required to demonstrate to EPA, using the multipathway analysis or another risk assessment model, how they would ensure on a site-specific basis that facilities disposing of conditionally exited wastes meet a 10-6 risk level. Development of this approach might also require quite different risk models, since the multipathway model as it currently exists incorporates a number of simplifying assumptions to capture a broad range of possible conditions. The Agency would have to ensure that a model used for this analysis can incorporate complex site-specific variables, or develop a set of simplified models that could be applied by states. However, this approach would provide maximum flexibility to states and generators to tailor exit levels to particular waste and site characteristics.

Under option six, the Agency would allow wastes posing up to 1 E–3 cancer risk and HQ 10 (in an unregulated management setting), and allow either a qualitative or quantitative review of the state program, but allow participation only by state programs that are broadly qualified, i.e., that are qualified in all aspects of the program, for currently managed industrial non-hazardous waste. The Agency would be more comfortable with this approach because it would be more assured of safe management of the waste regardless of where in the state it is disposed.

The Agency also solicits public comment on whether more than one of the options discussed above should be developed at the same time. For example, the Agency might establish both the option 1 proposal described below, and establish a state-based contingent management program based on any of options four, five or six. By doing so, the Agency would establish option 1 as a minimum national standard, but this approach would allow that states to go further they choose to do so.

3. Establish Exit Levels That Consider Regional or Site-Specific Factors That Might Affect Constituent Fate and Transport'

In addition to facility design factors, there are other location-specific factors that may substantially affect the risks and the appropriate exit levels for waste management units. Examples of such factors include: Rainfall and hydrogeology at the site and the distance to off-site receptors. The average amount of precipitation falling on these waste management units may affect both the amount of leachate to groundwater and soil run off to off-site receptors. Thus, the Agency could determine geographic regions based upon climatic zones, could require precipitation data from the most appropriate certified rain gauge, or could require site specific precipitation information. However, in order to do this the Agency would need to verify that the other model inputs are appropriate for each of the regions or else develop new region-specific inputs. Therefore, the Agency solicits data and comment on technically appropriate ways to establish exit levels based on rainfall levels.

Other site-specific factors that may significantly affect the groundwater pathway are the hydraulic conductivity of the soil surrounding the waste management unit and the distance to the nearest drinking water wells. If the hydraulic conductivity of surrounding soil is relatively low—such as in soils dominated by clays-then the flow of any potentially contaminated leachate to ground water could be effectively retarded for long periods of time (though flow to surface waters or other pathways might change, perhaps increasing). Landfills located in soils with low hydraulic conductivities (for example, 10-6 cm/sec or lower) could provide an extra level of environmental protectiveness for ground water that could be considered in developing this approach. For example, the Agency might address this effect by developing exit levels corresponding to different classes of hydraulic conductivity. Alternatively, differences in hydraulic conductivity could be considered through a site-specific process. This approach would not be relying on engineered controls, but on natural attributes of the location. EPA solicits comments on whether such attributes can be readily determined or in what circumstances they can be readily determined and relied upon.

The Agency did some limited sensitivity analysis with respect to ground water risk modelling to look at the concept of developing different exit levels depending on broad hydrogeological regions. The results of that analysis are in the docket. The Agency requests comment as to the value of investing in this approach and practical considerations the Agency should weigh in deciding whether to pursue this approach.

Finally, where the nearest drinking water wells are at an unusually great distance from the waste management unit, corresponding exit level concentrations associated with groundwater exposures that took that distance into account could be significantly lower if the Agency's goal were solely the prevention of current exposure to groundwater contamination.

However, many states have policies to not degrade groundwater and EPA believes it is quite difficult to predict future needs for uncontaminated groundwater. EPA believes that the groundwater modelling done for this rule reflects a balanced view by using the distribution of nearest wells. However, EPA expects it will receive comments suggesting that it should consider allowing facilities with no moderately nearby drinking water wells to take that into account. The Agency seeks comment on the implementation issues associated with taking these factors into account and the related policy judgement as to whether the goal of more site-specific assessment should be prevention of risk based on current ground water use, reasonably foreseeable use, or based on distances that would be more protective of the potential future use of ground water.

The Agency also seeks comment on other location-specific factors or combinations of factors that may be particularly important in mitigating the risks associated with waste disposal. The Agency also requests comment on alternative approaches for taking these location-specific factors into consideration in developing exit levels for waste management. One option for doing so would be to develop additional tables of exit levels (in addition to Option 2) for waste management units that reflect the effect of some of the most important location-specific factors (e.g., exit levels for areas with low annual rainfall, or indexed to landfill size). As an alternative option, the Agency could develop "reduced form" equations that specifically relate the exit level concentration to critical locationspecific factors (such as annual rainfall). The Agency requests comment on the merits of these approaches and on alternative options that might be used to better accommodate the effect of location-specific factors on exit levels.

D. Land Disposal Restrictions for Contingent Management Options

Any conditional exemption would offer much more significant relief if it eliminated or reduced the need to comply with more stringent LDR treatment requirements. As explained above in Section VI of today's proposed rulemaking, however, under Chemical Manufacturers Association v. EPA (the "Third Third" decision) LDR treatment standards generally continue to apply even if a waste ceases to be classified as a hazardous waste. If an LDR treatment standard were lower (more stringent) than a contingent management exit level, the waste would still need to meet the LDR standard.