

## **PERIODIC REVIEW**

North Star Lodge Facility/Site ID #: 55484252

808 North 39th Avenue Yakima, Washington 98902

**Central Regional Office** 

TOXICS CLEANUP PROGRAM

September 17, 2008

1.0	INTRODUCTION	1
2.0	SUMMARY OF SITE CONDITIONS	
2.1	Site History	2
2.2	2 Site Investigations	2
2.3	3 Remedial Activities	2
2.4	4 Restrictive Covenant	3
3.0	PERIODIC REVIEW	4
3.1	Effectiveness of completed cleanup actions	4
3.2	2 New scientific information for individual hazardous substances for mixtures present at	
	the Site	4
3.3	New applicable state and federal laws for hazardous substances present at the Site	4
3.4	4 Current and projected Site use	5
3.5	5 Availability and practicability of higher preference technologies	5
3.6	5 Availability of improved analytical techniques to evaluate compliance with cleanup	
	levels	5
4.0	CONCLUSIONS	6
4.1	Next Review	б
5.0	REFERENCES	7
6.0	APPENDICES	8
6.1	Vicinity Map	9
6.2	2 Site Map1	0
6.3	3 Environmental Covenant1	1
6.4	1 Photo log1	4

## **1.0 INTRODUCTION**

This document is the Department of Ecology's review of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected at the North Star Lodge property (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in residual concentrations of lead, arsenic and dichlorodiphenyltrichloroethane (DDT) that exceed MTCA Method A cleanup levels for soil established under WAC 173-340-740(2). WAC 173-340-420 (1) requires that " if the department selects or approves a cleanup action that results in hazardous substances remaining at a site at concentrations which exceed Method A or Method B cleanup levels established under WAC 173-340-700 through 173-340-760 or if conditional points of compliance have been established, the department shall review the cleanup action no less frequently than every five years after the initiation of such cleanup action to assure that human health and the environment are being protected".

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(2)]:

- (a) The effectiveness of ongoing or completed cleanup actions;
- (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 History

The North Star Lodge Site is located in the City of Yakima, Yakima County, Washington. A vicinity map is available as Appendix 6.1 and a site plan is available as Appendix 6.2. Following remedial activities that took place between 1999 and 2000, a restrictive covenant was recorded for the property and the Site received a No Further Action determination in 2002.

The Site was a portion of a larger orchard that operated for approximately 40 years prior to development in 1999. The North Star Lodge portion of the orchard was not the location of any known buildings, material storage areas, equipment washout areas, or other activities likely to concentrate pesticides or agricultural chemicals. Contamination at the Site was likely the result of standard agricultural pesticide application.

In 1998, Fulcrum Environmental Consulting, Inc., was hired to conduct a Phase I Site Assessment (ESA) of the property located at North 39th and Castlevale Avenue in Yakima, Washington. The Phase I ESA was conducted to facilitate new construction on Lots 1-3 of the Village View Business Park. Yakima Memorial Hospital purchased the lots for the purposes of planning and constructing a cancer care facility called the North Star Lodge.

### 2.2 Site Investigations

The Phase I ESA conducted in 1998 determined that the Site had been occupied by a fruit orchard. Lead and arsenic contamination had been confirmed on surrounding properties with similar land use histories. Rather than conduct sampling at that time, it was assumed that the Site contained lead and arsenic concentrations in soil that exceeded MTCA Method A cleanup standards.

Soil sampling was conducted prior to remedial activities in 1999. Lead, arsenic, and DDT were detected above an average depth of 2 feet below ground surface (bgs), and were not detected above natural background concentrations at depths below 6 feet bgs.

## 2.3 Remedial Activities

On-site management of contaminated soils was selected as the most appropriate remedial action for the Site. This remedial option was selected because contamination was spread throughout the entire Site. Off-site disposal would require excavation of a large quantity of soil and would have subjected the property owner to costs disproportionate to the environmental benefit. A remedial plan was drafted that incorporated site investigation and remedial activities into the construction of the North Star Lodge. Generally, contaminated surface materials from the Site were used as fill during construction. It was determined that approximately 1,800-cubic yards of material could not be used, and would need to be relocated offsite to accommodate final site grading. These excess soils were relocated to the other side of 39th Street, to a property that has the same ownership as the Site and was part of the same historic orchard property. The relocated soil was graded and stabilized with grass.

Approximately 1,200 cubic yards of contaminated soils were contained onsite as part of the remedial action. Due to site grading requirements, most of this material was relocated to the south end of the Site. These materials were covered with impermeable parking, sidewalk, or building footprint areas; or were capped with 6 inches of clean topsoil and an additional 2 to 3 inches of landscaping material such as sod or bark.

In 2002, a restrictive covenant was recorded for the Site and a No Further Action letter was sent to the property owner and the site status was changed to reflect a No Further Action determination.

