**Section 257.50 Site Monitoring**

a) Activities at central distribution facilities, Class A and B lawncare facilities, and other affected facilities shall not be subject to the provisions of this Section.

b) The owner or operator shall implement a monitoring program based on the Department's determination regarding the Facility Review Report and the requirements of this Section. In a minimum setback zone, such monitoring program shall be operable no later than 120 days after the Department's determination. In a maximum setback zone or regulated recharge area, such monitoring program shall be operable no later than 120 days after receipt of a notice to proceed from the Department. The monitoring program for activities at a facility within a setback zone or regulated recharge area shall consist of one of the following:

1) groundwater monitoring from an on-site facility water well(s) or a monitoring well(s); or

2) alternate monitoring program approved by the Department.

c) An alternate monitoring program within minimum setback zones, maximum setback zones, or regulated recharge areas shall provide for:

1) adequate characterization of on-site conditions; and

2) detection capability within or above the vadose zone at the facility.

d) Within three (3) days after occurrence, the owner or operator of an agrichemical or lawncare facility, except Class A or B lawncare facilities, shall provide the Department written notification of all agrichemical spills. The written notification shall include the following:

1) date, time, and location of the occurrence;

2) the type and amount of the agrichemical(s) involved;

3) the response action taken; and

4) the results associated with the response action.

e) Groundwater monitoring within a minimum setback zone shall be conducted as follows:

1) quarterly monitoring in a category A geologic vulnerability area for five years except that monitoring may be conducted semi-annually after the first year upon approval by the Department.

2) semi-annual monitoring in a category B geologic vulnerability area for five years except that monitoring may be conducted annually after the first year upon approval by the Department.

3) A facility request to alter the monitoring schedule or to discontinue monitoring shall include all monitoring results. Monitoring may be altered or discontinued upon approval by the Department if there were no confirmed pesticide detections at or above the MQL and nitrate-nitrogen levels had not exceeded 10 mg/l during the following specified periods:

A) one (1) year of monitoring for alteration; or

B) five (5) consecutive years of monitoring for discontinuance.

4) monitoring shall be resumed in accordance with subsection (g) if an agrichemical spill occurs at the facility unless the Department determines that such incident was of minimal consequence.

f) The Department may, based upon the criteria of subsection (2)(A) below, require groundwater monitoring or an alternate monitoring program at a facility that is located within a maximum setback zone and is within a category A geologic vulnerability area when the Department is advised that a facility represents a significant hazard as determined by a groundwater protection needs assessment, an advisory of groundwater contamination hazard, or an identification of hazard pursuant to Section 17.1 of the Illinois Environmental Protection Act (415 ILCS 5/17.1).

1) Upon receipt of such advisory, the Department shall notify the facility of this advisory and allow the facility 30 days to provide a written response.

2) The Department, within 45 days of when it is advised that a facility represents a significant hazard, shall provide a notice to proceed to the owner or operator of the affected facility when the Department determines that monitoring will be required. Such notice shall include a summary of the existing conditions which have resulted in the determination to require monitoring. In making such determination, the Department shall consider the following:

A) the information provided in the groundwater protection needs assessment, the advisory of groundwater contamination hazard, or the identification of hazard;

B) the operating history of the facility, including compliance with this Part and Part 255; and

C) the current and future agrichemical activities associated with the facility.

3) If groundwater monitoring is required pursuant to this subsection, it shall be conducted as follows:

A) semi-annually for five years except that after the second year the Department may approve monitoring on an annual basis.

B) A facility request to alter or discontinue monitoring shall include all monitoring results. Monitoring may be altered or discontinued upon approval by the Department if there were no confirmed pesticide detections at or above the MQL and nitrate-nitrogen levels had not exceeded 10 mg/l during the following specified periods:

i) two (2) consecutive years of monitoring for alteration; or

ii) five (5) consecutive years of monitoring for discontinuance.

C) Monitoring shall be resumed in accordance with subsection (g) if an agrichemical spill occurs at the facility unless the Department determines that such incident was of minimal consequence.

g) The Department may require groundwater monitoring or an alternate monitoring program at a facility where an agrichemical spill(s) has occurred after the effective date of this Part. In making a determination regarding post-agrichemical spill monitoring, the Department shall consider:

1) the operating history of the facility, including compliance with this Part and Part 255;

2) the number and severity of agrichemical spills that have occurred at the facility;

3) response actions at the facility; and

4) the potential adverse impacts on groundwater.

