

howard markus, Ph.D., P.E. retired

One of the major environmental stressors associated with the land application of manure is when it runs off into rivers, streams, and lakes. The result is usually either fish kills from anaerobic conditions caused by the decomposition of the organics in the manure or severe algal blooms connected with closely the nutrients in manure.

Manure runoff doesn't happen without larger rain events. As such, during or just after a manure application followed by a large rain event, the manure applicater must immediately visually inspect the application site and immediately contact the MPCA if there is manure runoff from the application site. This must be a requirement of the manure application permit and there must be penalties associated with not reporting the event.