

ILLINOIS POLLUTION CONTROL BOARD
March 6, 1997

IN THE MATTER OF:)
)
REGULATION OF PETROLEUM) R97-10
LEAKING UNDERGROUND STORAGE) (Rulemaking - Land)
TANKS (35 ILL. ADM. CODE 732))

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by G.T. Girard, J. Theodore Meyer, and J. Yi)¹:

On September 16, 1996 the Illinois Environmental Protection Agency (Agency) filed this proposal to amend our existing underground storage tank (UST) rules as required by P.A. 89-457, signed and effective May 22, 1996. P.A. 89-457 requires that the Board complete its rulemaking on or before March 15, 1997. The intent of the proposal is to effectuate changes for three reasons: (1) to make the UST program consistent with specified federal requirements; (2) to clarify issues which have arisen since initial implementation of this part; and (3) to address issues unresolved in the predecessor R94-2(B) docket, such as determining risk-based remediation objectives and site classification. On September 19, 1996 the Board accepted this matter for hearing, and granted the motion regarding incorporations by reference filed along with the petition.

A pre-hearing conference was held on October 24, 1996 in Springfield, Illinois. Hearings were held on November 18, 1996 (Tr. 1) in Chicago, Illinois and December 9, 1996 (Tr. 2) in Springfield, Illinois before Board Hearing Officer Marie Tipsord. Testimony was received from the Agency and representatives of the Illinois Petroleum Council and Illinois Petroleum Marketers Association. Final comments were due on December 23, 1996 and the Board received five public comments. On January 9, 1997 the Board adopted a second notice in this matter. The rule was filed with the Joint Committee of Administrative Rules (JCAR) and on February 26, 1997 JCAR voted a certification of no objection to the rule.

Today the Board proceeds to final notice with this rule. During second notice, the Board made numerous non-substantive changes at the request of JCAR. In addition, for reasons more fully explained in the opinion, an effective date of July 1, 1997 has been included in these rules.

¹ The Board gratefully acknowledges the assistance of Chuck Feinen, Attorney Assistant to Joseph Yi, K.C. Poulos, Attorney Assistant to J. Theodore Meyer, and Anand Rao, a Member of the Board's technical unit in this proceeding. Marie Tipsord, Attorney Assistant to G. Tanner Girard, deserves special recognition for coordinating the Board's efforts in this rulemaking within an extremely short time frame.

AGENCY PROPOSAL

In support of the proposal the Agency filed a “Statement of Reasons” (Reasons) which indicates that this proposal was filed pursuant to Section 57.14(e) of the Act, as amended by P.A. 89-457. (Reasons at 1.) The General Assembly had acted to amend the Act because of actions taken by the United States Environmental Protection Agency (USEPA) which indicated that the Illinois leaking underground storage tank program was inconsistent with federal requirements. This proposal submitted by the Agency amends the regulations to insure consistency with the federal program and legislative mandates. (Reasons at 2.)

The Agency’s proposal included general changes throughout Part 732, such as all plans and reports are now being required to be submitted on Agency forms. (Reasons at 4.) Those forms were provided to the Board as Exhibit 6 at hearing. Also, references to the development of remediation objectives are to Part 742, which is being proposed to the Board in R97-12, Tiered Approach to Clean-up Objectives (hereinafter R97-12). (Reasons at 4.) The last general change is that any references to approval of plans or reports by operation of law have been changed to denials in cases where the Agency fails to meet deadlines.

More specific changes in Subpart A include the definition of “occurrence” which has been changed to parallel the statutory change. Also, a new definition has been added for “stratigraphic unit” because of technical differences within the regulated community regarding the term’s meaning as used in the UST rules. (Reasons at 4.) The stratigraphic unit definition was developed for the purpose of interpreting the geologic material located at a site. (*Id.*) The Agency developed the definition to ensure that each physical feature within the geologic material on a site-specific basis is evaluated to determine the potential for the transportation of contamination. (*Id.*)

The Agency indicated in the statement of reasons that it is necessary to evaluate changes in geologic material to determine if the actual geologic material is consistent with its classification in the Berg Circular (as incorporated by reference in 35 Ill. Adm. Code 732) or to determine if the criteria in 35 Ill. Adm. Code 732.307(d)(2) and (d)(3) are satisfied. (Reasons at 4.) This issue is discussed in more detail herein.

