

**TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE F: PUBLIC WATER SUPPLIES  
CHAPTER I: POLLUTION CONTROL BOARD**

**PART 616  
NEW ACTIVITIES IN A SETBACK ZONE OR  
REGULATED RECHARGE AREA**

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**AUTHORITY:** Implementing Sections 5, 14.4, 21, and 22, and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 14.4, 21, 22, 27].

**SOURCE:** Adopted in R89-5 at 16 Ill. Reg. 1592, effective January 10, 1992; amended in R89-14(C) at 16 Ill. Reg. 14676, effective September 11, 1992; amended in R92-20 at 17 Ill. Reg. 1878, effective January 28, 1993; amended in R96-18 at 21 Ill. Reg. 6543, effective May 8, 1997.

## **SUBPART A: GENERAL**

### **Section 616.101 Purpose**

This Part prescribes requirements and standards for the protection of groundwater for certain types of new facilities or units located wholly or partially within a setback zone regulated by the Act or within a regulated recharge area as delineated pursuant to Section 17.4 of the Illinois Environmental Protection Act (Act) [415 ILCS 5].

(Source: Amended at 21 Ill. Reg.6543, effective May 8, 1997.)

**Section 616.102      Definitions**

Except as stated in this Section, and unless a different meaning of a word or term is clear from the context, the definitions of words or terms in this Part shall be the same as those used in 35 Ill. Adm. Code 615.102, the Act, or the Illinois Groundwater Protection Act [415 ILCS 55].

"NEW POTENTIAL PRIMARY SOURCE" MEANS:

A POTENTIAL PRIMARY SOURCE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JANUARY 1, 1988; OR

A POTENTIAL PRIMARY SOURCE WHICH EXPANDS Laterally BEYOND THE CURRENTLY PERMITTED BOUNDARY OR, IF THE PRIMARY SOURCE IS NOT PERMITTED, THE BOUNDARY IN EXISTENCE AS OF JANUARY 1, 1988; OR

A POTENTIAL PRIMARY SOURCE WHICH IS PART OF A FACILITY THAT UNDERGOES MAJOR RECONSTRUCTION. SUCH RECONSTRUCTION SHALL BE DEEMED TO HAVE TAKEN PLACE WHERE THE FIXED CAPITAL COST OF THE NEW COMPONENTS CONSTRUCTED WITHIN A 2-YEAR PERIOD EXCEED 50% OF THE FIXED CAPITAL COST OF A COMPARABLE ENTIRELY NEW FACILITY.

(Section 3.59 of the Act)

"NEW POTENTIAL ROUTE" MEANS:

A POTENTIAL ROUTE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JANUARY 1, 1988, OR

A POTENTIAL ROUTE WHICH EXPANDS Laterally BEYOND THE CURRENTLY PERMITTED BOUNDARY OR, IF THE POTENTIAL ROUTE IS NOT PERMITTED, THE BOUNDARY IN EXISTENCE AS OF JANUARY 1, 1988.

(Section 3.58 of the Act)

"NEW POTENTIAL SECONDARY SOURCE" MEANS:

A POTENTIAL SECONDARY SOURCE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JULY 1, 1988; OR

A POTENTIAL SECONDARY SOURCE WHICH EXPANDS Laterally beyond the currently permitted boundary or, if the secondary source is not permitted, the boundary in existence as of July 1, 1988, other than an expansion for handling of livestock waste or for treating domestic wastewaters; OR

A POTENTIAL SECONDARY SOURCE WHICH IS PART OF A FACILITY THAT UNDERGOES MAJOR RECONSTRUCTION. SUCH RECONSTRUCTION SHALL BE DEEMED TO HAVE TAKEN PLACE WHERE THE FIXED CAPITAL COST OF THE NEW COMPONENTS CONSTRUCTED WITHIN A 2-YEAR PERIOD EXCEED 50% OF THE FIXED CAPITAL COST OF A COMPARABLE ENTIRELY NEW FACILITY.

(Section 3.60 of the Act)

"POTENTIAL PRIMARY SOURCE" MEANS ANY UNIT AT A FACILITY OR SITE NOT CURRENTLY SUBJECT TO A REMOVAL OR REMEDIAL ACTION WHICH:

IS UTILIZED FOR THE TREATMENT, STORAGE, OR DISPOSAL OF ANY HAZARDOUS OR SPECIAL WASTE NOT GENERATED AT THE SITE; OR

IS UTILIZED FOR THE DISPOSAL OF MUNICIPAL WASTE NOT GENERATED AT THE SITE, OTHER THAN LANDSCAPE WASTE AND CONSTRUCTION AND DEMOLITION DEBRIS; OR

IS UTILIZED FOR THE LANDFILLING, LAND TREATING, SURFACE IMPOUNDING OR PILING OF ANY HAZARDOUS OR SPECIAL WASTE THAT IS GENERATED ON THE SITE OR AT OTHER SITES OWNED, CONTROLLED OR OPERATED BY THE SAME PERSON; OR

STORES OR ACCUMULATES AT ANY TIME MORE THAN 75,000 POUNDS ABOVE GROUND, OR MORE THAN 7,500

POUNDS BELOW GROUND, OF ANY HAZARDOUS SUBSTANCES.

(Section 3.59 of the Act)

"POTENTIAL ROUTE" MEANS ABANDONED AND IMPROPERLY PLUGGED WELLS OF ALL KINDS, DRAINAGE WELLS, ALL INJECTION WELLS, INCLUDING CLOSED LOOP HEAT PUMP WELLS, AND ANY EXCAVATION FOR THE DISCOVERY, DEVELOPMENT OR PRODUCTION OF STONE, SAND OR GRAVEL. (Section 3.58 of the Act)

"POTENTIAL SECONDARY SOURCE" MEANS ANY UNIT AT A FACILITY OR A SITE NOT CURRENTLY SUBJECT TO A REMOVAL OR REMEDIAL ACTION, OTHER THAN A POTENTIAL PRIMARY SOURCE, WHICH:

IS UTILIZED FOR THE LANDFILLING, LAND TREATING, OR SURFACE IMPOUNDING OF WASTE THAT IS GENERATED ON THE SITE OR AT OTHER SITES OWNED, CONTROLLED OR OPERATED BY THE SAME PERSON, OTHER THAN LIVESTOCK AND LANDSCAPE WASTE, AND CONSTRUCTION AND DEMOLITION DEBRIS; OR

STORES OR ACCUMULATES AT ANY TIME MORE THAN 25,000 BUT NOT MORE THAN 75,000 POUNDS ABOVE GROUND, OR MORE THAN 2,500 BUT NOT MORE THAN 7,500 POUNDS BELOW GROUND, OF ANY HAZARDOUS SUBSTANCES; OR