### 2.4 Restrictive Covenant

The Restrictive Covenant recorded for the Site in 2002 imposes the following limitations:

- 1. Remediation or removal of the contaminated soil must be addressed before the Site is altered or modified.
- 2. Any activity that may interfere with the integrity of the remedial action is prohibited.
- 3. Any activity that may result in the release of a hazardous substance that remains as part of the remedial action is prohibited.
- 4. The owner or successor owner of the Site must give written notice of intent to convey any interest in the Site.
- 5. The owner must restrict leases to uses and activities consistent with the restrictive covenant.
- 6. The owner or successor owner must notify and obtain approval from Ecology prior to any use of the Site that is inconsistent with the terms of the Covenant.
- 7. The owner or successor owner shall grant Ecology the right to enter the Site at reasonable times.
- 8. The owner or successor owner reserves the right to remove this Covenant with Ecology's approval.

## 3.0 PERIODIC REVIEW

### 3.1 Effectiveness of completed cleanup actions

Clean soil, asphalt, and building structures continue to serve as a cap for the Site and eliminate the human exposure pathways (ingestion, contact) to contaminated soils. Based upon the site visit conducted on September 18, 2008, no repair, maintenance or contingency actions have been required. A photo log is available as Appendix 6.4.

The Restrictive Covenant for the Site was recorded and is in place. Appendix 6.3 is a copy of the Restrictive Covenant for the Site. This Restrictive Covenant 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. This Restrictive Covenant serves to assure the long term integrity of the cap.

Conclusions:

Soils with arsenic, lead, and DDT concentrations higher than MTCA Method A cleanup levels are still present at the Site. However, the cap prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the integrity of the caps will be protected through maintaining the current use of the Site.

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

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

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

The cleanup at the site was governed by Chapter 173-340 WAC (1996 ed.). WAC 173-340-702(12)(c) [2001 ed.] provides that,

"A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment."

Contamination remains at the site above MTCA Method A cleanup levels and the cleanup action is still protective of human health and the environment.

### 3.4 Current and projected site use

The Site is currently 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 included removal/recycling of hazardous substances as well as containment, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

# 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. The presence of improved analytical techniques would not effect decisions or recommendations made for the site.

## 4.0 CONCLUSIONS

- The cleanup actions completed at the Site is protective of human health and the environment.
- Soils cleanup levels have not been met at the Site; however, under WAC 173-340-740(6)(d), the cleanup action is determined to comply with cleanup standards, since the long-term integrity of the containment system is ensured and the requirements for containment technologies in WAC 173-340-360(8) have been met.
- The Restrictive Covenant for the property is in place and will be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant have been satisfactorily completed. No additional actions are required by the property owner. It is the property owner's responsibility to continue to inspect the site to assure that the integrity of the cap is maintained.

### 4.1 Next Review

The next review for the site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

## 5.0 **REFERENCES**

Fulcrum Environmental Consulting, Inc., March 2002, Report of Voluntary Remedial Action