The proposal also makes specific changes to Subpart B which include, under Section 732.202, wording which has been added to clarify the time frames for submittal of 20 day and 45 day reports. (Reasons at 4.) The Agency has also added activities to the list of acceptable “early action” activities, including language that requires applicants seeking reimbursement for early action activities to perform those activities within 45 days, unless circumstances approved by the Agency warrant extending the time frame. (Reasons at 5.)

In Subpart C, the Agency added language to Section 732.300 to address USEPA’s concerns that the Agency must have the right to require a groundwater investigation if warranted. (Reasons at 5.) Amendments of Section 732.306 address the concerns of USEPA that deferrals need to be based on aspects of risk at the site. (*Id.*) The changes to Section

732.202 also address the issue of a groundwater investigation and the requirements that must be met. (*Id.*)

Proposed Section 732.307 contains several changes that include alternative methods for soil testing, clarifications on hydraulic conductivity and yield, clarifications on the Method 2 requirements when there are multiple tanks in one tank field, a provision for modification of the location of a groundwater monitoring well if the well cannot physically be installed at 200 feet or the property boundary, and criteria for when the Agency may waive the requirement for three years of groundwater monitoring. (Reasons at 5.)

Section 732.312 is a new proposed section that sets forth an alternative site classification approach. Section 57.7(b)(6) of the Act authorizes the Board to adopt a physical soil classification methodology as an alternative to the statutory Berg method. Therefore, the Agency is proposing Section 732.312 as a third method of site classification. (Reasons at 6.) Method 3 provides for the exclusion of exposure pathway as a means for classifying a site; if all applicable exposure routes can be excluded from further consideration pursuant to 35 Ill. Adm. Code 742 (which is cross-referenced in several places of Part 732), then the site is a “No Further Action” site. (*Id.*) However, if any of the applicable exposure routes cannot be excluded, then the site is a “High Priority” site. Under this Method 3 there is no “Low Priority” classification. (*Id.*)

In Subpart D the Agency proposed several changes. In Section 732.403, the Agency proposed amendments for modification of the location requirement for groundwater monitoring wells similar to that in Section 732.307. (Reasons at 6.) Proposed 732.403 also provides language for allowing the Agency to reclassify a site from “Low Priority” to “High Priority”, for just cause, any time before Agency approval of a “Low Priority” groundwater monitoring completion report, and language outlining the steps to be taken following a demonstration that groundwater monitoring should not be required for three years. (*Id.*) Section 732.403 as proposed also contains a provision that would allow an owner or operator to use groundwater monitoring data that has been collected up to three years prior to the site being classified as “Low Priority.” (*Id.*)

Section 732.408 has been revised to refer to 35 Ill. Adm. Code 742 for the establishment of remediation objectives and Section 732.410 was repealed because the “No Further Remediation Letters” are now addressed under a new Subpart G. (Reasons at 6-7.) In addition language has been added to Section 732.503 in Subpart E that deletes the requirement that the Agency notify tank owners or operators if 20 day, 45 day, and free product reports have been selected for full review. (Reasons at 7.)

A new Section 732.601(g) has been added to Subpart F in order to clarify that payment for site classification costs may only be submitted after site classification has been completed. (Reasons at 7.) Further, in Section 732.606 wording has been added to Subsection (a) to clarify what costs qualify for early action costs. (Reasons at 7.) Subsections (dd) and (ee) have been added to clarify that only one classification method is eligible for reimbursement, even if multiple methods are performed. Paragraphs (gg) through (ll) have been added to

clarify costs that are ineligible for reimbursement and provide a specific citation for the Agency to identify when denying these costs. (*Id.*)

Section 732.608 has been changed to require the Agency to determine the apportionment method to use (number of tanks or volume of tanks) that is most favorable in terms of reimbursement to the owner and operator of the tanks.

