



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 20, 2016

Mr. Amarjeet Singh
GSM Investments LLC
15235 SE 273rd Pl
Kent WA 98042

Re: Further Action at the following Site:

- **Site Name:** Main Street Grocery
- **Site Address:** 901 Martin Luther King Jr. Way, Tacoma, WA
- **Facility/Site No.:** 53355321
- **Cleanup No.:** 12291
- **VCP Project No.:** SW1481

Dear Mr. Singh:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Main Street Grocery facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Petroleum and constituents to the Soil.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. *Limited Phase II Site Assessment*, Northwest Environmental Solutions, Inc., January 9, 2014.
2. *Environmental Actions Report*, George R. Webster, June 18, 2014.

These documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You may make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.

The Site is located on the southeast corner of the intersection of Martin Luther King Jr. Way and South 9th Street in Tacoma, Pierce County, Washington (Figure 1). It is comprised of two tax parcels with a combined area of 0.3 acres. The business building, with the address of 911 Martin Luther King Jr. Way, is located on a third parcel to the south and is 0.15 acres. The building at the Site contains the Main Street Grocery and several other small businesses.

The available information suggests that the underground storage tank system (UST) was installed in 1984. It consists of three 11,000-gallon USTs. One of the USTs was

decommissioned in place at an unknown time in the past. No information regarding the closure in place of this tank was found.

Topography at the Site is flat. The majority of the area is paved with planters on the northern corners. The surrounding area is commercial/residential. A community park that has fun playground equipment is located to the west of the Site.

A Phase II report was conducted at the Site in 1998, however, a complete copy of the report was not been found in Ecology's file nor provided by the consultant for review.

An UST closure report was done in 1999. Ecology did not find a copy of this report in the file. The Ecology Closure and Site Assessment Notice form did state that no contamination was found. The Site Assessment Checklist did not include any relevant information other than the statement "see enclosed report."

In January 2014, a phase II investigation consisting of aerial photographs review, interviews of people associated with the Site, database reviews, visual inspection, and advancement of three direct push borings was conducted at the Site.

Soils encountered during drilling were described as brown sand to brown sand with gravel. Groundwater was not encountered at the total depth of 17 feet below ground surface (bgs).

Results of this investigation found a detection of benzene at 14 feet bgs in sample 2AE (figure 2). The concentration was 0.038 milligrams per kilogram (mg/kg). The Method A cleanup level for benzene is 0.03 mg/kg. Total Petroleum Hydrocarbons-Gasoline (TPH-G), toluene, ethylbenzene, and xylenes were found in the sample but were below their Method A cleanup levels.

Sample 3N, collected at 5 feet bgs on the east side of the dispenser island, was analyzed using only the Hydrocarbon Identification (HCID) method. This is a qualitative analytical method and does not determine quantity. Although the results were non-detect for TPH-G and Total Petroleum Hydrocarbons-Diesel extended (TPH-Dx), no analyses were done for benzene, toluene, ethylbenzene, or xylenes (BTEX).

In March, 2014, the text in the *Environmental Actions Report* states that a "Phase III" was done at the Site that consisted of excavation at specific areas, one of them being the location of sample 3N. The area of the drain to the oil water separator was also excavated. The area around sample location 2AE was excavated to approximately 3 feet. Samples were collected at depths of 1 foot, 2 feet, and 3 feet. Samples were collected for

laboratory analysis during this work. No discussion of the results are presented in the text.

In April, 2014, additional investigations were done. A direct push sample was collected from what the text in the *Environmental Actions Report* described as beneath the closed in place UST. Again, no documentation of this work or the sampling location has been provided to Ecology for review.

In June, 2014, tightness testing was conducted on the UST system. The form provided to Ecology lists the tanks as passing the test. The form indicates that tightness testing was not performed on the lines.