 When post-agrichemical spill groundwater monitoring is required for facilities located in minimum setback zones, the owner or operator shall perform the monitoring as specified in subsection (e). For facilities located in a Category A maximum setback zone, the owner or operator shall perform the monitoring as specified in subsection (f). For facilities located in a Category B maximum setback zone or regulated recharge area, semi-annual monitoring shall be required for three years except that after the second year the Department may approve monitoring on an annual basis. A facility request to alter monitoring shall include all monitoring results. For facilities located in a Category B maximum setback zone or regulated recharge area, monitoring may be altered upon approval by the Department if there were no confirmed pesticide detections at or above the MQL and nitrate-nitrogen levels had not exceeded 10 mg/l during two (2) consecutive years of monitoring.

h) The owner or operator may file a request to discontinue monitoring for a facility located in a category B maximum setback zone or regulated recharge area provided there were no monitoring results that exceed the criteria specified in subsection (k) for three years after the start of the monitoring period. A facility request to discontinue monitoring pursuant to this subsection shall include all monitoring results. Monitoring shall be resumed in accordance with subsection (g) if an agrichemical spill occurs at the facility unless the Department determines that such incident was of minimal consequence.

i) A groundwater monitoring program shall provide for:

1) sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the activity. At a minimum the program shall include procedures and techniques for:

A) sample collection;

B) sample preservation and shipment;

C) analytical procedures; and

D) chain of custody control.

2) sampling and analytical methods that are appropriate for groundwater monitoring and that allow for detection and quantification of contaminants specified in this Section, and that are consistent with the sampling and analytical methods specified in Section 257.20. Appropriate immunoassay screening tests and procedures approved by the Department may be used in combination with the analytical procedures.

3) a minimum of five pesticides as approved by the Department. In selecting the appropriate pesticides to monitor the following criteria shall be considered:

A) the volume and quantity of the pesticides stored, disposed of, or otherwise handled at the facility; and

B) there is a groundwater standard for such parameter; or

C) if there is no groundwater standard, a health advisory level established by USEPA or under 35 Ill. Adm. Code 620.Subpart F; and

D) physical and chemical properties of the pesticides indicate the potential for transport to groundwater.

4) nitrate as nitrogen shall be monitored where nitrogen fertilizer is stored or handled.

j) All monitoring results shall be maintained on-site and be available for review on request by the Department.

k) Results of groundwater monitoring shall be submitted, where constituent concentrations exceed 50% of the groundwater standard(s) for pesticide(s), to the Department within 60 days after completion of sampling. Results for nitrate that exceed the groundwater standard shall also be submitted to the Department within 60 days after completion of sampling. This submission shall address the following:

1) evaluate the significance of the results; and

2) provide a description of the response action taken.

l) The Department may consider whether the owner or operator reasonably demonstrates that during review of the information provided under subsection (k) that groundwater contamination was a result of:

1) residual contamination from a prior agrichemical spill(s) where appropriate action has already been taken; or

2) the source of contamination is not due to an on-site agrichemical spill(s); or

3) the source of contamination was due to an agrichemical spill(s) prior to the effective date of this Part and which remains subject to other applicable provisions of existing State or federal laws or regulations adopted thereunder.

m) Results of alternate monitoring shall be submitted as required by the Department. This submission shall address the following:

1) evaluate the significance of the results; and

2) provide a description of the response action taken.

n) The Department may consider whether the owner or operator reasonably demonstrates that during review of the information provided under subsection (m) that contamination was a result of:

1) residual contamination from a prior agrichemical spill(s) where appropriate action has already been taken; or

2) the source of contamination is not due to an on-site agrichemical spill(s); or

3) the source of contamination was due to an agrichemical spill(s) prior to the effective date of this Part.

o) The Department shall evaluate the response action taken under subsection (k) or subsection (m), advise the owner or operator in writing regarding these findings, and provide a time frame for correction of any deficiencies. In performing the evaluation, the Department shall consider the following:

1) the extent and severity of on-site contamination;

2) the presence of potentially affected off-site water supply wells;

3) the frequency of monitoring; and

4) the appropriateness of the response.

p) The Department shall ensure that potential impacts on off-site water supply wells are evaluated and considered when making determinations about the adequacy of response actions. Such assurance shall include, when appropriate, water well sampling at a frequency and duration that is commensurate with the on-site conditions that caused the response action. The Department shall also coordinate its activities under this subsection with the Illinois Department of Public Health or local health department so that those off-site wells that are most likely to be impacted are afforded this consideration.

q) The Department shall consult with the Agency regarding technical components of alternate monitoring programs and procedures during the development process.