A new Subpart G which sets forth the procedures for issuance of a “No Further Remediation” letter and the recording requirements has been proposed. Subpart G was established to carry out the provisions in 35 Ill. Adm. Code 742 (*see* R97-12) that require the use of institutional controls under certain circumstances.

Finally, the Agency proposed that Appendix B be completely revamped to delete the references to cleanup objectives and replace them with a list of indicator contaminants referenced in Section 732.310. Appendix C was added to identify the maximum amount of backfill that can be reimbursed under early action based on the volume of the tank. (Reasons at 8.)

ISSUES

The Board heard testimony by Mr. Gary King, Mr. Douglas Clay and Mr. Jack Burds on behalf of the Agency and in support of the proposal. The Agency also filed a final written comment on December 23, 1996 (P.C. 3). The Board received four additional public comments in this proceeding from the following:

- 11/12/1996 Comments of Browning-Ferris Industries by William R. Uffeleman, Divisional Vice President, Government Affairs (P.C. 1) (BFI)
- 10/28/1996 Comments on behalf of the Illinois Petroleum Marketers Association and Illinois Association of Convenience Stores submitted by William J. Fleischli (previously prefiled testimony) (P.C. 2)
- 12/23/1996 Comments of Gardner, Carton and Douglas (P.C. 4) (GCD)
- 12/23/1996 Comments of the Illinois Petroleum Council submitted by David Rieser, Ross & Hardies (P.C. 5) (IPC)

In addition, Mr. Michael Rapps testified on behalf of the Illinois Petroleum Marketers Association and Mr. Peter Gates testified on behalf of the Illinois Petroleum Council.

Based on the comments and testimony in this record there were five issues which the Board resolved before adopting this rule. Those issues were:

- 1) The definition of stratigraphic unit and how testing is done within a stratigraphic unit.

- 2) Whether a non-water bearing unit should have the “yield” calculated.
- 3) What standards are necessary to void a “No Further Remediation” letter under Section 732.704(a)(4).
- 4) Whether an applicant can resubmit a request for a “No Further Remediation” letter which is denied by operation of law and whether the provisions for “90-day extensions” of Section 40 of the Act apply.
- 5) As the proposal extensively cross-references proposed 35 Ill. Adm. Code 742, how should the Board proceed to meet the statutory deadlines adopted in P.A. 89-457.

1) The definition of stratigraphic unit and how testing is done within a stratigraphic unit.

The Board received post-hearing comments from Illinois Petroleum Council (IPC), Gardner, Carton and Douglas (GCD) and the Illinois Environmental Protection Agency (Agency) concerning the definition of “stratigraphic unit” and the testing of stratigraphic units as set forth in Section 732.307(d)(2). At the December 9, 1996 hearing Michael Rapps of Rapps Engineering, on behalf of the Illinois Petroleum Marketers Association, testified concerning the proposed definition of “stratigraphic unit” and the required testing. Additionally, Mr. Gates, on behalf of IPC, also testified concerning this issue.

Initially, the Board noted that in Section 732.307(c)(2), Method One for Physical Soil Classification, the Agency proposed the same language as in Section 732.307(d)(2), Method Two for Physical Soil Classification. None of the public comments addressed the language contained in Section 732.307(c)(2) which is identical to Section 732.307(d)(2) and states: “The following tests shall be performed on a representative sample of each stratigraphic unit encountered at the site.”

Since the language of the two sections are identical and both sections set forth physical soil classifications, the Board found that the language of the two sections should be consistent. The Board also found that the same reasoning and arguments relating to Section 732.307(d)(2) hold true for Section 732.307(c)(2). Therefore any changes made to Section 732.307(d)(2) should also be made in Section 732.307(c)(2).

