## Asbestos Minerals Sites – Initial Screening

Conducted by North Carolina Division of Waste Management, in cooperation with US EPA Region IV and North Carolina Division of Public Health, Health Hazards Control Unit

| A. SITE INFORMATION Site Number: NC-42 |  |          |             |        |          |              |
|--|--|----------|-------------|--------|----------|--------------|
| Historical Name                        | Spruce Pine Unnamed Occurrences              |          |             |        |          |              |
| Latitude / Longitude                   | 35.896N -82.065W                             |          |             |        |          |              |
| State, County, nearest<br>City/Town    | North Carolina, Mitchell County, Spruce Pine |          |             |        |          |              |
| Site Type                              | Mine   |          | Prospect    |        | <u> </u> | Occurrence   |
| Mineral reported                       | chrysotile                                   |          | crocidolite | tremo  | olite    | Other (name) |
|  | amosite                                      | <u> </u> | ohyllite    | actino | olite    |              |

| <b>B. INFORMATION</b>      | Brobst (1962, plate 1). Conrad and others (1963, p. 24). USGS 7.5' Topo |
|----------------------------|---|
| SOURCES                    | Map Spruce Pine (7-1-94). USGS Orthophotoquad for Spruce Pine (4-6-     |
| (include publication date) | 98). USGS color IR photo(1998). Mitchell Co. NCDOT road map (2005).     |
|                            | http://www.ncdot.org/it/gis/DataDist/GISCountyMap_TIFs.html.            |

| C. SITE AND AREA RECONNAIS              |  |  |  |  |  |
|---|--|--|--|--|--|
|   | Reconnaisance 10/31/05                                       |  |  |  |  |
| 1. Was the site located and a site      |  |  |  |  |  |
| visit completed?                        | <u>x</u> Yes No, site could not be located                   |  |  |  |  |
|   |  |  |  |  |  |
|   | (Please attach a topographic map print showing the site)     |  |  |  |  |
| 2. Is the site property developed and   |  |  |  |  |  |
| in use of any kind?                     | <u><b>x</b></u> Yes <u>No, site is wooded / undeveloped</u>  |  |  |  |  |
| 3. Land use on site (check all that     | <u>x</u> Residential <u>x</u> Commercial <u>x</u> Industrial |  |  |  |  |
| apply)                                  | Recreational (golf course, park, etc.)                       |  |  |  |  |
|   | <u>x</u> Construction or clearing in progress                |  |  |  |  |
|   | Other (please describe below)                                |  |  |  |  |
| 4. Are there large areas of bare soil   | <b>x</b> Yes (Please describe below)                         |  |  |  |  |
| visible on the property?                | No   |  |  |  |  |
| 5. Are there residences, apartments,    | x Yes No   |  |  |  |  |
| stores or businesses, or day care       |  |  |  |  |  |
| facilities on the site, or within 200   | Please note which, and describe the item and its location    |  |  |  |  |
| feet of it?                             | (relative to the site) below.                                |  |  |  |  |
| 6. Where is the nearest residence,      | <u>x</u> N/A (addressed at 5 above)                          |  |  |  |  |
| place of business, or place frequented  |  |  |  |  |  |
| by local residents located, in relation | (Place and distance/direction to site)                       |  |  |  |  |
| to the site?                            |  |  |  |  |  |
|   |  |  |  |  |  |
| 7. Are any physical barriers present    | YesNo  |  |  |  |  |
| (fences, gates) that prevent access?    |  |  |  |  |  |
| ······································  | Description Some areas are gated. Others are not.            |  |  |  |  |

## **D. ADDITIONAL INFORMATION**

(Indicate by letter and number which topic the information supports)

**A.** Anthophyllite was identified in samples taken from a roadcut on State Road 1117. The anthophyllite comprises a high percentage of the rocks in this area. It is of the mass-fiber variety (compact, short-fiber, randomly oriented, fiber bundles). Initial PLM analysis was performed by Ronald D. McDaniel. Confirmation analysis by PLM was performed by Stephen H. Westbrook, Asbestos Analysis and Information Service, Inc., a NVLAP accredited laboratory

**C3.** The site contains two distinct ultramafic bodies (Conrad and others, 1963, p. 24)(Brobst, 1962, plate 1). The northern body is in a residential area with possible commercial or residential development in progress. This body is located on and north side of State Road 1117, just east of Grassy Creek. The other body lies about 500 feet south of State Road 1117 and is also east of Grassy creek. It lies immediately behind a large strip mall on land said to belong to Spruce Pine Mica Company. A large berm, 30 feet or more in height, separates the mica company property from the shopping mall, blocking the view of the mica company property to the east. The berm was constructed "a couple of years ago" by pushing material from the east to the west toward the shopping center according to personnel at the mall's Western Sizzlin Steakhouse. If this is true, asbestos-bearing ultramafic rock might be incorporate in the berm. Such berms are commonplace in mining operations and serve as a visual shield. The area behind the mall once was the site of kaolin mining and might now be a mica mining operation. The southern ultramic body was at the edge of the kaolin mine as described by Conrad in 1963. Residential neighborhoods are immediately east of both ultramafic bodies. A golf course is located on the opposite side of US 226 from the mall. A motel is located near the southern end of the northern body.

