- In guidance issued in 1996 EPA recognized that batch chemical production facilities are not able to use one operations unit for more than one production cycle at a time since the production occurs in discrete batches, rather than as a continuous process in which raw materials are continuously being fed, and products continuously being removed. Moreover, the addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. In addition, operation units (reactors, etc.) at batch chemical plants may not be dedicated to the production of a single chemical. Rather, the collection of operation units at a given plant site is available to manufacture a variety of different chemicals. The particular equipment used, the sequence of that equipment, and the time each piece of equipment is in operation may change with each different product manufactured (i.e., each production cycle). Thus, the "worst-case" emissions may be determined by deriving an average rate over an entire production cycle and emissions may be calculated based on the greatest number of batches that could occur in a year's time. The list of products and raw materials should include all products that the source, in the exercise of due diligence and best engineering judgment, reasonably knows that it can produce.

- In the promulgation of 40 CFR Part 63, Subpart HH, EPA recognized that facilities dependent on gas fields for throughput usually operate at considerably less than the maximum capacity of the equipment present, because the supply of gas available to process is an inherent physical limit on operations. The MACT standard allows calculation of PTE to be based upon annual throughput data, incorporating a safety factor, instead of maximum capacity of the equipment, and if throughput data shows an uninterrupted 5-year history of decline, an alternative and even less stringent method of calculating PTE is allowed.

- In the promulgation of 40 CFR Part 63, Subpart HHH, EPA recognized that dehydrators and other equipment used during withdrawal operations at facilities for underground storage of natural gas could not operate 8,760 hours per year, but only because gas must be injected into the reservoir before it can be withdrawn. Dehydrators used to remove moisture from gas when it is withdrawn from the reservoir do not operate during the injection phase of the injection/withdrawal cycle. PTE is determined based upon a calculation of the injection/withdrawal cycle time, assuming that the cycle is performed at the maximum possible rate year-round.

- It's also important to note that, in several of these instances, comments received on the regulations proposed that EPA should consider "seasonal operation" of the facility as an inherent limitation on PTE. This was rejected as not appropriate for these specific cases. In addition, we are not aware of any rule or guidance specifically recognizing seasonal operation (because of weather changes throughout the year) as an inherent limitation on PTE.

How Can I Limit My PTE?

Any number of methods may be used to limit emissions. The methods can be used singly or in combination. In general, two considerations must be followed when proposing permit conditions meant to lower the PTE. First, the reduction in PTE must be permanent, quantifiable and otherwise enforceable. Second, the stationary source must be able to meet its business needs