STORES OR ACCUMULATES AT ANY TIME MORE THAN 25,000 GALLONS ABOVE GROUND, OR MORE THAN 500 GALLONS BELOW GROUND, OF PETROLEUM, INCLUDING CRUDE OIL OR ANY FRACTION THEREOF WHICH IS NOT OTHERWISE SPECIFICALLY LISTED OR DESIGNATED AS A HAZARDOUS SUBSTANCE; OR

STORES OR ACCUMULATES PESTICIDES, FERTILIZERS, OR ROAD OILS FOR PURPOSES OF COMMERCIAL APPLICATION OR FOR DISTRIBUTION TO RETAIL SALES OUTLETS; OR

STORES OR ACCUMULATES AT ANY TIME MORE THAN 50,000 POUNDS OF ANY DE-ICING AGENT; OR

IS UTILIZED FOR HANDLING LIVESTOCK WASTE OR FOR TREATING DOMESTIC WASTEWATERS OTHER THAN PRIVATE SEWAGE DISPOSAL SYSTEMS AS DEFINED IN THE PRIVATE SEWAGE DISPOSAL LICENSING ACT [225 ILCS 225]

(Section 3.60 of the Act)

(Source: Amended at 21 Ill. Reg.6543, effective May 8, 1997.)

**Section 616.104      Exceptions to Prohibitions**

- a) THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OR A POTENTIAL SECONDARY SOURCE MAY SECURE A WAIVER FROM THE prohibitions specified in Sections 616.402(a), 616.422(a), 616.442, 616.462(a), 616.602, 616.622, 616.702 or 616.722(a) against construction or operation within the setback zone FOR A POTABLE WATER SUPPLY WELL OTHER THAN A COMMUNITY WATER SUPPLY. A WRITTEN REQUEST FOR A WAIVER SHALL BE MADE TO THE OWNER OF THE WATER WELL AND THE AGENCY. SUCH REQUEST SHALL IDENTIFY THE NEW OR PROPOSED POTENTIAL SOURCE, SHALL GENERALLY DESCRIBE THE POSSIBLE EFFECT OF SUCH POTENTIAL SOURCE UPON THE WATER WELL AND ANY APPLICABLE TECHNOLOGY-BASED CONTROL WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, AND SHALL STATE WHETHER, AND UNDER WHAT CONDITIONS, THE REQUESTOR WILL PROVIDE AN ALTERNATIVE POTABLE WATER SUPPLY. WAIVER MAY BE GRANTED BY THE OWNER OF THE WATER WELL NO LESS THAN 90 DAYS AFTER RECEIPT UNLESS PRIOR TO SUCH TIME THE AGENCY NOTIFIES THE WELL OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST. (Section 14.2(b) of the Act)
  
- b) THE AGENCY SHALL NOT CONCUR WITH ANY SUCH REQUEST WHICH FAILS TO ACCURATELY DESCRIBE REASONABLY FORESEEABLE EFFECTS OF THE POTENTIAL SOURCE OR POTENTIAL ROUTE UPON THE WATER WELL OR ANY APPLICABLE TECHNOLOGY-BASED CONTROLS. SUCH NOTIFICATION BY THE AGENCY SHALL BE IN WRITING, AND SHALL INCLUDE A STATEMENT OF REASONS FOR THE NONCONCURRENCE. WAIVER OF THE MINIMUM SETBACK ZONE SHALL EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE BUT SHALL NOT PRECLUDE ENFORCEMENT OF ANY LAW REGARDING WATER POLLUTION.

IF THE OWNER OF THE WATER WELL HAS NOT GRANTED A WAIVER WITHIN 120 DAYS AFTER RECEIPT OF THE REQUEST OR THE AGENCY HAS NOTIFIED THE OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST, THE OWNER OF A POTENTIAL SOURCE OR POTENTIAL ROUTE MAY FILE A PETITION FOR AN EXCEPTION WITH THE BOARD AND THE AGENCY PURSUANT TO subsection (b) OF THIS SECTION. (Section 14.2(b) of the Act)

- c) NO WAIVER UNDER THIS SECTION IS REQUIRED WHERE THE POTABLE WATER SUPPLY WELL IS PART OF A PRIVATE WATER SYSTEM AS DEFINED IN THE ILLINOIS GROUNDWATER PROTECTION ACT, AND THE OWNER OF SUCH WELL WILL ALSO BE THE OWNER OF A NEW POTENTIAL SECONDARY SOURCE OR A POTENTIAL ROUTE. IN SUCH INSTANCES, A PROHIBITION OF 75 FEET SHALL APPLY AND THE OWNER SHALL NOTIFY THE AGENCY OF THE INTENDED ACTION SO THAT THE AGENCY MAY PROVIDE INFORMATION REGARDING THE POTENTIAL HAZARDS ASSOCIATED WITH LOCATION OF A POTENTIAL SECONDARY SOURCE OR POTENTIAL ROUTE IN CLOSE PROXIMITY TO A POTABLE WATER SUPPLY WELL. (Section 14.2(b) of the Act)
  
- d) THE BOARD MAY GRANT AN EXCEPTION FROM THE SETBACK REQUIREMENTS OF THIS SECTION AND SECTION 14.3 TO THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OTHER THAN LANDFILLING OR LAND TREATING, OR A NEW POTENTIAL SECONDARY SOURCE. THE OWNER SEEKING AN EXCEPTION WITH RESPECT TO A COMMUNITY WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY. THE OWNER SEEKING AN EXCEPTION WITH RESPECT TO A POTABLE WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY, AND SET FORTH THEREIN THE CIRCUMSTANCES UNDER WHICH A WAIVER HAS BEEN SOUGHT BUT NOT OBTAINED PURSUANT TO subsection (a) OF THIS SECTION. A PETITION SHALL BE ACCOMPANIED BY PROOF THAT THE OWNER OF EACH POTABLE WATER SUPPLY WELL FOR WHICH SETBACK REQUIREMENTS WOULD BE AFFECTED BY THE REQUESTED EXCEPTION HAS BEEN NOTIFIED AND BEEN PROVIDED WITH A COPY OF THE PETITION. A PETITION SHALL SET FORTH SUCH FACTS AS MAY BE REQUIRED TO SUPPORT AN EXCEPTION, INCLUDING A GENERAL DESCRIPTION OF THE POTENTIAL IMPACTS OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE UPON GROUNDWATERS AND THE AFFECTED WATER WELL, AND AN EXPLANATION OF THE APPLICABLE TECHNOLOGY-BASED

CONTROLS WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION OF THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)