Mr. Michael Rapps, Testimony on behalf of Illinois Petroleum Marketers Association. In summary, Mr. Rapps’ testimony concerning the proposed definition of “stratigraphic unit” was that the Agency should not re-define or identify stratigraphic units because the Handbook of Illinois Stratigraphy, Bulletin Number 95, (1975) from the Illinois State Geological Survey (ISGS Bulletin 95) has already defined and identified all the stratigraphic units in the State. (See Exhibit 8 and Tr. 2 at 74, 82, 86 and 98.) Mr. Rapps proposed that the Board adopt the following definition of “stratigraphic unit”:

“Stratigraphic Unit” means a regionally-extensive interval of native-deposited material that has been formally named by the Illinois State Geological Survey (ISGS) in ISGS Bulletin 95, “Handbook of Illinois Stratigraphy” (1975).

(Exhibit 8.)

Mr. Rapps’ second point concerning this issue is that the assertion that the sampling requirement of each stratigraphic unit as set forth in Section 732.307(d)(2) is not necessary. (See Exhibit #8, Tr. 2 at 70.) Mr. Rapps argued that the Agency is only concerned with those stratigraphic units which are most conducive to the transport of contaminants off-site. (Exhibit 8.) Therefore, Mr. Rapps concludes, testing every stratigraphic unit is not necessary. (Exhibit 8.) Mr. Rapps proposes the following language for Section 732.307(d)(2):

The following tests shall be performed on a sample of each stratigraphic unit at the site which exhibits physical features that are the most conducive to migration of petroleum contaminants.

(Exhibit 8.)

Mr. Peter Gates, Testimony on behalf of the Illinois Petroleum Council. Mr. Gates’ testimony focused on the application of the definition of “stratigraphic unit” through Section 732.307(d)(2). (Tr. 2 at 104.) Mr. Gates believes that the implementation of Section 732.307(d)(2) will generate unnecessary sampling, which the Agency acknowledged at the first hearing. The Agency agreed to limit the sampling to those units which are most conducive to contaminant migration. (Tr. 2 at 104.) Mr. Gates testified further that the Agency was considering issues such as visible particle size, geological classification, continuity, and the size of the unit in determining which units must be included in the physical sampling program. (Tr. 2 at 104.) Mr. Gates states that the Agency’s decision not to base the need for sampling on these criteria takes the judgment away from the on-site professionals. (Tr. 2 at 104.) Mr. Gates did not propose any alternative language in either his pre-filed testimony or testimony at hearing.

Gardner Carton & Douglas (GCD)(P.C. 4) comments re: Stratigraphic unit. GCD is troubled by the definition of "stratigraphic unit" in Section 732.103. GCD is concerned that the definition is too broad and as a result Section 732.307(d)(2) would require that many different layers, regardless of significance, be evaluated for certain physical characteristics. GCD states that "[w]ithout some limitation as to the thickness, extent or permeability of a unit, parties proceeding under the program will be subject to an ambiguous and potentially overbroad stratigraphic unit sampling requirement that will lead to confusion, misapplication and excessive and unnecessary sampling and analysis." (P.C. 4 at 4.) GCD asserts that "[t]he physical identification of soil at a site often includes information from a variety of sources, such as existing and published information about site geology, observations during drilling and sampling, as well as the visual identification of the soil following standard ASTM methodology." (P.C. 4 at 4.) Furthermore, GCD contends that the information used to identify the physical soil is used by the engineers and geologists to make an informed and

reliable opinion as to the potential for a particular unit to transmit contamination off-site. (P.C. 4 at 5.)

GCD proposes the following language for Section 732.307(d)(2) to address its concerns:

The following tests shall be performed on a representative sample of each stratigraphic unit encountered in the native soil boring at a site that, in the opinion of the Licensed Professional Engineer based on a visual identification, other field data and available information about site geology, has the potential to transmit contamination off-site. (P.C. 4 at 5.)

