list

ATTACHMENT B

Comments on Assignment of Exposure Scenarios to Specific Exposure Areas

In the Direct Contact Assessment, the Human Health Risk Assessment (HHRA) assesses the risk of direct contact to floodplain soils based on the activities assumed to occur within each Exposure Area (EA) or subarea. Where multiple activities were considered plausible for a given EA or subarea, the HHRA has selected the exposure scenario assumed to result in the greatest exposure (i.e., the most conservative assumptions) (HHRA, Vol. I, p 4-6), except that for some currently non-residential areas the HHRA has evaluated future residential use in addition to the current use.

For some EAs or subareas, the HHRA has assumed current-use exposure scenarios that are highly unlikely to occur. In addition, for other areas, the HHRA has applied a future residential use scenario when such future use is not "reasonably anticipated" based on "realistic assumptions," as provided in EPA guidance (EPA, 1995). This attachment provides examples of these mis-assignments of exposure scenarios and recommends changes to them.

Exposure Area 6 - Future Residential

EA 6 consists of a portion of Miss Hall's School for Girls. In addition to assessing a General Recreation scenario, the HHRA applies a Future Residential scenario to this EA based on the "potential" that the property could be converted to residential use (Vol. IIIA, p. 5-15). However, given that the school has been operating continuously since 1898, it is not reasonably anticipated or realistic to assume that the property will be converted over to residential property. Hence, the Future Residential exposure scenario should be dropped for this EA.

Exposure Area 10 – General Recreation (Young Child)

EA 10 consists of the section of Massachusetts Audubon's Canoe Meadows property that falls within the 1 ppm isopleth, including the trail area (EA 10A) and the heavily vegetated non-trail areas. The HHRA applies the General Recreation scenario to this entire EA, including both the young child and adult receptors (Vol. IIIA, p. 5-18). Application of the young child receptor to the non-trail portion of this EA is inappropriate. It is unrealistic to assume that a child between the ages of 1 and 6 years would spend any appreciable amount of time "bush whacking" off-trail through dense vegetation when marked trails and boardwalks are available. Hence, the young child receptor should be limited to the trail area (EA 10A).

Exposure Area 22A – ATV/Dirt and Mountain Biker

EA 22A is a small area approximately 300 ft by 300 ft, to which the HHRA applies an "ATV/Dirt and Mountain Bike Riding" exposure scenario (Vol. IIIA, p. 5-29). Given the small size of this area, it is unlikely that any ATV riders and dirt/mountain bike riders would limit their activities to only EA 22A. Rather, this exposure scenario should apply throughout EAs 22 and 23, which are contiguous.

Exposure Area 27A, 28A – ATV/Dirt and Mountain Biker

The HHRA applies the ATV/Dirt and Mountain Bike Riding exposure scenario separately to EAs 27A and 28A (Vol. IIIA, pp. 5-33, 5-35). These subareas should be combined and evaluated as one EA using that scenario, because the two subareas are contiguous and have trails that connect them. In addition, EA 28A is limited in size and it is unlikely to be used without simultaneous use of EA 27A.

Exposure Area 30 – Residential (Young Child)

EA 30 is part of a residential property and is evaluated as residential using both young child and adult receptors (Vol. IIIA, p. 5-37). The section of EA 30 within the 1 ppm isopleth consists of a narrow strip along the river approximately 50 feet wide and is separated from the living area and a maintained lawn by a wooded section that drops off sharply from the lawn area to the bank of the river. Given these physical characteristics, it is unlikely that a young child aged 1 to 6 years would spend any appreciable amount of time in the small section of the property within the 1 ppm isopleth. Hence, the young child receptor should be dropped from this EA.

Exposure Area 33 – General Recreation

EA 33 is the site of the City of Pittsfield's wastewater treatment plant. It is currently evaluated using a General Recreation scenario (Vol. IIIA, p. 5-40). However, the property is fenced and gated, restricting unauthorized access to the property. Given the use of the property and the restricted access, this EA should be evaluated using the Groundskeeper scenario.

