

AMMONIA REMOVAL (NH-TRAP)

Light Environmental's Ammonia Removal (NH-TRAP) is a selective ion exchange system that captures ammonia from a stream using a specialized resin. This technology was developed for the treatment of water in the mining industry where the use of ammonia latent explosives required the treatment of amounts of water contaminated by ammonia.



Process Description:

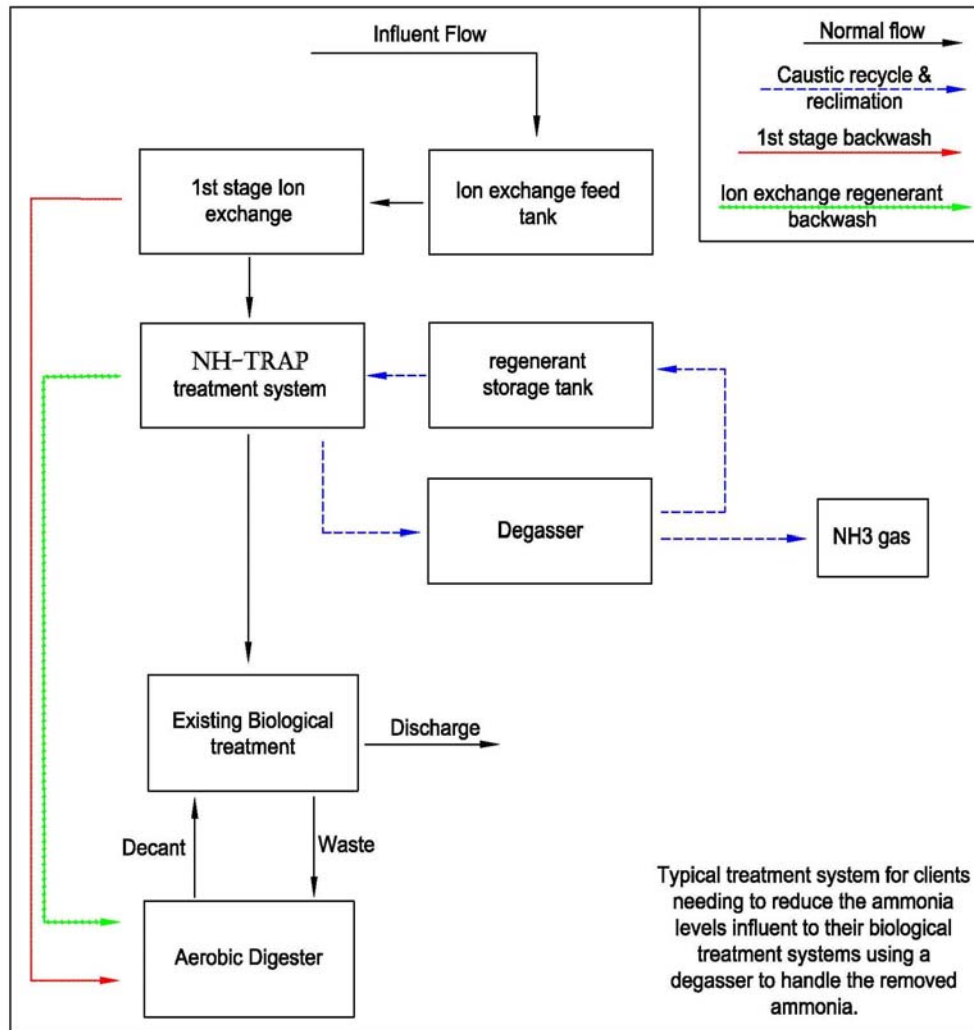
As the system encounters wastewater the resin collects the ammonia from the stream and captures it allowing the remaining water to pass out of the system. The ammonia is then removed from the resin with the use of high pH caustic. At this point there are several avenues of processing the removed ammonia. The more traditional approach consists of stripping the ammonia from the caustic for release into the atmosphere or air scrubbers.

The second option, Light Environmental's Ammonia NH-TRAP involves pulling the ammonia through a membrane and mixing it with various chemicals to produce a beneficial product such as fertilizers. This option is very viable for clients with high ammonia levels in their wastewater which are toxic in nature and are detrimental to biological treatment systems. Our technology is also very well utilized in streams with large flow rates that have issues with ammonia that cannot be easily treated or removed with conventional methods.

The new Ammonia Removal NH-Trap technology has some very specific advantages over using an air stripper alone.

NH-Trap Advantages over Air Stripping:

- Caustic used in the regeneration process is reusable once the ammonia is stripped out creating a dramatic reduction in the operating costs
- Many pieces of the equipment is sized based only on the volume of ammonia, not the volume of the stream
- Standard ammonia strippers lose efficiency in temperatures below 20 degrees Celsius, our technology is designed to function in varying temperatures without a loss of efficiency in the removal of ammonia



Learn More

To learn more about our **Ammonia Removal (NH-Trap) Solution** or any of our other wastewater solutions, please visit our web site at www.lightenvironmental.com or call our Corporate Sales Office at: 1-816-537-9190.

We look forward to providing your next wastewater solution.