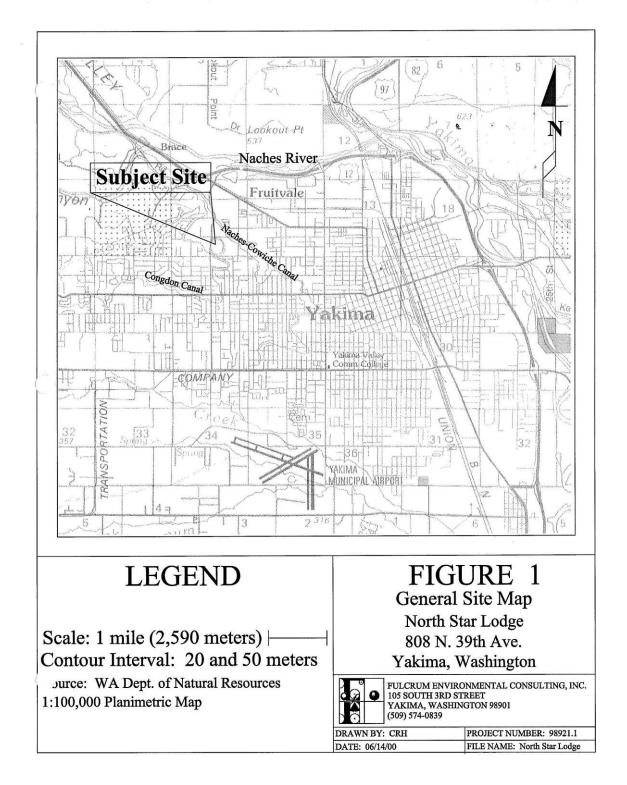
Ecology, 2002, No Further Action Letter

Ecology, 2002, Restrictive Covenant

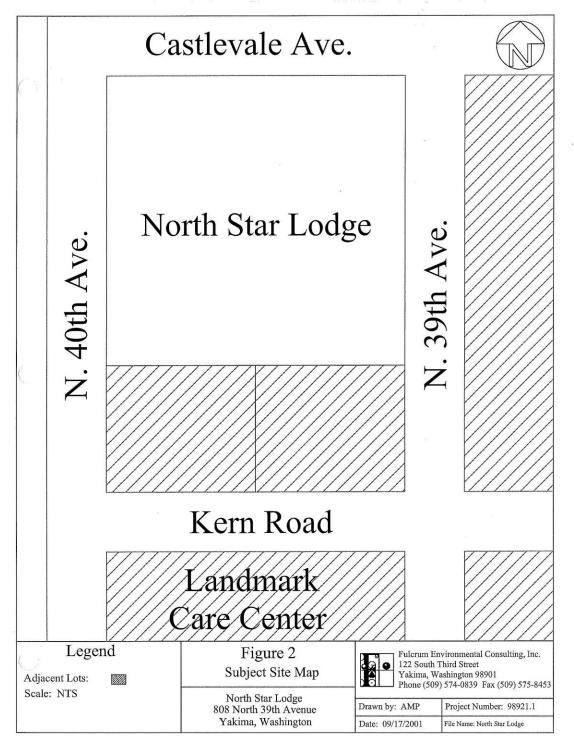
Ecology, 2008, Site Visit

# 6.0 APPENDICES

### 6.1 Vicinity Map



### 6.2 Site Map



#### 6.3 Environmental Covenant

Yakima Valley Memorial Hospital c/o Administration 2811 Tieton Drive Yakima WA 98902

#### Restrictive Covenant North Star Lodge

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030 (1) (f) and (g) and WAC 173-340-440 by Yakima Valley Memorial Hospital (hereafter "Memorial Hospital"), its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following document: Report of Voluntary Remedial Action prepared by Travis Trent of Fulcrum Environmental Consulting, Inc. This document is on file at Ecology's Central Regional Office.

This Restrictive Covenant is required by WAC 173-340-440 because the Remedial Action resulted in residual concentrations of Arsenic, Lead, and Dichlorodiphenyltrichloroethane (DDT) which exceed the Model Toxics Control Act Method A unrestricted use levels for soil established under WAS 173-340-740. Accordingly, certain engineering controls have been put in place on the Property to deal with such soil.

The undersigned, Memorial Hospital, is the fee owner of real property (hereafter "Property") in the County of Yakima, State of Washington, which is subject to this Restrictive Covenant. The Property is legally described as follows:

181315-

**Parcels 42406, 42407, and 42408**: Lots 1,2, and 3, of Village View Business Park, according to the official plat thereof, recorded November 20, 1997, under Auditor's File No. 7035057, records of Yakima County, Washington.

**Parcel 42414:** Lot 9 of Village View Business Park, adjacent from the three above parcels, is also included within the deed covenant. This parcel was used to place soil removed from the above parcels.

Memorial Hospital makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies 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



North Star Lodge – Restrictive Covenant Page 2

under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

1. The Property contains Arsenic, Lead, and DDT concentrations in soil located under impermeable surfaces such as the building and associated asphalt areas; or under sod and 6" of clean topsoil in permeable surface areas such as landscaped areas. The Owner shall not alter, modify, or remove the existing structure or clean top soil/sod barrier in any manner that may result in the release or exposure to the environment of soil containing Arsenic, Leads, DDT, or create a new exposure pathway without prior written approval from Ecology.

Any activity on the Property that may result in the release or exposure to the environment of the soil containing Arsenic, Lead, DDT that was contained as part of the Remedial Action or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited on this site include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface greater than 6" with a rod, spike, or similar item, bulldozing or earthwork.

- 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
- 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
- 4. The Owner of the property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. The Owner shall consummate no conveyance of title, easement, lease, or other interest in the Property without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
- 5. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property. This provision shall not require notification of residents of individual beds or suites within the Property while being used essentially in its present fashion.
- 6. The Owner must notify and obtain approval from Ecology prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
- 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.



North Star Lodge -- Restrictive Covenant Page 2

8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, finds it appropriate to do so.

Executed this \_ & day of \_ May \_, 2002.

MEMORIAL HOSPITAL

bubloch By: ohn G. Vornbrock Senior Vice President

State of Washington County of Yakima

I certify that I know or have satisfactory evidence that  $\underline{JOHN} \ \underline{G} \ \underline{VORNBROCK}$  is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument, on oath stated that (he/she) was authorized to execute the instrument and acknowledged it as the <u>Senior Vice President</u> of <u>Yakima</u> <u>Valley Memorial Hospital</u> to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: May 8, 2002



Millie Haupt Signature

Notary Pitle

10-15-04 My appointment expires



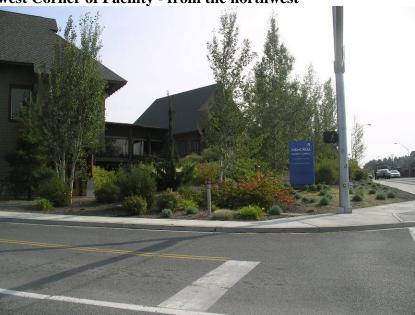
## 6.4 Photo log

Photo 1: Front of Facility - from the east



Photo 2: Parking Area - from the south





#### Photo 3: Northwest Corner of Facility - from the northwest

Photo 4: Resident Walking Path - from north