- e) THE BOARD SHALL GRANT AN EXCEPTION, WHENEVER IT IS FOUND UPON PRESENTATION OF ADEQUATE PROOF, THAT COMPLIANCE WITH THE SETBACK REQUIREMENTS OF THIS SECTION WOULD POSE AN ARBITRARY AND UNREASONABLE HARDSHIP UPON THE PETITIONER, THAT THE PETITIONER WILL UTILIZE THE BEST AVAILABLE TECHNOLOGY CONTROLS ECONOMICALLY ACHIEVABLE TO MINIMIZE THE LIKELIHOOD OF CONTAMINATION OF THE POTABLE WATER SUPPLY WELL, THAT THE MAXIMUM FEASIBLE ALTERNATIVE SETBACK WILL BE UTILIZED, AND THAT THE LOCATION OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE WILL NOT CONSTITUTE A SIGNIFICANT HAZARD TO THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)
- f) A DECISION MADE BY THE BOARD PURSUANT TO THIS SUBSECTION SHALL CONSTITUTE A FINAL DETERMINATION. (Section 14.2(c) of the Act)
- g) THE GRANTING OF AN EXCEPTION BY THE BOARD SHALL NOT EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE IN INSTANCES WHERE THE OWNER HAS ELECTED NOT TO PROVIDE A WAIVER PURSUANT TO subsection (a) OF THIS SECTION. (Section 14.2(c) of the Act)

(Source: Amended at 21 Ill. Reg.6543, effective May 8, 1997.)

**Section 616.105      General Exceptions**

- a) This Part does not apply to any facility or unit, or to the owner or operator of any facility or unit, for which:
  - 1) The owner or operator obtains certification of minimal hazard pursuant to Section 14.5 of the Act; or
  - 2) Alternate requirements are imposed in an adjusted standard proceeding or in a site-specific rulemaking, pursuant to Title VII of the Act; or
  - 3) Alternate requirements are imposed in a regulated recharge area proceeding pursuant to Section 17.4 of the Act; or

- 4) The owner or operator of the facility for storage and related handling of pesticides or fertilizers for the purpose of commercial application or at a central location for the purpose of distribution to retail sales outlets that has filed a written notice of intent pursuant to Section 14.6 of the Act with the Department of Agriculture by January 1, 1993, OR WITHIN 6 MONTHS AFTER THE DATE ON WHICH A MAXIMUM SETBACK ZONE IS ESTABLISHED OR A REGULATED RECHARGE AREA REGULATION IS ADOPTED THAT AFFECTS SUCH A FACILITY; or has filed a written certification of intent pursuant to Section 14.6 of the Act ON THE APPROPRIATE LICENSE OR RENEWAL APPLICATION FORM SUBMITTED TO THE DEPARTMENT OF AGRICULTURE OR OTHER APPROPRIATE AGENCY (Section 14.6(a) of the Act). This exception shall not apply to those facilities that are not in compliance with the program requirements of subsections 14.6(b) and 14.6(c) of the Act.
- b) Nothing in this Section shall limit the authority of the Board to impose requirements on any facility or unit within any portion of any setback zone or regulated recharge area in any adjusted standard proceeding, site-specific rulemaking or a regulatory proceeding establishing the regulated recharge area.

(Source: Amended at 17 Ill. Reg. 1878, effective January 28, 1993)

## **SUBPART B: GROUNDWATER MONITORING REQUIREMENTS**

### **Section 616.201      Applicability**

This Subpart applies to:

- a) Land treatment units subject to Subpart E;
- b) Surface impoundments subject to Subpart F;
- c) Pesticide storage and handling units subject to Subpart I;
- d) Fertilizer storage and handling units subject to Subpart J;
- e) Road oil storage and handling units subject to Subpart K; and
- f) De-icing agent storage and handling units subject to Subpart L.

### **Section 616.202      Compliance Period**

The compliance period is the active life of the unit, including closure and post-closure care periods.

- a) The active life begins when the unit first begins operation or one year after the date of first applicability, whichever occurs later, and ends when the post-closure care period ends.
- b) The post-closure care period for units other than pesticide storage and handling units subject to Subpart I and fertilizer storage and handling units subject to Subpart J is five years after closure, except as provided at Section 616.211(e).
- c) The post-closure care period for pesticide storage and handling units subject to Subpart I and for fertilizer storage and handling units subject to Subpart J is three years after closure, except as provided at Section 616.211(e).
- d) Subsections (a), (b), and (c) notwithstanding, no post-closure care period is required if all waste, waste residues, contaminated containment system components and contaminated subsoils are removed or decontaminated at closure, and no ongoing corrective action is required pursuant to Section 616.211.

### **Section 616.203 Compliance With Groundwater Standards**

The owner or operator shall comply with the groundwater standards.

- a) The term of compliance is the compliance period.
- b) Compliance shall be measured at the compliance point, or compliance points if more than one such point exists.

### **Section 616.204 Groundwater Monitoring System**

- a) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples that:
  - 1) Represent the quality of background water that has not been affected by contamination from the facility or unit; and
  - 2) Represent the quality of groundwater at the compliance point or points.
- b) If a facility contains more than one unit, separate groundwater monitoring systems are not required for each unit, provided that provisions for

sampling the groundwater will enable detection and measurement of contaminants that have entered the groundwater from all units.

- c) Monitoring wells must meet the following requirements:
  - 1) Construction must be done in a manner that will enable the collection of groundwater samples;
  - 2) Casings and screens must be made from durable material that is resistant to expected chemical or physical degradation and that does not interfere with the quality of groundwater samples being collected; and
  - 3) The annular space opposite the screened section of the well (i.e., the space between the bore hole and well screen) must be filled with gravel or sand if necessary to collect groundwater samples. The annular space above and below the well screen must be sealed to prevent migration of water from overlying adjacent formations and the surface to the sampled depth.

**Section 616.205      Groundwater Monitoring Program**

The owner or operator shall develop a groundwater monitoring program that consists of:

- a) Consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the unit. At a minimum the program must include procedures and techniques for:
  - 1) Sample collection;
  - 2) Sample preservation and shipment;
  - 3) Analytical procedures; and
  - 4) Chain of custody control.
- b) Sampling and analytical methods that are appropriate for groundwater monitoring and that allow for detection and quantification of contaminants specified in this Subpart, and that are consistent with the sampling and analytical methods specified in 35 Ill. Adm. Code 620.
- c) A determination of the groundwater head elevation each time groundwater is sampled.

- d) A determination at least annually of the groundwater flow rate and direction.
- e) If the owner or operator determines that the groundwater monitoring program no longer satisfies the requirements of this Section, the owner or operator shall, within 90 days, make appropriate changes to the program. Conditions under which a groundwater monitoring program no longer satisfies the requirements of this Section include, but are not limited to:
  - 1) A Maximum Allowable Result (MAR) is exceeded in any monitoring well that is being used as a background monitoring well or that the owner or operator has previously determined to be hydraulically upgradient from the facility; or
  - 2) A redetermination of groundwater flow rate and direction conducted pursuant to subsection (d) shows that the existing monitoring system is not capable of assessing groundwater quality at the compliance points or points.