Based on a review of the above-mentioned documents, Ecology has the following comments:

General comments:

1. Overall, the reports did not contain enough information to make an informed decision as to the adequacy of the work done at the Site. The following comments will have to be addressed before a determination of no further action can be made.
2. A section on the hydrogeology of the area needs to be included. Impacts to groundwater have not been demonstrated to be absent and as such will need to be investigated.
3. The dates of work at the Site need to be given.
4. A figure showing sampling locations in relation to all Site features and streets needs to be provided.
5. No logs of the borings completed at the Site are given in either report. These need to be included in the reports.
6. A copy of the report describing the in-place closure of the third tank was not available for review. It should be provided to Ecology.

Comments on the January 2014 report:

1. Most of the required sections in the report had "NA" as the sole content. The information not given is required, and "NA" is not acceptable.

2. No sampling or sample preservation protocols were detailed in the report. Without this information, the sample results are not useable.
3. A figure showing the relationship of features at the Site to surrounding facilities is needed. The one figure in the report has no north arrow or streets shown. A general location figure was also not included.
4. The report states that HCID found TPH-O present at sampling location 3N-5 yet no quantitative analysis was done. BTEX should also have been analyzed. These analytical results are needed for characterization of this area.
5. The report states that air photos, interviews, and database reviews were conducted but nowhere in the report are the results of this work provided. It should be included in the report.
6. The Site figure does not show the location of the closed-in-place UST. Since no information was found on the decommissioning of this tank, samples need to be collected to verify that it did not leak.
7. The detection of benzene above the Method A cleanup level was collected in boring 2AE at 14 feet bgs. Samples were not collected either above or below the 14 foot sample so vertical extent is not known.
8. The 2014 report states that City of Vancouver has jurisdiction for fire protection at the Site in section 5.1.3. Please correct to the appropriate municipality.

Comments on the June 2014 report:

1. The text does not specify the laboratory methods the consultant used for analysis of gasoline and BTEX samples. Re report did not describe how the consultant collected, preserved, or transported samples. Please provide this information.
2. The poor quality of the photos used for locations of investigations at the Site make it very difficult to determine the adequacy of the sampling locations. Please provide one figure that shows all locations of investigation/work sampling.
3. From the figure that shows the location of the excavation done at the drainage ditch, it appears that the location of the January 2014 sample 3N was at the very edge. It doesn't appear likely that the contaminated area was even reached during the excavation. The sample collected was analyzed only for NWTPH-HCID. The later

analysis for oil had a result well below the Method A cleanup level. The area should also have been sampled for TPH-G and BTEX.

4. The June 2014 report states that the location of the benzene detection was backfilled with pea gravel. Why wasn't this noted in the January 2014 report? If it wasn't there, then the excavation did not address the area of contamination.
5. The text states that "It could not be remembered or determined if the sample was of "soil" or "pea-gravel." Since no boring logs or soil descriptions, this statement further shows that the information collected is not useable. Additional characterization work will need to be done. When it is, adequate information will need to be collected so a determination of the adequacy may be determined.
6. State the rationale for collecting samples in the UST work area at depths of "a couple of inches" and the other depths cited. A figure showing the locations and sample numbers of these samples is needed.
7. The text states that a soil sample was collected from beneath the closed in place UST. How was this done? Was the push probe advanced through the tank?
8. The text states that the benzene contamination had to have occurred after the third UST was closed in place since the site assessment done at that time did not find anything. Since the author appears to have seen this report from which this conclusion was drawn, a copy needs to be sent to Ecology for verification of the conclusion.
9. The "Release Cause Concepts" do not appear to be based on sound scientific logic. Although recent tightness testing of the UST system results indicated the tanks were tight, it does not mean that a leak is not occurring. Current technology is not sensitive enough to preclude any and all leaks since it can only detect leaks above a threshold such as approximately 0.02 gallons per hour. This concept needs to be rewritten to better reflect reality.
10. The text cites an "error release." It is unclear what this phrase means and thus needs a definition.
11. The cited Appendices B and C are not included in the report. These need to be provided so a complete review of all information can be done.
12. Appendix D is lab results dated March 24, 2014. No figure showing the locations of these solid samples is included in the report. Results for a matrix spike/matrix spike

duplicate for a water sample, dated March 21, 2014, is also included. The relevance of this sample to the Site is not known.

