Yakima</u>. The Site is legally described as follows:

Encompassing Lots 15 through 26 and the south half of Lot 27, Block 13, Sunnyside, Washington according to the official plat thereof recorded in Volume "A" of Plats, page 59, records of Yakima County, Washington.

The remedial action undertaken to cleanup the Site (hereafter the "cleanup action") is described in the Remedial Investigation/Feasibility Study ("RI/FS") submitted by SECOR International Inc. to the Washington State Department of Ecology ("Ecology") Central Regional Office and Cascade Natural Gas Corporation (report dated 26 November 1995). This document is on file at Ecology Central Regional Office in Yakima, Washington. This Restrictive Covenant is required by Ecology as defined in WAC 173-340-440 because the Cleanup Action at the Site resulted in residual concentrations of petroleum and other organic products which exceed Model Toxics Control Act (MTCA) cleanup levels for groundwater and soil established under WAC 173-340-720(2) and 740(2).

The undersigned, Cascade Natural Gas Corporation, is the fee owner of real property in the County of Yakima, State of Washington. The contamination that is the subject of this restrictive covenant is described in the above-referenced report. The property owner makes the following declaration as to limitations, restrictions, and uses to which the Site may be put, and specifics that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Site.

Section 1: Halogenated organic compounds and petroleum compounds have been found in the soil and groundwater located under the paved portion of the Cascade Natural Gas property and East Decatur Avenue located south of the site. Remediation or removal of any residually contaminated soil must occur before the

- 1 -



Washington Department of Ecology

1.1

owner or successor owner alters, modifies, or removes the paving or existing building in any manner that exposes the contamination. Any plans for alteration, modification or removal that may expose the contamination shall be submitted to and approved by Ecology or its successor agency prior to such actions.

Section 2: The integrity of monitoring wells placed on the property for the purpose of groundwater monitoring shall be maintained during the period that monitoring is required in Consent Decree No. 98 201173 3. Should future construction activities on the property require abandonment or removal of monitoring wells, such removal or abandonment shall not occur without the prior written approval of Ecology. Said monitoring wells shall be abandoned and replaced in a manner approved by Ecology.

Section 3: The owner of the property must give written notice to Ecology, or to its successor agency, of the owner's intent to convey any interest in the property or any portion of the property. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for continued groundwater monitoring and compliance with this restrictive covenant. Copies of this restrict covenant shall be furnished to any transferee of such, real property interest.

Section 4: The owner or a successor owner shall allow authorized representatives of Ecology, or its successor agency, the right to enter the property at reasonable times for the purpose of evaluating compliance with the CAP and carrying out its duties under chapter 70.105D RCW. Duties include but are not limited to the right to take samples, inspect remedial actions conducted at the property relating to the contamination identified in the above-referenced RI?FS, and to inspect records that are related to the Cleanup Action.

Section 5: Until the appropriate MCTA cleanup levels, as specified in Consent Decree No. 98 201173 3 and CAP, are attained in both soil and groundwater, this property shall not be utilized for residential use.

Section 6: The owner must notify and obtain approval from Ecology or its successor agency prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant, or the Consent Decree and its attachments and amendments. Ecology or its successor agency may approve any inconsistent use only after public notice and comment.

Section 7: The owner of the Site and any successor owners reserve the right under WAC 173-340-440 to record an instrument which provides that this Restrictive Covenant shall no longer be of any further force or effect. However, such

- 2 -



an instrument may be recorded only with the consent of Ecology, or its successor agency. Ecology, or its successor Agency, may consent to the recording of such an instrument only after appropriate public notice and comment. Ralph Boyd, President For Cascade Natural Gas Corporation 98 Ja Date State of Washington) ss. County of King) July , 1998, before me On this personally appeared Ralph Boyd, to me known to be the President of the corporation that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation. July 1998 Dated: 1 WES Netary Public for Washington John L West (Printed or Stamped Name of Notary) My appointment expires: 5-2-02 TION mun ZW80758D - 3 -7066258 Page: 4 of 4 07/07/1998 88:30A Yakima Co, WA This is to certify that the foregoing is a true copy of a record on file in the office of the Auditor of Yakima County, Washington. Filed for record in this office on the <u>That of State</u>, <u>1996</u>, <u>as record location number</u> <u>The Debe 2005</u>. IN WITNESS WHEREOF, Thave hereunto set my hand and official seal this the tax of any year of a way of day of DOUG COC L Yakir na Co flor, BY: **Deputy Auditor**

6.5 Photo log Photo 1: CNG Site w/ MW-6 in Foreground – from the southwest



Photo 2: CD-East w/ CNG Building in Background – from the southeast





Photo 3: CNG Building and Parking Lot – from the northwest.

Photo 4: CNG Equipment Storage Yard – from the west