**Section 616.206 Reporting**

The owner or operator shall submit results of all monitoring required pursuant to this Subpart to the Agency within 60 days after completion of sampling.

**Section 616.207 Determining Background Values and Maximum Allowable Results ("MARs")**

- a) The owner or operator shall, beginning no later than the beginning of operation of the unit and continuing for a period of at least one year, sample each monitoring well at least every two months and analyze each such sample according to the following program:
  - 1) For a unit subject to Subpart E (land treatment units), Subpart F (surface impoundments), Subpart K (road oil storage and handling units), or Subpart L (de-icing agent storage and handling units), analysis shall be for pH, specific conductance, total organic carbon, total organic halogen, and any other parameter that meets the following criteria:
    - A) Material containing such parameter is stored, treated or disposed of at the unit; and
    - B) There is a groundwater standard for such parameter.

- 2) For a unit subject to Subpart I for the storage and handling of pesticides, analysis shall be for each pesticide stored or handled at the unit.
- 3) For a unit subject to Subpart J for the storage and handling of fertilizer, analysis shall be for pH, specific conductance, total organic carbon, nitrates as nitrogen, ammonia nitrogen and for any other parameter that meets the following criteria:
  - A) Material containing such parameter is stored or handled at the unit; and
  - B) There is a groundwater standard for such parameter.
- b) The results obtained under subsection (a) shall be used to calculate the background mean, background standard deviation and the Maximum Allowable Result (hereinafter referred to as "MAR") for each parameter using the following procedures:
  - 1) Results from all samples collected during the year must be used in the calculations unless the owner or operator demonstrates to the Agency that one or more of the results was due to error in sampling, analysis or evaluation.
  - 2) All calculations must be based on a minimum of at least six sample measurements per parameter per well.
  - 3) If any measured value is equal to or greater than its PQL, or if any measured value is greater than its corresponding groundwater standard, the actual measured value must be used calculating the mean and standard deviation.
  - 4) If any measured value is less than its PQL and less than its corresponding groundwater standard, the PQL rather than the measured value is to be used in calculating the mean and standard deviation.
  - 5) Except for pH, the MAR is the quantity equal to the measured mean value of the contaminant plus the product of the contaminant's standard deviation times the following constant:

Sample Size	Constant
6	2.10
7	2.03
8	1.97

9	1.93
10	1.90
11	1.88
12	1.85
13	1.84
14	1.82

- 6) For pH, the upper limit for the MAR is the quantity equal to the measured background mean pH plus the product of the calculated background standard deviation of the samples times the constant tabulated in subsection (a)(5).
- 7) For pH, the lower limit of the MAR is the quantity equal to the measured background mean pH minus the product of the calculated background standard deviation of the samples times the constant tabulated in subsection (a)(5).

**Section 616.208 Continued Sampling**

Upon completion of the background sampling required pursuant to Section 616.207, the owner or operator shall sample each monitoring well for the duration of the compliance period and analyze each sample, except as provided in Section 616.209, according to the following program:

- a) For a unit subject to Subpart E (land treatment units) or Subpart F (surface impoundments), sampling shall be at least quarterly and analysis shall be for pH, specific conductance, total organic carbon, total organic halogen, and any other parameter that meets the following criteria:
  - 1) Material containing such parameter is stored, treated or disposed of at the unit; and
  - 2) The Board has adopted a groundwater standard for such parameter.
- b) For a unit subject to Subpart I for the storage and handling of pesticides, sampling shall be at least quarterly, except as provided in subsection (d), and analysis shall be for five specific pesticides or five groups of chemically-similar pesticides stored or handled at the unit that are the most likely to enter into the groundwater from the unit and that are the most toxic. The owner or operator shall choose the five specific pesticides or five groups based upon the following criteria:
  - 1) The volume of the pesticides stored or handled at the unit;
  - 2) The leachability characteristics of the pesticides stored or handled at the unit;

- 3) The toxicity characteristics of the pesticides stored or handled at the unit;
  - 4) The history of spillage of the pesticides stored or handled at the unit; and
  - 5) Any groundwater standards for the pesticides stored or handled at the unit.
- c) For a unit subject to Subpart J for the storage and handling of fertilizer, sampling shall be at least quarterly, except as provided in subsection (d), and analysis shall be for pH, total organic carbon, nitrates as nitrogen, ammonia nitrogen, and specific conductance.
- d) Subsections (b) and (c) notwithstanding, for a unit subject to Subpart I for the storage and handling of pesticides or for a unit subject to Subpart J for the storage and handling of fertilizers, sampling shall be at least semi-annually provided that all of the following conditions are met:
- 1) The unit is in compliance with the containment requirements of 8 Ill. Adm. Code 255;
  - 2) There have been no detections within the preceding two years in any of the monitoring wells of any contaminant stored or handled at the facility or of any contaminant attributable to operation of the unit; and
- e) For a unit subject to Subpart K for the storage and handling of road oils or subject to Subpart L for the storage and handling of de-icing agents, sampling shall be annually and analysis shall be for pH, specific conductance, total organic carbon and total organic halogen.

**Section 616.209      Preventive Notification and Preventive Response**

- a) Preventive notification is required for each well in which:
- 1) A MAR is found to be exceeded (except for pH), or
  - 2) There is a detection of any contaminant:
    - A) Required to be monitored under Section 616.207(a);
    - B) Listed under 35 Ill. Adm. Code 620.310(a)(3)(A) (except due to natural causes and except for pH);

- C) Denoted as carcinogen under 35 Ill. Adm. Code 620.410(b); or
  - D) Subject to a standard under 35 Ill. Adm. Code 620.430 (except due to natural causes).
- b) Whenever preventive notification is required under subsection (a), the owner or operator of the unit shall confirm the detection by resampling the monitoring well or wells. This resampling shall be analyzed for each parameter found to be present in the first sample and be performed within 30 days after the date on which the first sample analyses are received, but no later than 90 days after the results of the first sample are received.
- c) If preventive notification is provided under subsection (b) by the owner or operator and the applicable standard has not been exceeded, the Agency shall determine whether the levels for each parameter as set forth in 35 Ill. Adm. Code 620.310(a)(3)(A) are exceeded. If an exceedence is determined, the Agency shall notify the owner or operator in writing regarding such finding.
- d) Upon receipt of a finding that an exceedence has occurred, the owner or operator shall submit to the Agency within 60 days a report that, at a minimum, shall include the degree and extent of contamination and the measures that are being taken to minimize or eliminate this contamination, in accordance with a prescribed schedule. The owner or operator may also provide a demonstration that:
  - 1) The contamination is the result of contaminants remaining in groundwater from a prior release for which appropriate action was taken in accordance with the laws and regulations in existence at the time of the release;
  - 2) The source of contamination is not due to the on-site release of contaminants; or
  - 3) The detection resulted from error in sampling analysis or evaluation.
- e) Based upon the report in subsection (d) as well as any other relevant information available to the Agency, the Agency shall provide a written response to the owner or operator that specifies either:
  - 1) Concurrence with the preventive response being undertaken; or
  - 2) Non-concurrence with the preventive response being undertaken and a description of the inadequacies of such action.