**C4.** A lot is being graded in preparation for possible construction on the southwest end of the northern ultramafic body. Bare soil may be exposed in the vicinity of the southern ultramafic body on the Spruce Pine Mica Company property as indicated by the latest aerial photography inspected (1998). The berm behind the shopping mall appears to be well grassed.

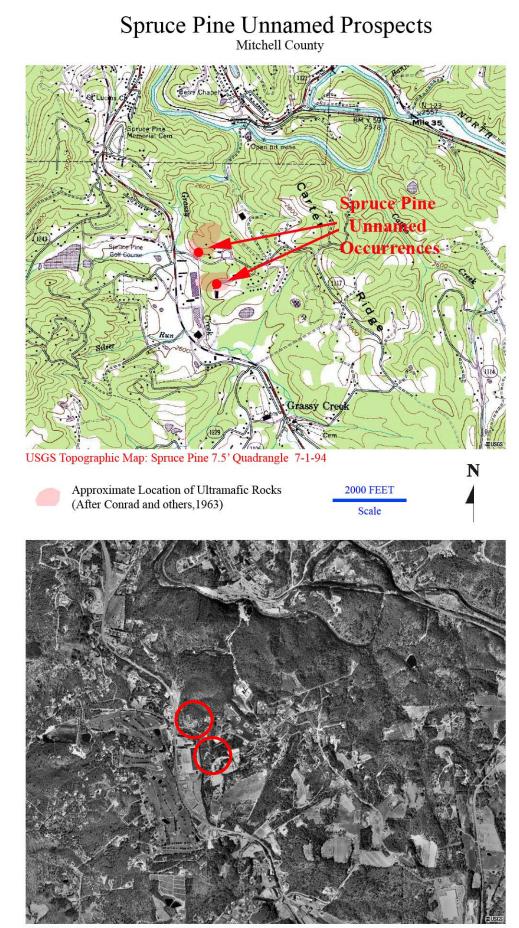
**C5.** At least three homes are located on the northern ultramafic body and grading is in progress for possibly more construction there. Visual inspection of the southern asbestos-bearing ultramafic body was not possible due to limited access to the Spruce Pine Mica Company property (locked gate).

C7. The Spruce Pine Mica Company property is gated. All other areas are not restricted.

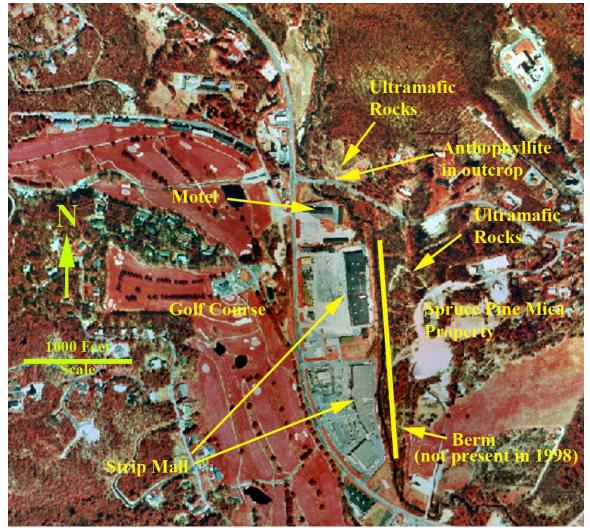
## **Directions to Occurrences:**

(From Conrad, 1963, p. 24)

The two prospects in this area are about 1.5 miles south of Spruce Pine on the east side of U.S. Highway 226 beside and behind Grassy Creek Shopping Center on the north side of Grassy Creek. One of the two separate ultramafic bodies lies about 300 feet east of the Bridge over Grassy Creek on the North side of Carters Ridge Road (SR 1117) and adjacent to the North end of Grassy Creek shopping Center. A few outcrops are present in the road bank, but the main mass of the body lies north of the road and is present in disconnected boulder-like outcrops that can be traced through the woods to near the crest of a prominent hill. The other ultramafic body is located about 500 feet south of SR 1117 directly behind Grassy Creek Shopping Center on or near the property of Spruce Pine Mica Company.



USGS Orthophotoquad: Spruce Pine 7.5' Quadrangle 4-6-98



Color IR Orthophoto of the Spruce Pine unnamed anthophyllite occurrences area (1998).



View looking north from SR 1117 toward the northern ultramafic body.



Outcrop on SR 1117 contains rocks with abundant anthophyllite.



Anthophyllite in the SR 1117 outcrop occurs in dense, compact masses in which the fiber bundles have a random orientation.



High berm behind strip mall was constructed a few years ago (since 1998). The southern Ultramafic body lies just behind this part of the shopping center according to mapping by Conrad and others (1963) and Brobst (1962).