Asbestos Abatement Report

Former Burns Air Force Site
Harney County, Oregon

for
Oregon Department of Environmental Quality

November 8, 2011
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GeoEngineers

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Asbestos Abatement Report

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Harney County, Oregon
Task Order 58-08-48

File No. 2787-044-01

November 8, 2011

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1.0 INTRODUCTION AND PURPOSE

This report describes the asbestos abatement activities in October 2011 at the former Burns Air Force site in Harney County, Oregon (site). GeoEngineers managed the removal and disposal of asbestos containing materials (ACM), including cement asbestos board (CAB) and ACM tile from the ground surface in the vicinity of structures that were demolished in 2004. The purpose of the asbestos removal activities was to reduce potential risks from exposure to asbestos.

This report has been prepared under Oregon Department of Environmental Quality (DEQ) Task Order 58-08-48.

2.0 BACKGROUND SUMMARY

The following paragraphs describe the layout and history of the site.

2.1 Site Location and Description

The site consists of approximately 35 acres located on Burns Butte, approximately 5 miles west of Burns and Hines, Oregon. The abatement area is vacant, with the exception of numerous concrete building foundations, several building debris stockpiles, and some roadways.

Three buildings housing telecommunication facilities are present at or adjacent to the site and are not included in the abatement area. ACM abatement activities were not conducted near those buildings. The site vicinity is shown in Figure 1 and the site layout is shown in Figure 2.

2.2 Site History

The U.S. Air Force acquired the site between 1954 and 1958 and developed an Aerospace Defense Command facility there. The developed facility included several large antennas, power generation facilities, and numerous support structures.

Beginning in the 1970s, the U.S. Department of Defense began selling portions of the property to various entities and individuals. The subject site was initially conveyed to the Oregon Department of Health, Education, and Welfare, which subsequently conveyed the site to Burns Union High School District No. 2. The school district deeded the site back to the federal government in 1977 and the property was conveyed to Russel and Aileen Wilson in 1980. The Wilsons conveyed the property to their daughter, Ms. Kathleen Towery.

2.2.1 Previous Site Assessments and ACM Abatement Activities

Although the records are unclear, it appears that the U.S. Army Corps of Engineers conducted several environmental cleanup activities at the site in 1987; those activities included removal of the following: 1) three underground storage tanks (USTs); 2) two aboveground storage tanks (ASTs); 3) lead- and polychlorinated biphenyl (PCB)-contaminated floor drain materials; 4) PCB-
and pesticide-contaminated transformer oil; 5) six transformer carcasses; and 6) approximately 84.7 tons of PCB-contaminated soil.

DEQ’s Air Quality Program documented friable asbestos and ACM at the site in 2002. DEQ determined that the friable asbestos and ACM posed a public health threat.

The U.S. Environmental Protection Agency (EPA) performed a Time-Critical Removal Action (TCRA) at the site in 2004. Activities completed during the TCRA included abatement of friable asbestos in buildings, demolition of buildings, excavation and removal of an ACM steam line, disposal of ACM and non-ACM debris, and removal and off-site disposal of PCB-contaminated building materials and soil.

EPA contractors performed a sweep of the ground surface following the 2004 ACM abatement activities to pick up small, loose pieces of ACM debris. Most of the ACM debris consisted of broken sections of ACM floor tile and CAB siding, typically 1-inch in diameter or smaller.

During a subsequent visit to the site, EPA observed that some ACM debris (primarily pieces of ACM floor tile and CAB siding) remained within the footprint and vicinity of a number of the demolished buildings.

In 2008, GeoEngineers documented the removal of approximately 1,918 pounds of ACM and intermingled soil from the ground surface at the former Burns Air Force site. The ACM appeared to consist of residual debris generated during building demolition activities that occurred at the site in 2004. The removed material was transported to the Crook County Landfill for disposal. The bulk of ACM was removed from the surface of the site; however, limited quantities of small diameter ACM remained on the ground surface in some areas. It was not feasible to remove the small diameter material without excavation of a shallow layer of surface soil.

3.0 PURPOSE AND SCOPE OF SERVICES

The objective of the 2011 asbestos abatement activities was to further reduce risks to human health resulting from potential exposure to asbestos. GeoEngineers’ services were completed in general accordance with the Burns Air Force Site Asbestos Abatement Work Plan (Work Plan) dated September 19, 2011 and the Budget and Assumption Proposal (BAP), dated September 8, 2011. GeoEngineers’ specific scope of services completed for the asbestos abatement included:

- Prepared contractor bid specifications and completed procurement activities for subcontractors to remove ACM from the ground surface with subsequent disposal.
- Prepared a health and safety plan (HASP) to govern our activities at the site.
- Identified areas of the site that were impacted by ACM and required abatement.
- Established a corridor system at the abatement areas to guide the abatement activities and to guide post-abatement inspections.
- Removal and disposal of ACM.
■ Re-establishing asbestos abatement inspection plots.
■ A post-abatement inspection.