- f) An owner or operator who receives a written response of concurrence pursuant to subsection (e) shall provide periodic program reports to the Agency regarding the implementation of the preventive response.
- g) An owner or operator who receives a written response of non-concurrence pursuant to subsection (e) shall have 30 days to correct the inadequacies and to resubmit the report to the Agency or to request a conference with the Agency. Upon receipt of a written request for such a conference, the Agency shall schedule and hold the conference within 30 days. Following a conference, the Agency shall provide the owner or operator with a final determination regarding the adequacy of the preventive response.
- h) An owner or operator shall be responsible for implementing adequate preventive response as determined pursuant to this Section.
- i) After completion of preventive response, the concentration of a contamination listed in 35 Ill. Adm. Code 620.310(a)(3)(A) in groundwater may exceed 50 percent of the applicable numerical standard in 35 Ill. Adm. Code 620.Subpart D only if the following conditions are met:
  - 1) The exceedence has been minimized to the extent practicable;
  - 2) Beneficial use, as appropriate for the class of groundwater, has been assured; and
  - 3) Any threat to public health or the environment has been minimized.
- j) Nothing in this Section shall in any way limit the authority of the State or the United States to require or perform any corrective action process.

### **Section 616.210 Corrective Action Program**

Whenever any applicable groundwater standard under 35 Ill. Adm. Code 620.Subpart D is exceeded, an owner or operator shall be required to undertake the following corrective action:

- a) Notify the Agency of the need to undertake a corrective action program when submitting the groundwater monitoring results required pursuant to Section 616.206. The notification must indicate in which wells and for which parameters a groundwater standard was exceeded.
- b) Continue to sample and analyze according to the provisions of Section 616.208(a), except that:

- 1) For all units subject to Subpart I for the storage and handling of pesticides, the frequency of all such sampling shall be quarterly until no measured values above the groundwater standard have been recorded for any parameter for two consecutive quarters.
  - 2) For a unit subject to Subpart J for the storage and handling of fertilizers, sampling shall be quarterly for the parameters set forth in Section 616.207(a)(3) stored or handled at the unit until no measured values above the groundwater standard have been recorded for two consecutive quarters.
- c) If sample values above any groundwater standard are confirmed pursuant to Section 616.209(b), the owner or operator shall:
- 1) Submit to the Agency an engineering feasibility plan for a corrective action program designed to achieve the requirements of subsection (e) through (j).
    - A) Such feasibility plan shall be submitted to the Agency within 180 days after the date of the sample in which a groundwater standard was initially exceeded.
    - B) This requirement is waived if no groundwater standard is exceeded in any sample taken pursuant to subsection (b) for two consecutive quarters.
- d) Except as provided in subsection (c)(1)(B), the Agency shall provide a written response to the owner or operator based upon the engineering feasibility plan and any other relevant information that specifies either:
- 1) Concurrence with the feasibility plan for corrective action; or
  - 2) Non-concurrence with the feasibility plan for corrective action and a description of the inadequacies of such plan.
- e) An owner or operator who receives a written response of concurrence pursuant to subsection (d) shall provide periodic progress reports to the Agency regarding the implementing of the preventive response.
- f) An owner or operator who receives a written response of non-concurrence pursuant to subsection (d) shall have 30 days to correct the inadequacies and to resubmit the report to the Agency or to request a conference with the Agency. Upon receipt of a written request for such a conference, the Agency shall schedule and hold the conference within 30 days. Following

a conference, the Agency shall provide the owner or operator with a final determination regarding the adequacy of the corrective action.

- g) An owner or operator shall be responsible for implementing adequate preventive response as determined pursuant to this Section.
- h) Except as provided in subsection (c)(1)(B), the owner or operator shall:
  - 1) Begin the corrective action program specified in the engineering feasibility plan no later than the date of receipt of concurrence from the Agency.
  - 2) Establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program.
  - 3) Take corrective action that results in compliance with the groundwater standards:
    - A) At all compliance points; and
    - B) Beyond the unit boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner or operator is not relieved of responsibility to clean up a release that has migrated beyond the unit boundary where off-site access is denied.
  - 4) Continue corrective action measures to the extent necessary to ensure that no groundwater standard is exceeded at the compliance point or points.
  - 5) The owner or operator may terminate corrective action measures taken beyond the compliance period as identified at Section 616.202 if the owner or operator can demonstrate, based on data from the post-closure groundwater monitoring program under subsection (h)(2), that no groundwater standard has been exceeded for a period of three consecutive years.
  - 6) Report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator shall submit these reports semi-annually.
  - 7) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this Section, the

owner or operator shall, within 90 days, make any appropriate changes to the program.

- i) Subsections (b), (c) and (f) do not apply if the owner or operator makes an alternative corrective action demonstration pursuant to Section 616.211.

### **Section 616.211      Alternative Corrective Action Demonstration**

If a corrective action program is required pursuant to Section 616.210, it is presumed that contamination from the facility or unit that is being monitored is responsible for the groundwater standard being exceeded. An owner or operator may overcome that presumption by making a demonstration that a source other than the facility or unit that is being monitored caused the groundwater standard to be exceeded, or that the cause of the groundwater standard being exceeded is due to error in sampling, analysis or evaluation.

- a) In making such demonstration the owner or operator shall:
  - 1) Notify the Agency that the owner or operator intends to make a demonstration under this Section when submitting the groundwater monitoring results pursuant to Section 616.206; and
  - 2) Submit a report to the Agency that demonstrates that a source other than a facility or unit for which he is the owner or operator caused the groundwater standard to be exceeded, or that the groundwater standard was exceeded due to an error in sampling, analysis or evaluation. Such report must be included with the next submission of groundwater monitoring results required pursuant to Section 616.206; and
- b) The Agency shall provide a written response to the owner or operator, based upon the written demonstration and any other relevant information, that specifies either:
  - 1) Concurrence with the written demonstration for alternative corrective action with requirements to continue to monitor in accordance with the groundwater monitoring program established pursuant to Sections 616.205 and 616.210; or
  - 2) Non-concurrence with the written demonstration for alternative corrective action and a description of the inadequacies of such demonstration.
- c) An owner or operator who receives a written response of non-concurrence pursuant to subsection (c) shall have 30 days to so respond to the Agency in writing or to request a conference with the Agency. Upon receipt of a written request for such a conference, the Agency shall schedule and hold

the conference within 30 days. Following a conference, the Agency shall provide the owner or operator with a final determination regarding the adequacy of the alternative corrective action.

