Information ambiguity is prevalent in organizations and my influence management decisions. This study examines, given imprecise probabilities or outcomes, how managers decide which department's performance to investigate further when they are provided with performance benchmarks expressed in numerical intervals. Seventy-nine MBA students participated in two experiments involving investigation decisions. We presented participants with interval benchmarks of a firm's expenses. Being below or above the benchmark should have been seen as equally negative. We found that, when facing outcome ambiguity, our participants consistently preferred to investigate further those departments whose performance was described as having an ambiguous outcome (when the outcome's range was centered either below or above the interval benchmark). However, when facing probabilistic ambiguity, there were two predominant choice patterns: consistently choosing to investigate the department whose performance is described with an ambiguous probability, or consistently choosing to investigate the department with unambiguous performance. To gain further insight, we conducted a follow-up study collecting written protocols of participants' reasons for making choices involving ambiguous performance information. The results show that our participants displayed similar decision-making processes when facing outcome ambiguity and probabilistic ambiguity.