4.0 FIELD ACTIVITIES

Asbestos abatement activities were conducted in general accordance with the Work Plan. Field activities were completed between October 10 and October 14, 2011. GeoEngineers contracted Cascade Insulation of Bend, Oregon, an Oregon-licensed asbestos abatement contractor, to perform the removal activities.

The abatement activities were considered Oregon Occupational Safety and Health Administration (OSHA) Class II asbestos work. Abatement and disposal activities were conducted in accordance with Oregon Administrative Rules (OAR) 437-003-1926.1101 and OAR Chapter 340, Division 248. Cascade Insulation conducted the abatement activities using certified asbestos workers, under the supervision of a certified asbestos supervisor.

4.1 ACM Removal

GeoEngineers visited the site to identify the extent of ACM on the ground surface prior to the start of abatement activities. Observed ACM included asbestos floor tile (white, pink, green, and black colors) and CAB siding (cream colored). ACM was generally scattered on the ground surface in a halo-type pattern around former building structures. Relatively high concentrations of ACM were observed in some areas, possibly because ACM was stockpiled in those areas during previous demolition activities.

ACM was observed and removed from the seven ACM abatement areas (A through G) that were established in 2008 and from five additional areas (1 through 5) where ACM was observed in October 2011. These areas are shown in Figure 2.

GeoEngineers established a perimeter around each impacted area to identify the areas requiring abatement. The perimeters were established using flagging, stakes, plastic tape, and/or paint. GeoEngineers established a corridor system within the impacted areas, approximately 5-feet wide and the impacted area in length, to guide the abatement activities and the post-abatement visual inspection. GeoEngineers recorded the pre-abatement condition of select portions of each abatement area using a digital camera. Photographs of the abatement areas are included in Figures 3 through 14. A photographic log has been included in Appendix A.

GeoEngineers delineated the areas requiring abatement by visual inspection and established a corridor system in each abatement area to guide removal efforts. Abatement workers surveyed the ground surface by walking shoulder-to-shoulder, in a linear manner, up and down the corridor system until the each ACM abatement area was abated.

ACM was removed from 16 former building locations. Cascade Insulation removed ACM by hand picking or raking/shoveling the debris into piles. The recovered ACM was double-bagged in 4-millimeter-thick labeled polyvinyl bags. Cascade Insulation did not attempt to recover buried ACM, if present.

Post-abatement clearance air sampling was not performed because clearance air sampling is not appropriate for non-contained outdoor areas such as the project site. Neither
GeoEngineers nor the subcontractor submitted DEQ form ASN5 Air Clearance Sample Results to DEQ following completion of the abatement activities.

In total, about two cubic yards (approximately 325 pounds) of material (ACM and intermingled soil) was removed and transported offsite to the Crook County Landfill for disposal as ACM. Descriptions of ACM removal areas are presented on Table 1 and ACM removal locations are shown in Figure 2. Copies of the asbestos disposal receipts are included in Appendix B.

4.2 Re-Establishment of ACM Test Plots

Seven ACM test plots (A through G) were established at the site following the 2008 abatement activities. The purpose of establishing the ACM test plots was to identify areas that could be monitored to evaluate whether ACM was reappearing at the abated areas, as a result of either wind transport of ACM debris, erosion of soil covering ACM or exposure via freeze-thaw cycles. The ACM test plots were originally marked with flags at their four corners; however, the flags were removed, either by vandals or wind after 2008.

GeoEngineers re-established the ACM test plots A through G by: 1) identifying, to the extent possible, the former locations of the test plots from site diagrams; 2) placing survey flags at the corners of each test plot; 3) photo-documenting the location and condition of each test plot; and 4) recording the geographic coordinates of each test plot using a sub-meter grade global positioning system (GPS) instrument.

During the 2011 abatement work, five new ACM test plots were identified. These areas were designated Areas 1 through 5.

Figure 2 shows the location of the 2008 test plots and the new test plots and Table 1 provides the GPS coordinates for the new plots. Photographs of pre- and post-abatement ACM test plot locations are presented on Figures 3 through 14.

5.0 CONCLUSIONS

GeoEngineers documented the removal of approximately 2 cubic yards of ACM and intermingled soil from the ground surface at the former Burns Air Force site. The ACM appears to consist of residual debris generated during building demolition activities that occurred at the site in 2004. The removed material was transported to the Crook County Landfill for disposal.