- d) The owner or operator shall begin the corrective action program in accordance with the requirements of Section 616.210(f).

## **SUBPART C: GENERAL CLOSURE AND POST-CLOSURE REQUIREMENTS**

### **Section 616.301      Applicability**

This Subpart applies to:

- a) Land treatment units subject to Subpart E;
- b) Surface impoundments subject to Subpart F;
- c) Pesticide storage and handling units subject to Subpart I; and
- d) Fertilizer storage and handling units subject to Subpart J.

### **Section 616.302      Closure Performance Standard**

The owner or operator shall close the unit in a manner that:

- a) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of waste, waste constituents, leachate, contaminated runoff or waste decomposition products to soils, groundwaters, surface waters, or the atmosphere;
- b) Minimizes the need for maintenance during and beyond the post-closure care period; and
- c) Complies with the closure requirements of 35 Ill. Adm. Code: Subtitles C and G.

### **Section 616.303      Certification of Closure**

Within 60 days after completion of closure of each unit, the owner or operator shall submit to the Agency, by registered or certified mail, a certification that the unit has been closed in accordance with the closure requirements. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

**Section 616.304      Survey Plat**

- a) No later than the submission of the certification of closure of each unit, the owner or operator shall submit to any local zoning authority, or authority with jurisdiction over local land use, and to the Agency, and record with land titles, a survey plat indicating the location and dimensions of any waste disposal units, and any pesticide or fertilizer storage and handling units, with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a registered land surveyor.
- b) For pesticide storage and handling units or for fertilizer storage and handling units, records or reports required under any other state or Federal regulatory program and which contain the information required above may be used to satisfy this reporting requirement.

**Section 616.305      Post-Closure Notice for Waste Disposal Units**

No later than 60 days after certification of closure of the unit, the owner or operator of a unit subject to Subparts D, E, or F shall submit to the Agency, to the County Recorder and to any local zoning authority or authority with jurisdiction over local land use, a record of the type, location and quantity of wastes disposed of within each cell or other area of the unit.

**Section 616.306      Certification of Completion of Post-closure Care**

No later than 60 days after completion of the established post-closure care period, the owner or operator shall submit to the Agency, by registered or certified mail, a certification that the post-closure care period for the unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

**Section 616.307      Post-Closure Care Period**

The post-closure care period is as defined at Section 616.202.

**SUBPART D: ON-SITE LANDFILLS**

**Section 616.401      Applicability**

This Subpart applies to new landfill units which are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new landfill unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part pursuant to Section 616.105.

**Section 616.402 Prohibitions**

- a) Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any landfill unit that is:
  - 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).
- b) No person shall cause or allow the disposal of special waste in a new on-site landfill unit within a regulated recharge area if the distance from the wellhead of the community water supply well to the landfill unit is 2500 feet or less, except as provided at Section 616.105.

**SUBPART E: ON-SITE LAND TREATMENT UNITS**

**Section 616.421 Applicability**

This Subpart applies to new land treatment units that are located wholly or partially within a setback zone or regulated recharge area and that treat or dispose of special waste or other waste generated on-site, except that this Subpart does not apply to any new land treatment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part pursuant to Section 616.105.

**Section 616.422 Prohibitions**

- a) Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any land treatment unit that is:

- 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).
- b) Nothing in this Section shall prohibit land treatment within a maximum setback zone regulated by the Act of sludge resulting from the treatment of domestic wastewater or of sludge resulting from the treatment of water to produce potable water, if such activities are conducted in accordance with the Act and 35 Ill. Adm. Code: Subtitle C.

**Section 616.423      Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

**Section 616.424      Design and Operating Requirements**

The owner or operator shall design and operate the land treatment site in accordance with 35 Ill. Adm. Code: Subtitle C and 35 Ill. Adm. Code: Subtitle G.

**Section 616.425      Closure and Post-Closure Care**

The owner or operator shall comply with the requirements of Subpart C.

**SUBPART F: ON-SITE SURFACE IMPOUNDMENTS**

**Section 616.441      Applicability**

This Subpart applies to new surface impoundment units that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new surface impoundment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part pursuant to Section 616.105.

**Section 616.442      Prohibitions**

Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any surface impoundment unit that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

**Section 616.443      Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

**Section 616.444      Design Requirements**

- a) The owner or operator of a surface impoundment shall install two or more liners and a leachate collection system between such liners. The requirement for the installation of two or more liners in this subsection may be satisfied by the installation of a top liner designed, operated, and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a 5-foot thick layer of recompacted clay or other natural material with a permeability of no more than  $1 \times 10^{-7}$  centimeter per second.
- b) A surface impoundment must be designed, constructed, maintained and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms and other equipment; and human error.
- c) A surface impoundment must have dikes that are designed, constructed and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the surface impoundment.
- d) The owner or operator shall maintain the following items:
  - 1) Records describing the contents of the impoundment; and

- 2) A map showing the exact location and dimensions of the impoundment, including depth with respect to permanently surveyed benchmarks.

**Section 616.445      Inspection Requirements**

- a) During construction and installation, liners must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots or foreign materials). Immediately after construction or installation:
  - 1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters; and
  - 2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes or other structural non-uniformities that may cause an increase in the permeability of that liner or cover.
- b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
  - 1) Deterioration, malfunctions or improper operation of overtopping control systems;
  - 2) Sudden drops in the level of the impoundment's contents;
  - 3) Severe erosion or other signs of deterioration in dikes or other containment devices; or
  - 4) A leaking dike.

**Section 616.446      Operating Requirements**

- a) No person shall cause or allow incompatible materials to be placed in the same surface impoundment unit.
- b) A surface impoundment unit must be removed from service in accordance with subsection (c) when:
  - 1) The level of liquids in the unit suddenly drops and the drop is not known to be caused by changes in the flows into or out of the unit; or
  - 2) The dike leaks.

- c) When a surface impoundment unit must be removed from service as required by subsection (b), the owner or operator shall:
  - 1) Shut off the flow or stop the addition of wastes into the impoundment unit;
  - 2) Contain any surface leakage that has occurred or is occurring;
  - 3) Stop the leak;
  - 4) Take any other necessary steps to stop or prevent catastrophic failure;
  - 5) If a leak cannot be stopped by any other means, empty the impoundment unit; and
  - 6) Notify the Agency of the removal from service and corrective actions that were taken, such notice to be given within 10 days after the removal from service.
- d) No surface impoundment unit that has been removed from service in accordance with the requirements of this Section may be restored to service unless the portion of the unit that failed has been repaired.
- e) A surface impoundment unit that has been removed from service in accordance with the requirements of this Section and that is not being repaired must be closed in accordance with the provisions of Section 616.447.

