of vegetation, or by sublimation from snow and ice. In addition, many of the locations characterized by net evapotranspiration also have ground water located at great depths, further reducing the risk of a small amount of leachate that could be generated by these small landfill from ultimately reaching the ground water. For these reasons, the Agency believes that the 25 inch annual precipitation criterion in the original small landfill exemption represents a reasonable cut-off for qualifying for the ground-water monitoring flexibility in today's rule. The Agency specifically requests data (for docket number F-95-AGAP-FFFFF) that either supports the 25 inch cut-off or provides the basis for establishing another criterion as a qualifier for today's flexibility.

Second, in addition to the low precipitation, the size of the landfill plays another factor in the potential for leachate generation. Agency water balance studies used to predict leachate generation from MSWLFs indicate a relationship between the area of a landfill surface and the quantity of leachate generated over time, whereby the smaller the surface area of the landfill, the lower the quantity of leachate generated. In general, landfills receiving small amounts of waste occupy less surface area than landfills receiving larger amounts of waste. The Agency's Subtitle D Risk Model was used to predict risk as a function of landfill size. Again, while no single factor is responsible for overall risk from a landfill, the model generally predicted a much lower risk of contamination from the smallest class of landfills modelled (approximately less than 20 TPD) relative to larger facilities. The Agency believes that the 20 TPD cut-off in the original small landfill exemption continues to represent a reasonable limit for qualifying as a small landfill for today's rule. Additional explanation of the 20 TPD limitation is contained in the preamble to the final MSWLF criteria (56 FR 50989-50991, October 9, 1991)

While a landfill may be small and dry, it may not always be a candidate for today's ground-water monitoring flexibility. Therefore, today's rule would require Directors of approved programs to assess the viability of alternative monitoring techniques on a site-specific basis. For example, the Agency recognizes that sources of moisture in addition to precipitation, such as ground-water intrusion into the landfill and the release of ambient waste moisture through waste degradation and compression, should be considered on a site-specific basis along with the influences of size, climate, and geology when determining the ground-water monitoring requirements for a particular landfill.

The Agency continues to be aware of constraints on small community landfills located in geographically isolated areas where it is economically impracticable for the community to take advantage of a regional waste management facility. While today's proposal is limited to arid landfills (i.e., those located in areas receiving less than 25 inches of precipitation annually), the Agency recognizes that some small landfills located in areas receiving greater than 25 inches of annual precipitation also may face economic hardships associated with getting access to a regional waste management facility and therefore would also desire to take advantage of cost-efficient alternative monitoring methods, where conditions are appropriate.

Thus, it may be appropriate for landfills serving small populations in geographically isolated areas receiving greater than 25 inches of annual precipitation to take advantage of alternative monitoring methods where the local hydrogeology of the site minimizes, to a large extent, the migration of leachate to ground water. For example, areas with deep water tables and an adequate thickness of low permeability soil or rock between the landfill and water table could be candidates for using alternative monitoring methods. Other such landfills may be located in areas where bedrock (or permafrost in Alaska) exists at or near the base of the landfill, causing any potential leachate to migrate laterally over the bedrock rather than vertically to ground water below. Here again, a simplified alternative monitoring strategy may provide a more cost-effective and equally accurate method of detecting a release from the landfill

Small communities in areas receiving greater than 25 inches of annual precipitation face many of the same financial problems that exist in arid areas. Therefore, the Agency also is requesting comment (for docket number F-95-AGAP-FFFFF) on the appropriateness of extending today's flexibility to any small landfill that has no practicable waste management alternative. The Agency solicits comment (for docket number F-95-AGAP-FFFFF) on whether alternative monitoring methods will detect contamination in more humid environments.

Because higher annual precipitation could lead to additional leachate

generation at a landfill, the Agency believes that site-specific conditions (e.g., hydraulic conductivity, depth to the uppermost aquifer) become increasingly important factors when considering whether to extend today's flexibility to non-arid small landfills. At this time, the Agency does not have sufficient data to identify those situations where it would be appropriate for small landfills in nonarid areas to use alternative groundwater monitoring methods to detect contamination. Therefore, the Agency requests comments (for docket number F-95-AGAP-FFFFF) and data on an appropriate set of hydrogeologic conditions that should exist at a small landfill before it could qualify for today's proposed flexibility to use alternative monitoring techniques.

2. Limited Financial Resources

A number of States and local governments have submitted cost data regarding ground-water monitoring demonstrating the high cost of groundwater monitoring at a landfill serving smaller communities where economies of scale are not available to decrease per capita or per household costs.

• The Texas Natural Resource Conservation Commission (TNRCC) reported that as many as 110 communities in west Texas (served by qualifying small MSWLFs) would be significantly impacted by existing part 258 ground-water monitoring requirements. TNRCC reports that if part 258 ground-water monitoring requirements are fully implemented, they would increase average monthly household waste disposal costs in the 110 communities by 285 percent.

• The New Mexico Environment Department indicated that application of all part 258 ground-water monitoring requirements would increase waste disposal costs per household by approximately \$44.00 per month in communities served by qualifying small MSWLFs.

 The Alaska Department of Environmental Conservation (ADEC) reports that for the 289 qualifying small MSWLFs in Alaska, a total capital cost of approximately \$6.5 million would be incurred just for the cost of installing monitoring wells (which is cited to be about one-third of the annual construction budget for village sanitation facilities in Alaska). ADEC reports annual cost estimates of \$10,600 per facility for sample collection, shipping, and analysis, assuming the landfill has four monitoring wells sampled twice annually. ADEC states that the average community operating budget (for a population of about 800