13. Appendix E – soil result for oil, 242 mg/kg. No chain of custody form for this sample was provided.
14. Appendix F contains a chain of custody form listing one soil sample, 3-A to be analyzed for BTEX/NWTPH-G, dated April 4, 2014. The results, dated April 10, 2014, in the appendix are for a matrix spike/matrix spike duplicate for a water sample. State how this is relevant to the Site. The results for the one soil sample are not included.
15. In accordance with WAC 173-340-7490, a Terrestrial Ecological Evaluation (TEE) needs to be completed for the Site. Please fill out the TEE form and any supporting information (as appropriate) and submit it to Ecology. The form can be found on our website at <http://www.ecy.wa.gov/biblio/ecy090300.html>.
16. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Please be sure to submit the previous data not submitted yet, as well as any future data, in this format. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards.

Ecology has determined that the full extent of the contamination attributable to the petroleum hydrocarbon contamination at the Site has not been determined. Once the Site has been fully delineated, Ecology has determined the following points of compliance would be appropriate for use at the Site:

Soil – Protection of groundwater: “For soil cleanup levels based on the protection of ground water, the point of compliance shall be established in the soils throughout the site.”¹

¹ WAC 173-340-740(6)(b)

Soil – Direct Contact: “For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the site from the ground surface to fifteen feet below the ground surface.”²

Groundwater – The highest beneficial use for the Site groundwater is potable use since the Site is within an identified aquifer recharge area. “The point of compliance for the groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.”³

Once the Site soil is fully delineated, the applicable MTCA Method A Soil cleanup levels will be:

TPH-G	30 mg/kg
TPH-D	2,000 mg/kg
TPH-O	2,000 mg/kg
Benzene	0.03 mg/kg
Toluene	7 mg/kg
Ethylbenzene	6 mg/kg
Xylenes	9 mg/kg
EDB	0.005 mg/kg

The proposed groundwater MTCA Method A CULs will be:

TPH-G	800 µg/L
TPH-D	500 µg/L
TPH-O	500 µg/L
Benzene	5 µg/L
Toluene	1,000 µg/L
Ethylbenzene	700 µg/L
Xylenes	1,000 µg/L
EDB	0.01 µg/L

² WAC 173-340-740(6)(d)

³ WAC 173-340-720(8)(b)

If analytical results indicate total petroleum hydrocarbon impacts are above applicable MTCA cleanup levels then additional cleanup and characterization work may be required.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

Actions taken to date include excavation of contaminated soil. Disposition of the soil was not identified in the reports.

Additional characterization will need to be done before a cleanup action can be selected.

4. Cleanup.

Ecology has determined the cleanup you performed does not meet any cleanup standards at the Site.

Limited investigation and excavation have been done at the Site. Disposition and documentation of soil removed was not provided.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you

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performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (360) 407-6263 or e-mail at cjoh461@ecy.wa.gov.

Sincerely,



Carol A. Johnston
Toxics Cleanup Program

CAJ: ANF

By Certified Mail [91 7108 2133 3939 7075 2493]

Enclosures (2 figures)

cc: George R. Webster
Rob Olsen, TPCHD
Richelle Perez, Ecology
Dolores Mitchell, Ecology