**Section 616.447      Closure and Post-Closure Care**

- a) If closure is to be by removal, the owner or operator shall remove all waste, all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils and structures and equipment contaminated with waste and leachate; and, if disposed of in the State of Illinois, dispose of them at a disposal site permitted by the Agency under the Act.
- b) If closure is not to be by removal, the owner or operator shall comply with the requirements of Subpart C and shall:
  - 1) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues.
  - 2) Stabilize remaining wastes to a bearing capacity sufficient to support final cover.

- 3) Cover the surface impoundment unit with a final cover designed and constructed to:
  - A) Provide long-term minimization of the migration of liquids through the closed impoundment unit;
  - B) Function with minimum maintenance;
  - C) Promote drainage and minimize erosion or abrasion of the final cover;
  - D) Accommodate settling and subsidence so that the cover's integrity is maintained; and
  - E) Have a permeability less than or equal to the permeability of any bottom liner system.
- c) If some waste residues or contaminated materials are left in place at final closure, the owner or operator shall comply with the requirements of Subpart C and shall for a period of 5 years after closure:
  - 1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion or other events;
  - 2) Maintain and monitor the groundwater monitoring system; and
  - 3) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(Source: Amended in R96-18 at 21 Ill. Reg. 6543, effective May 8, 1997.)

#### SUBPART G: ON-SITE WASTE PILES

##### **Section 616.461      Applicability**

This Subpart applies to new waste piles that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new waste pile that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Consists of sludge resulting from the treatment of domestic wastewater from a POTW and the sludge pile is situated on an underdrained pavement

and operated in accordance with the Act, 35 Ill. Adm. Code: Subtitle C and 35 Ill. Adm. Code: Subtitle G; or

- c) Is exempt from this Part pursuant to Section 616.105.

**Section 616.462 Prohibitions**

- a) Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any waste pile that is:
  - 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).
- b) No person shall cause or allow the disposal of special waste in a new waste pile within a regulated recharge area if the distance from the wellhead of the community water supply well to the waste pile is 2500 feet or less, except as provided at Section 616.105
- c) Nothing in this Section shall prohibit a waste pile, within a maximum setback zone regulated by the Act, of sludge resulting from the treatment of domestic wastewater or of sludge resulting from the treatment of water to produce potable water, if such activities are conducted in accordance with the Act, 35 Ill. Adm. Code: Subtitle C, Subtitle F, and Subtitle G.

**Section 616.463 Design and Operating Requirements**

- a) No person shall cause or allow:
  - 1) Disposal or storage in the waste pile of liquids or materials containing free liquids; or
  - 2) Migration and runoff of leachate into adjacent soil, surface water, or groundwater.
- b) A waste pile must comply with the following standards:
  - 1) The waste pile must be under an impermeable membrane or cover that provides protection from precipitation;
  - 2) The waste pile must be protected from surface water run-on; and

- 3) The waste pile must be designed and operated to control wind dispersal of waste by a means other than wetting.

#### **Section 616.464 Closure**

The owner or operator shall accomplish closure by removing and disposing of all wastes and containment system components (liners, etc). If disposed of in the State of Illinois, the waste and containment system components must be disposed of at a disposal site permitted by the Agency under the Act.

### **SUBPART H: UNDERGROUND STORAGE TANKS**

#### **Section 616.501 Applicability**

This Subpart applies to new underground storage tanks that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste, except that this Subpart does not apply to any new underground storage tank that:

- a) Pursuant to 35 Ill. Adm. Code 731.110(a) must meet the requirements set forth in 35 Ill. Adm. Code 731, unless such a tank is excluded from those requirements pursuant to 35 Ill. Adm. Code 731.110(b); or
- b) Must have interim status or a RCRA permit under 35 Ill. Adm. Code: Subtitle G; or
- c) Is exempt from this Part pursuant to Section 616.105.

#### **Section 616.502 Design and Operating Requirements**

Owners and operators of new underground storage tanks that store special waste shall meet the requirements set forth in 35 Ill. Adm. Code 731. Such requirements must be met even if the tanks are excluded from coverage under 35 Ill. Adm. Code 731 by 35 Ill. Adm. Code 731.110(b). The exclusions set forth in 35 Ill. Adm. Code 731.110(b) shall not apply to any underground storage tank that stores special waste.

### **SUBPART I: PESTICIDE STORAGE AND HANDLING UNITS**

#### **Section 616.601 Applicability**

- a) This Subpart applies to any new unit for the storage and handling of pesticides that is located wholly or partially within a setback zone or regulated recharge area and that:
  - 1) Is operated for the purpose of commercial application; or

- 2) Stores or accumulates pesticides prior to distribution to retail sales outlets, including but not limited to a unit that is a warehouse or bulk terminal.
- b) Subsections (1) and (2) notwithstanding, this Subpart does not apply to any unit exempt pursuant to Section 616.105.

### **Section 616.602 Prohibitions**

Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any unit for the storage and handling of pesticides that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Section 616.104(a) and (b); or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

### **Section 616.603 Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

### **Section 616.604 Design and Operating Requirements**

The owner or operator shall:

- a) Maintain a written record inventorying all pesticides stored or handled at the unit.
- b) At least weekly when pesticides are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator must immediately repair or replace the device. The owner or operator shall maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.
- c) Store all containers containing pesticides within a pesticide secondary containment structure, if such containers are stored outside of a roofed structure or enclosed warehouse. For the purpose of this subsection, a pesticide secondary containment structure is a structure that complies with the design standards set forth in 8 Ill. Adm. Code 255.

- d) Maintain all written records required under this Section at the site. The owner or operator shall provide any such record to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255.)

### **Section 616.605 Closure and Post-Closure Care**

The owner or operator shall comply with the requirements of Subpart C.

## **SUBPART J: FERTILIZER STORAGE AND HANDLING UNITS**

### **Section 616.621 Applicability**

This Subpart applies to any new unit for the storage and handling of fertilizers that is located wholly or partially within a setback zone or regulated recharge area and that:

- a) Is operated for the purpose of commercial application; or
- b) Stores or accumulates fertilizers prior to distribution to retail sales outlets, including but not limited to a unit that is a warehouse or bulk terminal.
- c) Subsections (a) and (b) notwithstanding, this Subpart shall not apply to any unit exempt pursuant to Section 616.105.

### **Section 616.622 Prohibitions**

Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any unit for the storage and handling of fertilizers that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

### **Section 616.623 Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

### **Section 616.624 Design and Operating Requirements**

The owner or operator shall:

- a) Maintain a written record inventorying all fertilizers stored or handled at the unit.
- b) At least weekly when fertilizers are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator shall immediately repair or replace the device. The owner or operator shall maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.
- c) Store all containers containing fertilizers (except anhydrous ammonia) within a fertilizer secondary containment structure, if such containers are stored outside of a roofed structure or enclosed warehouse. For the purpose of this subsection, a fertilizer secondary containment structure is a structure that complies with the design standards set forth in 8 Ill. Adm. Code 255.
- d) Maintain all written records required under this Section at the site. The owner or operator shall provide any such record to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255.)