Alternatively, GCD requests that the definition of "stratigraphic unit" be modified to include qualifications as to the thickness, extent and permeability of geologic material when determining what is a stratigraphic unit. (P.C. 4 at 5-6.)

Comments of the Illinois Petroleum Council (P.C. 5) (IPC) re: Stratigraphic unit. IPC shares the concerns of GCD that the proposed definition of "stratigraphic unit" would "identify as a new unit, each change in color or texture, no matter how slight or inconsequential." (P.C. 5 at 3.) IPC asserts that in using this definition of stratigraphic unit, Section 732.307(d) would require testing for each unit even if the differences were irrelevant to contaminant transport. (P.C. 5 at 3.) IPC argues that to require such testing would provide useless information, waste both private and public resources, and be "inconsistent with the intent of the regulation which is to determine whether the entire 15 foot unit below the invert of the tank meets the properties of a Class I aquifer." (P.C. 5 at 3.)

IPC states that it proposed a more limited approach at hearing which limits the physical testing to those units determined in the field to be more conducive to contaminant transport using the information derived from the field evaluation of the boring. (P.C. 5 at 3.) IPC maintains, citing to the testimony of Mr. Rapps, that the activities of preparing the boring log requires both a visual and manual analysis of the soil in order to fit the soil into the Unified Soil Classification System as required by the regulations. (P.C. 5 at 3.) IPC requests that the Board not ignore the importance of the judgment of the professional engineer (P.E.), the Board provided that the P.E.'s judgment is presumed correct in the identification of natural and manmade pathways. (P.C. 5 at 3.)

IPC agrees with the Agency that additional factors besides visual observation can and should be considered in making a determination of the soil's potential ability to transport contaminants and proposes the following language to be added to Section 732.307(d)(2) to address its concerns:

The following tests shall be performed on a representative sample of each of the stratigraphic units encountered in the native soil boring which are most conducive to transporting contaminants from the source based on site factors including but not limited to visual and tactile observations, the classification of

the soil, any prior evaluation of the site Stratigraphy, the volume of the release and the size or extent of the unit. (P.C. 5 at 4.)

Agency Comments/Testimony (P.C. 3) re: Stratigraphic unit. The Agency contends that the definition of stratigraphic unit should remain as proposed. The Agency argues that its definition is "strongly supported in the record and is the only one that will assure that the units most conducive to contaminant transport will be evaluated." (P.C. 3 at 4.) The Agency states that "[w]ithout the detail set forth in its definition it would be difficult, if not impossible, to determine, especially visually, which stratigraphic units at the site exhibit physical features that are most conducive to transportation of contaminants." (P.C. 3 at 4.)

In response to Mr. Rapps' testimony concerning the definition of "stratigraphic unit" and the use of the ISGS Bulletin 95 to replace the proposed definition, the Agency lists three reasons not to use the ISGS Bulletin 95. (P.C. 3 at 4.) The first reason is that the Agency is concerned that the ISGS Bulletin 95 may not be accurate because it was written over 20 years ago and therefore site-specific conditions may not be accurate. (P.C. 3 at 4.) Next, the Agency argues that the ISGS Bulletin 95 does not actually define "stratigraphic unit" but offers a compilation of descriptions of various stratigraphic units around the State. (P.C. 3 at 4.) Finally the Agency states that Mr. Rapps even admitted that in places the ISGS Bulletin 95's description of stratigraphic units is not quite accurate. (P.C. 3 at 4.)

The Agency states that "[i]n order to effectively evaluate the variability within geologic material located at a site, geotechnical testing must be conducted on each stratigraphic unit to confirm what is actually located at the site." (P.C. 3 at 4.) At hearing Mr. Clay testified about the Agency's concerns with visual observation as a means of determining the potential ability of the soil to transport contamination. (See pages Tr. 2 at 13-17.) Mr. Clay stated the following:

The Agency, as we stated in the last hearing, does believe that the unit that we're most concerned with is the one that is most conducive for transporting contaminants. However, we do not believe that this can be determined visually. We've had a number of situations where an engineer or geologist when doing the soil boring has identified a unit as a certain -- by a certain classification, such as a clayey silt, and when they actually do the physical testing of that unit, it's something much different. So we do not believe that you can determine visually -- without doing the physical soil testing that's required, we don't believe you can determine what unit is going to be the most conducive.