The bulk of ACM has been removed from the site; however, limited quantities of small diameter ACM remains in some areas. It was not feasible to remove the small diameter material without excavation of a shallow layer of surface soil.

Buried ACM may be present at the site. GeoEngineers recommends periodic monitoring of the test plots to evaluate if ACM is reappearing at the ground surface.
6.0 LIMITATIONS

We have prepared this report for use by the DEQ, their authorized agents and regulatory agencies. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions express or implied should be understood.

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7.0 REFERENCES


Figure 1
Burns Air Force Site
Harney County, Oregon

Data Sources: ESRI Data & Maps, Street Maps 2005
Transverse Mercator, Zone 10 N North, North American Datum 1983
North arrow oriented to grid north

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.
Pre-Abatement: Area A, Facing Southeast

Post-Abatement: Area A, Facing Southeast

ACM Area Photographs

Former Burns Air Force Site
Burns, Oregon

Figure 3
Pre-Abatement: Area B, Facing East

Post-Abatement: Area B, Facing North
Pre-Abatement: Area C, Facing West

Post-Abatement: Area C, Facing West
Pre-Abatement: Area D, Facing North

Post-Abatement: Area D, Facing Southwest

ACM Area Photographs
Former Burns Air Force Site
Burns, Oregon
Pre-Abatement: Area E, Facing West

Pre-Abatement: Area E, Friable ACM
Post-Abatement: Area E, Facing East

Post-Abatement: Area E, Friable ACM
Pre-Abatement: Area F, Facing West

Post-Abatement: Area F, Facing West

ACM Area Photographs
Former Burns Air Force Site
Burns, Oregon

Figure 9
Pre-Abatement: Area 1, Facing Southeast

Post-Abatement: Area 1, Facing North
Pre-Abatement: Area 2, Facing West

Post-Abatement: Area 2, Facing West

ACM Area Photographs

Former Burns Air Force Site
Burns, Oregon

Figure 11
Pre-Abatement: Area 3, Facing North

Post-Abatement: Area 3, Facing North
Pre-Abatement: Area 4, Facing East

Post-Abatement: Area 4, Facing Southeast
Pre-Abatement: Area 5, Facing South

Post-Abatement: Area 5, Facing West
APPENDIX A
Photographic Log on CD
APPENDIX B
Asbestos Disposal Receipt
ASN 4  ASBESTOS WASTE SHIPMENT REPORT FORM

PLEASE PRINT OR TYPE! If you have questions, contact your local DEQ Regional Office in Portland at (503) 229-5364, Salem at (503) 378-8240 ext. 272, Medford at (541) 776-6010 ext. 235, or Bend at (541) 388-6146 ext. 226, OR call (800) 452-401 for the location of your local regional DEQ office.

WASTE GENERATOR: (Contractor, Facility, or Operator)
1. Asbestos removal site name and address: Burns Kodak Station
   Burns  OR  Money  97730
   Street  City/State  County  Zip
   Contact person: NIAN REED  Phone: 541-388-2800
2. Operator's name and address: CASCADE INSULATION, Inc.
   23356 Nelson Rd  Bend, OR  Deschutes  97701
   Street  City/State  County  Zip
   Phone: 541-388-2800
3. Waste disposal site: Clackamas County Landfill
   PO Box 1  Tualatin  OR  Clackamas  97084
   Street  City/State  County  Zip
   Phone: 541-447-3398
4. Describe asbestos materials: Asbestos-Containing Pipe Insulation
5. Containers: Number: 10  Type: 69
6. Total quantity (cubic yards): 2

7. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport according to all government regulations. All movement of this asbestos-containing material is recorded on this Waste Shipment Record Form.

   Name: NIAN REED  Company: CASCADE INSULATION
   Signature:  Date: 10/15/11

TRANSPORTER(S):
8. Transporter #1: (Acknowledgment of receipt of materials)
   Agent: NIAN REED  Company: CASCADE INSULATION, INC.
   Address: 23356 Nelson Rd  Bend  OR  97701  Phone: 541-388-2800
   Signature:  Date: 10/15/11

9. Transporter #2: (Acknowledgment of receipt of materials)
   Agent:  Company:
   Address:  Phone:
   Signature:  Date:

DISPOSAL: (Certification of receipt of asbestos materials covered by this manifest, except as noted in item 11 below.)
10. Waste Disposal Site: CCLF
    Name and Title: SCALE HOUSE  Date: 10-15-11
    Signature: ALLAN R NICKERSON  Phone: 541-447-2298

11. DISCREPANCY SPACE: (Add attachments as needed)
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Please let us know by visiting www.geoengineers.com/feedback.