#### **Section 616.625      Closure and Post-Closure Care**

The owner or operator shall comply with the requirements of Subpart C.

### **SUBPART K: ROAD OIL STORAGE AND HANDLING UNITS**

#### **Section 616.701      Applicability**

This Subpart applies to any new unit for the storage and related handling of road oils that is located wholly or partially within a setback zone or regulated recharge area and at which greater than 25,000 gallons of road oils are stored or accumulated at any one time, except as otherwise provided in Section 616.105.

#### **Section 616.702      Prohibitions**

Pursuant to Sections 14.2(a), 14.2(c) and 14.3(e) of the Act, no person shall cause or allow the construction or operation of any unit for the storage and handling of road oils that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

**Section 616.703      Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

**Section 616.704      Design and Operating Requirements for Above-Ground Storage Tanks**

- a) The owner or operator of a tank shall not cause or allow:
  - 1) Materials to be placed in a tank if such materials could cause the tank to rupture, leak, corrode, or otherwise fail.
  - 2) Uncovered tanks to be placed or operated so as to maintain less than 60 centimeters (2 feet) of freeboard unless:
    - A) The tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank); and
    - B) Such containment structure, drainage control system, or diversion structure has a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
  - 3) Material to be continuously fed into a tank, unless the tank is equipped with a means to stop this inflow (e.g., a feed cutoff system or a bypass system to a standby tank).
  - 4) Incompatible materials to be placed in the same tank.
  - 5) Material to be placed in a tank that previously held an incompatible material unless the incompatible material has been washed from the tank.
  - 6) Ignitable or reactive material to be placed in a tank unless:
    - A) The material is stored or treated in such a way that it is protected from any material or conditions that may cause it to ignite or react; or

- B) The tank is used solely for emergencies.
- b) The owner or operator shall provide and maintain primary containment for the tank such that:
  - 1) The tank has a minimum shell thickness that ensures that the tank will not fail (i.e., collapse, rupture, etc.).
  - 2) The tank is compatible with the material to be placed in the tank or the tank is lined with a substance that is compatible with the material to be placed in the tank.
- c) The owner or operator shall provide and maintain secondary containment for the tank that:
  - 1) Is capable of containing the volume of the largest tank or 10% of the total volume for all tanks, whichever is greater;
  - 2) Is constructed of material capable of containing a spill until cleanup occurs (e.g., concrete or clay). The base of the secondary containment area must be capable of minimizing vertical migration of a spill until cleanup occurs (e.g., concrete or clay);
  - 3) Has cover (e.g., crushed rock or vegetative growth) on earthen embankments sufficient to prevent erosion; and
  - 4) Isolates the tank from storm water drains and from combined storm water drains and sanitary sewer drains.
- d) If incompatible materials are handled at the site, secondary containment sufficient to isolate the units containing the incompatible materials must be provided.
- e) The owner or operator of a tank shall also:
  - 1) Test above-ground tanks and associated piping every five years for structural integrity.
  - 2) Remove uncontaminated storm water run off from the secondary containment area immediately after a precipitation event.
  - 3) Handle contaminated storm water run off in accordance with 35 Ill. Adm. Code 302.Subpart A.
  - 4) Provide a method for obtaining a sample from each tank.

- 5) Install, maintain, and operate a material level indicator on each tank.
- 6) When not in use, lock all gauges and valves that are used to inspect levels in the tank. All such devices must be located within the containment structure.

**Section 616.705 Closure**

- a) At closure, all materials must be removed from containers, tanks, discharge control equipment, and discharge confinement structures.
- b) All materials that are to be disposed of in the State of Illinois must be disposed of at a disposal site permitted by the Agency under the Act.

**SUBPART L: DE-ICING AGENT STORAGE AND HANDLING UNITS**

**Section 616.721 Applicability**

This Subpart applies to any new facility for the storage and related handling of de-icing agents that is located wholly or partially within a setback zone and at which more than 50,000 pounds of de-icing agent are stored or accumulated at any one time, except as otherwise provided in Section 616.105. For the purpose of this Subpart:

- a) An indoor storage unit means a storage unit with a roof capable of protecting the de-icing agents from wind and precipitation;
- b) An outdoor storage unit means a unit for the storage of de-icing agents that is not an indoor storage unit.

**Section 616.722 Prohibitions**

- a) Pursuant to Sections 14.2(a), 14.2(c) and (14.3(e) of the Act, no person shall cause or allow the construction or operation of any unit for the storage and handling of de-icing agents that is:
  - 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) and (b); or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

- b) No person shall cause or allow the construction or operation within any setback zone of any outdoor facility for the storage and handling of de-icing agents, except as provided at Section 616.105.

**Section 616.723      Groundwater Monitoring**

The owner or operator shall comply with the requirements of Subpart B.

**Section 616.724      Design and Operating Requirements for Indoor Storage Facilities**

- a) The base of the facility must be constructed of materials capable of containing de-icing agents (i.e., bituminous or concrete pad).
- b) The roof and walls of the facility must be constructed of materials capable of protecting the storage pile from precipitation and capable of preventing dissolved de-icing agents from entering into the adjacent soil, surface water, or groundwater. The walls of the facility must be constructed of materials compatible with the de-icing agents to be placed in the facility. Run-off from the roof must be diverted away from the loading pad.
- c) The loading pad of the facility must be constructed of materials capable of containing a spill (i.e., concrete or bituminous pad). The borders of the loading pad must be curbed to prevent dry or dissolved de-icing agents from migrating from the loading pad into the adjacent soils, surface water, or groundwater. The loading pad must be covered by a roof of sufficient size to provide the pad and de-icing agents with protection from precipitation to prevent run-off or dissolved de-icing agents from entering into the adjacent soil, surface water, or groundwater.
- d) All areas surrounding the storage pile, including but not limited to the loading pad, must be routinely inspected to determine whether any release of de-icing agents has occurred. Such areas shall be cleaned as necessary. Spilled de-icing agents must be placed back under the protective covering of the indoor storage pile. The storage pile must be reshaped as often as necessary to prevent leaching.
- e) The integrity of the facility and loading pad must be maintained.
- f) All areas surrounding the storage facility must be inspected daily to determine whether any release of de-icing agents has occurred. Spilled de-icing agents must be placed back into the storage facility.

**Section 616.725      Closure**

- a) At closure, all de-icing agents must be removed from the site, discharge control equipment and discharge confinement structures.
- b) All de-icing agents that are to be disposed of in the State of Illinois must be disposed of at a disposal site permitted by the Agency under the Act.