§ 11.93 Post-assessment phase—restoration plan.

(a) Upon determination of the amount of the award of a natural resource damage claim as authorized by section 107(a)(4)(C) of CERCLA, or sections 311(f)(4) and (5) of the CWA, the authorized official shall prepare a Restoration Plan as provided in section 111(i) of CERCLA. The plan shall be based upon the Restoration and Compensation Determination Plan described in §§11.81 of this part. The Plan shall describe how the monies will be used to address natural resources, specifically what restoration, rehabilitation, replacement, or acquisition of the equivalent resources will occur. When damages for compensable value have been awarded, the Plan shall also describe how monies will be used to address the services that are lost to the public until restoration, rehabilitation, replacement, and/or acquisition of equivalent resources is completed. The Restoration Plan shall be prepared in accordance with the guidance set forth in §11.81 of this part.

(b) No restoration activities shall be conducted by Federal agencies that would incur ongoing expenses in excess of those that would have been incurred under baseline conditions and that cannot be funded by the amount included in the separate account established pursuant to §11.92(a) of this part unless such additional monies are appropriated through the normal appropriations process.

(c) Modifications may be made to the Restoration Plan as become necessary as the restoration proceeds. Significant modifications shall be made available for review by any responsible party, any affected natural resource trustees, other affected Federal or State agencies or Indian tribes, and any other interested members of the public for a period of at least 30 days, with reasonable extensions granted as appropriate, before tasks called for in the modified plan are begun.

(d) If the measure of damages was determined in accordance with subpart D, the restoration plan may describe actions to be taken that are to be financed from more than one damage award, so long as the actions are intended to address the same or similar.

§ 11.93 Appropriation, in a separate account in the U.S. Treasury.

(2) All sums (damage claim and assessment costs) recovered pursuant to section 107(f) of CERCLA, or sections 311(f)(4) and (5) of the CWA by a State government acting as trustee shall either:

(i) Be placed in a separate account in the State treasury; or

(ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the State agency acting as trustee.

(3) All sums (damage claim and assessment costs) recovered pursuant to section 107(f) of CERCLA or sections 311(f)(4) and (5) of the CWA by an Indian tribe shall either:

(i) Be placed in an account in the tribal treasury; or

(ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the Indian tribe.

(b) Adjustments. (1) In establishing the account pursuant to paragraph (a) of this section, the calculation of the expected present value of the damage amount should be adjusted, as appropriate, whenever monies are to be placed in a non-interest bearing account. This adjustment should correct for the anticipated effects of inflation over the time estimated to complete expenditures for the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.

(2) In order to make the adjustment in paragraph (b)(1) of this section, the authorized official should adjust the damage amount by the rate payable on notes or bonds issued by the United States Treasury with a maturity date that approximates the length of time estimated to complete expenditures for the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.

(c) Payments from the account. Monies that constitute the damage claim amount shall be paid out of the account established pursuant to paragraph (a) of this section only for those actions described in the Restoration Plan required by §11.93 of this part.

resource injuries as those identified in each of the subpart D assessment procedures that were the basis of the awards.


APPENDIX I TO PART 11—METHODS FOR ESTIMATING THE AREAS OF GROUND WATER AND SURFACE WATER EXPOSURE DURING THE PREASSESSMENT SCREEN

This appendix provides methods for estimating, as required in §11.25 of this part, the areas where exposure of ground water or surface water resources may have occurred or are likely to occur. These methods may be used in the absence of more complete information on the ground water or surface water resources.

Ground Water

The longitudinal path length (LPL) factors in Table 1 are to be applied in estimating the area potentially exposed downgradient of the known limit of exposure or of the boundary of the site. Estimates of lateral path width (LPW) are to be used when the LPW exceeds the width of the plume as determined from available data, or when the width of the plume at the boundary of the site is estimated as less than the LPW. In the absence of data to the contrary, the largest values of LPL and LPW consistent with the geohydrologic data available shall be used to make the estimates required in the preassessment screen. An example computation using the LPL and LPW factors follows table 1.

Table 1—Factors for Estimation of Areas Potentially Exposed Via the Ground Water Pathway

<table>
<thead>
<tr>
<th>Aquifer type</th>
<th>Hyd. conductivity/porosity factor (miles/year)</th>
<th>Hydraul. gradient (feet/mile)</th>
<th>Time since release began (in years)</th>
<th>Lateral path width (in feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>50</td>
<td>x</td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Sand+silt</td>
<td>0.5</td>
<td>x</td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Gravel</td>
<td>6000</td>
<td>x</td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Sandstone</td>
<td>0.01</td>
<td>x</td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Shale</td>
<td>3×10^{-4}</td>
<td>x</td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Karst Limestone or Dolomite</td>
<td>10 x</td>
<td></td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Limestone or Dolomite</td>
<td>0.01 x</td>
<td></td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Fractured Crystalline Rocks</td>
<td>0.3 x</td>
<td></td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
<tr>
<td>Dense Crystalline Rocks</td>
<td>1×10^{-1} x</td>
<td></td>
<td>x</td>
<td>LPL=0.8LPL</td>
</tr>
</tbody>
</table>

Example of Computation for Estimating the Area Potentially Exposed via Ground Water Pathway

A release of hazardous substances occurs from a facility located in a glacial valley. Available data indicate the release may have occurred intermittently over a period of almost 1 year, although only one well about 300 feet downgradient of the facility boundary had detectable quantities of contaminants. The contaminated well is screened in the water table aquifer composed of gravelly sands. The facility boundary nearest the contaminated well is almost 3,000 feet in length, but a review of available data determined the release is probably localized along a 500-foot section of the boundary where a stream leaves the facility. Available water table data indicate hydraulic gradients in the valley range from 0.005 feet/mile up to 0.25 feet/mile near pumping wells. No pumping wells are known to be located near the release, and a mean hydraulic gradient of 0.1 feet/mile is estimated in the vicinity of the release site.

Using the gravel factor from Table 1, the LPL and LPW are estimated:

- LPL=0.8(120) feet = 96 feet
- LPW=0.8(600) feet = 480 feet

Since the estimated LPW (480 feet) is less than the plume width (500 feet) determined from other available data, the greater number is used to compute the area potentially exposed:

1. 600 feet×500 feet=300,000 square feet (about 6.9 acres)
2. 300 feet×500 feet=150,000 square feet (about 3.5 acres)

The total area potentially exposed is the sum of (1) and (2):

6.9+3.5=10.4 acres.