Exposure Areas 38A, 41A, 42A, 43A – Angler

The HHRA applies the Angler scenario to these subareas (Vol. IIIA, Table 5-1). For EAs 38A, 42A, and 43A, the Angler scenario should not be evaluated because there is no access to shore fishing in these areas. Limited access to and dense vegetation along the riverbank would make

fishing extremely difficult in these areas. For EA 41A, the Angler scenario should not be evaluated because GE owns this parcel and does not authorize access to the property. Indeed, during the intensive Floodplain User Survey conducted in 2002 (described in Attachment A to this set of comments), no anglers were observed in any of these areas despite extensive observations. Hence, these subareas (which were created for application of the Angler scenario) should be dropped, leaving the entire EAs to be evaluated for General Recreation.

Exposure Area 39 – Marathon Canoeist

The HHRA applies the Marathon Canoeist scenario to this entire EA, which contains not only the John Decker Canoe Launch but also substantial other areas, much of which are characterized as "wadeable" and "difficult to access" (Vol. IIIA, p. 5-49; Vol. IIIB, Fig. 5-39). It is very unlikely that a marathon canoeist will spend any time in the portions of this EA beyond the parking lot and canoe access point, given the scrub brush and wet areas in those portions and their lack of connection to the canoeist's intended activity (launching his/her canoe). Hence, EPA should limit the Marathon Canoeist scenario to the subarea of EA 39 that includes only the parking lot and the canoe access to the river. The remainder of this EA could be evaluated with a General Recreation scenario.

Exposure Areas 70 and 87 - General Recreation (Young Child)

EAs 70 and 87 are large, undeveloped areas, to which the HHRA applies a General Recreation scenario, including both young child and adult receptors (Vol. IIIA, pp. 5-79, 5-95). Use of the young child receptor for these areas is not appropriate. These EAs are undeveloped sections of land between the river and railroad tracks with no designated access points (see Vol. IIIB, Figures 5-71 & 5-87). It is unrealistic to assume that a child between the ages of 1 and 6 years would spend any appreciable time "bush whacking" through dense vegetation with no trail network. Hence, that receptor should be dropped from these EAs.

Exposure Area 78 - Future Residential

The parcels that make up EA 78 are privately owned and currently in commercial use consisting of two properties with hotels and one property with a retail store. For this area, the HHRA applies a commercial Groundskeeper scenario for current use and a Future Residential scenario based on the assumption that future residential development is "possible" (Vol. IIIA, p. 5-86). Under EPA guidance, future use to be considered in a risk assessment must be "reasonably anticipated" and based on "realistic assumptions" (EPA, 1995). The EA 78

properties abut Route 20 just south of downtown Lee. Although there is a limited number of residential houses on this stretch of highway (some of which are used for businesses), the primary use in the area is commercial and most of the properties in the area fall into this category. In the future, it is more likely that some additional residential properties will be converted to commercial use than that current commercial properties will be converted to residential use. Given the commercial use of the parcels in EA 78 and the characteristics of the overall area, it cannot be reasonably anticipated or realistic to assume that these parcels would be converted to residential use. Hence, the Future Residential scenario should be dropped for this EA.

Exposure Area 86 - Future Residential

EA 86 consists of portions of the Stockbridge Golf Course. For this EA, the HHRA applies a Groundskeeper scenario, but also applies a Future Residential use scenario based on the assumption that "[p]otential future residential development was considered possible" (Vol. IIIA, p. 5-94). However, it is highly unlikely that the golf course will be converted to residential property. Such conversion cannot be considered "reasonably anticipated" based on "realistic assumptions" under EPA (1995) guidance. Thus, the Future Residential scenario should be dropped for this EA.

Reference

EPA. 1995. *Land Use in the CERCLA Remedy Process*. Memorandum from E.P. Laws to EPA Regional Offices. OSWER Directive 9355.7-04. May 25.