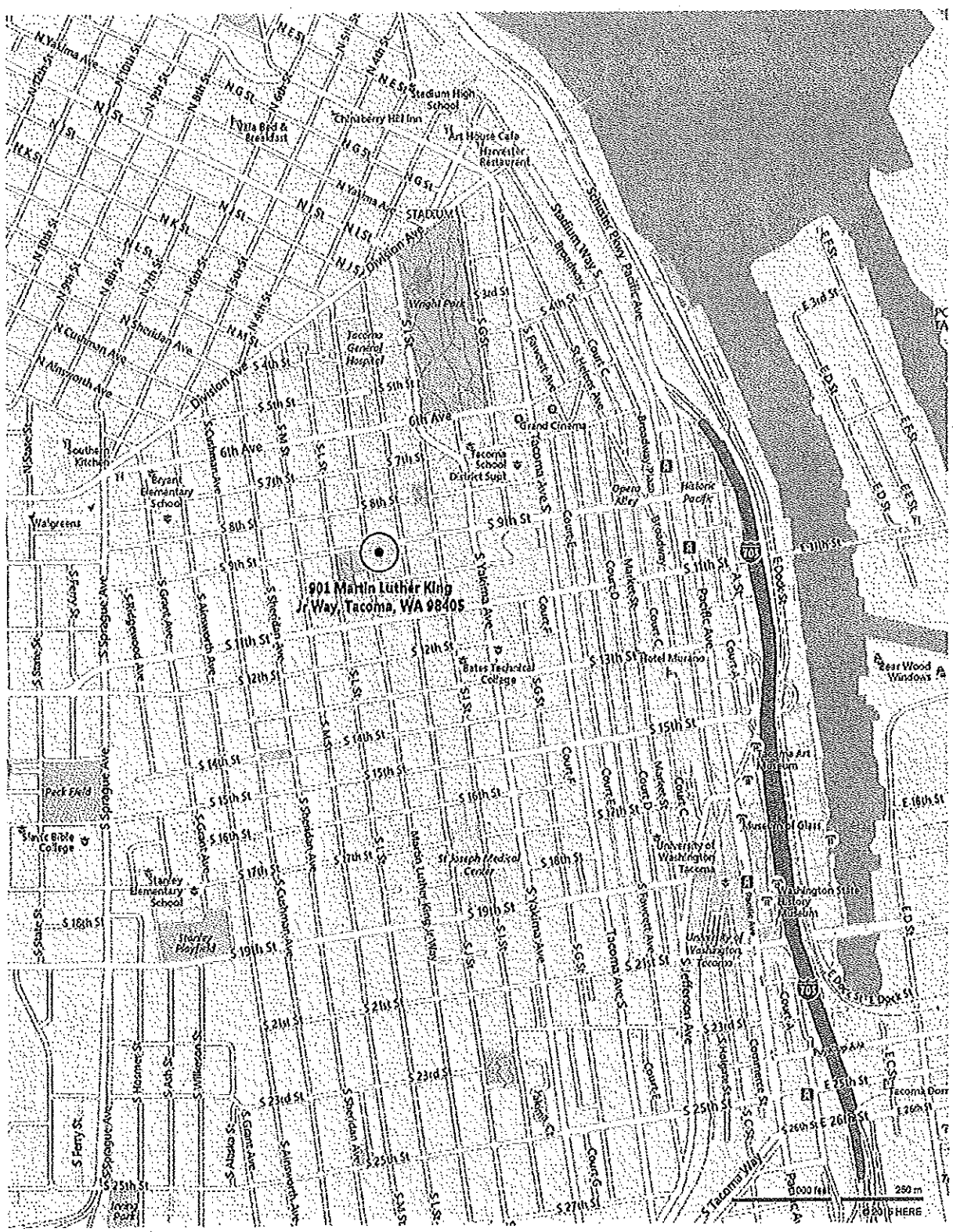
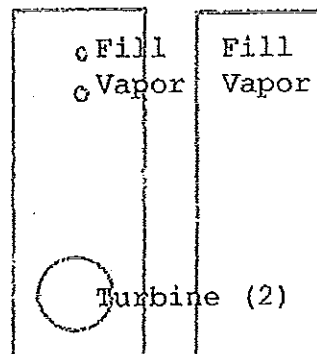


Figure 1

Northwest Environmental Solutions, Inc.

Main Street Grocery
901 Martin Luther King Jr. Way
Tacoma, WA. 98405

2AE-14



1AW-5
1AW-14

Product lines
(4) Dispensers
(2) Vent Lines

3N-5

Office: 406 A 112th Street E. Tacoma, WA. 98445
Mailing Address: P.O. Box 1583 Sumner, WA. 98390
253-241-6213 (P) 253-537-8378 (F) nesinc@hotmail.com (E)

FIGURE 2

