Raymark Superfund Site
OU6 Risk Assessment Summary

Summary of Estimated Potential Risks

The following details the findings of the risk assessments. Table 4-1 summarizes receptor risks and hazards and identifies COCs for each of the 24 properties.

A. Current Risks:

Carcinogenic:

- 7 of the 24 properties are estimated to have current carcinogenic risks above $1x10^{-4}$. The highest current carcinogenic risks were estimated[1] to be $2.0x10^{-3}$ (576 East Broadway (commercial worker)) with principal COCs consisting of PCBs, dioxin TEQ, dieldrin, arsenic, and benzo(a)pyrene.

- 6 of the 24 properties are estimated to have current carcinogenic risks between $1.0x10^{-4}$ and $1.0x10^{-6}$.

- 7 of the 24 properties are estimated to have current carcinogenic risks less than $1.0x10^{-6}$.

- 4 of the 24 properties are not evaluated for current carcinogenic risk due to insufficient data

- Principal COCs for current carcinogenic risk are PCBs, dioxin TEQ, dieldrin, arsenic, and PAHs including benzo(a)pyrene.

Noncarcinogenic:

- 9 of the 24 properties are estimated to have current noncarcinogenic risks with an HI greater than 1. This highest estimated noncarcinogenic risk was an HI of 18 (300 Ferry Blvd. (commercial worker)) with the principal COC being PCBs).

- 5 of the 24 properties are estimated to have current noncarcinogenic risks with an HI of less than 1.

- 4 of the 24 properties are not evaluated for current noncarcinogenic risk due to insufficient data.

- The single COC for current noncarcinogenic risk is PCBs.

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[1] Cancer risk estimate determined using the draft dioxin reassessment recommended dioxin slope factor of 1E+6 $(mg/kg/d)^{-1}$

All 7 of the 24 properties estimated to have current carcinogenic risks above $1x10^{-4}$ were also estimated to have current noncarcinogenic risks with an HI greater than 1. Each of these 7 properties also had predicted blood lead levels above 5% and asbestos in soil greater than 1%. (See asbestos discussion below).

B. *Future Risks:*

Carcinogenic:

- 10 of the 24 properties are estimated to have future carcinogenic risks above $1x10^{-4}$. The highest future carcinogenic risks were estimated[1] to be $3.4x10^{-3}$ (326 Ferry Blvd) with the principle COC being benzo(a)pyrene.
- 9 of the 24 properties are estimated to have future carcinogenic risks between $1.0x10^{-4}$ and $1.0x10^{-6}$.
- 1 of the 24 properties is estimated to have future carcinogenic risks less than $1.0x10^{-6}$.
- 4 of the 24 properties are not evaluated for future carcinogenic risk due to insufficient data.
- Principal COCs for future carcinogenic risk are PCBs, dioxin TEQ, dieldrin, arsenic, and PAHs including benzo(a)pyrene.

Noncarcinogenic:

- 13 of the 24 properties are estimated to have future noncarcinogenic risks with an HI greater than 1. This highest future noncarcinogenic risks were estimated to have an HI of 20 (vacant lot behind 326 Ferry Blvd. (future resident)) with the principal COC being PCBs.
- 7 of the 24 properties are estimated to have future noncarcinogenic risk with an HI of less than 1.
- 4 of the 24 properties are not evaluated for future noncarcinogenic risk due to insufficient data.
- The dominant COC for future noncarcinogenic risk is PCBs. Chromium was also identified as a COC at one property.

All 10 of the 24 properties estimated to have future carcinogenic risks above $1x10^{-4}$ were also estimated to have future noncarcinogenic risks with an HI greater than 1. Each of these 10 properties also had predicted blood lead levels above 5% and asbestos in soil greater than 1%. (See asbestos discussion below).

C. *Asbestos:*

All of the 24 properties have asbestos at concentrations in excess of 1% in soil. Concentrations range from 2% (380 East Main Street) to 90% (230, 250 and 280 Ferry Blvd. and 576 East Broadway). Depths of asbestos range from surface to 40 feet below ground surface. (See Appendix A for discussion of Raymark waste definition and Section 13, Technical and Policy Issues.)

Ecological Risk Characterization

The 24 individual OU6 properties consist of 17 developed and 7 undeveloped parcels. Ecological evaluations, primarily qualitative in nature, were conducted for each individual parcel.

The findings were that the developed parcels, which consist primarily of buildings surrounded by paved parking lots with some landscape plantings, provide little wildlife habitat. The undeveloped parcels, which are typical of disturbed areas in New England, provide minimal habitat value. All 24 parcels abut or are very nearby commercial, industrial, or residential properties. Because of this, no significant ecological risks were identified primarily due to extremely limited habitat, a result of development of the individual parcels or to those immediately surrounding. An exception to this is Ferry Creek, its associated wetlands, and the Housatonic River, all of which abut some of the OU6 properties, but are not part of the OU.

Portions of the stream bed, banks, and wetlands of Ferry Creek contain Raymark waste as well as fill from other sources. As a result, the quality of habitat has been severely degraded. Vegetation along the banks and wetlands of Ferry Creek is dominated by common reed. The upland bank along Ferry Creek typically has a narrow tree line with a dense understory of shrubs and vines. Ferry Creek flows into the Housatonic River.

The Housatonic River is used for recreational fishing, shell fishing, and boating. The mouth of the Housatonic River is considered to be a recreational fishery and a potential source of human food-chain organisms. Coastal waterways in New England, in general, are assumed to support various recreational activities, as well as recreational and commercial fishing. The lower portion of the Housatonic River, near the mouth of Ferry Creek, contains important commercial seed beds for oyster cultivation. People have also been observed collecting crabs near the mouth of Ferry Creek.