(Tr. 2 at 13.)

The Agency was questioned as to whether it had an issue with the visual part of the determination, or with allowing the licensed professional engineer to make field determinations of any sort with respect to which stratigraphic units they believe are the most conducive to transporting materials off the site. Mr. Clay stated that he did not believe that the Agency intends to preclude a geologist or an engineer from making any field judgments. Instead, Mr.

Clay testified that the Agency is concerned when judgments are made that the Agency doesn't agree with or concur with, which will require additional sampling, testing, and expense, rather than testing each stratigraphic unit initially. Mr. Clay also stated that typically the Agency has seen two or three stratigraphic units per Method Two evaluation. Moreover, Mr. Clay testified that sometimes someone will classify or identify one unit visually and subsequently find it to be something completely different once a particle size analysis is conducted. (Tr. 2 at 14-15.)

In response to the assertions that the definition of "stratigraphic unit" in Section 732.103 coupled with the testing requirement of Section 732.307(d)(2) will be overly burdensome and expensive, the Agency cites to the testimony of Mr. Clay: "the tests that are required are fairly inexpensive, in the range of five hundred dollars for the entire testing per stratigraphic unit, and we typically see two to three stratigraphic units for a Method Two classification." (P.C. 3 at 4.) The Agency concludes that it "does not believe that the proposal is an unduly burdensome requirement on owners or operators; rather, it helps ensure that human health will be protected from migration of contaminants through highly permeable units." (P.C. 3 at 4.)

Board Discussion of Definition of Stratigraphic Unit. The Board found that the definition of "stratigraphic unit" as proposed by the Agency was appropriate for these regulations and therefore the Board did not adopt Mr. Rapps' suggested changes. A stratigraphic unit is no more than a body of earth materials lumped together for some purpose. There are many ways in which earth materials may be grouped or lumped, and hence the number of potential stratigraphic units that can be defined is large. There are, for example, stratigraphic units that are based on time of formation, others on lithologic identity, others on fossil content, and still others on mode of formation or physiographic expression. None of these bases are relevant for the purposes of these regulations; however, they are all appropriate definitions depending on their intended use.

Most of the critical stratigraphic units defined in ISGS Bulletin 95 lump materials of different physical characteristics. This requirement of the ISGS Bulletin 95 is the basis for the same reason why the ISGS and Mr. Berg have problems using the Berg Circular for site-specific information. The stratigraphic units described in the Berg Circular were defined or categorized for other purposes and at other scales than the information necessary for the determinations that need to be made in these regulations. In making determinations pursuant to these regulations site-specific information is necessary which is why physical soil classification is necessary. Therefore, although there are multitudes of identified stratigraphic units, that does not mean that the use of the adopted definition is inappropriate or scientifically invalid. The Agency's definition of "stratigraphic unit" is appropriate for its intended use in these regulations which necessitates site-specific information on a smaller scale than in most identified stratigraphic units.

Furthermore, the Board agreed with the Agency that in order to identify the possible contaminant pathways each change in the geological material must be identified in the soil boring. The record in this proceeding (R97-10) and the last proceeding (R94-2) concerning

UST regulations makes it evident that, in order to insure human health and protection of the environment, the information must be obtained to identify the appropriate site classification based on local geology. As Mr. Clay testified the definition is necessary for the purpose of interpreting the geological material on-site and for physical soil property testing. (Prefiled Test. at 4.) Evaluation of the geological material is necessary in order to insure if conditions exists that would allow for transportation of contaminants off-site. (Prefiled Test. at 4-9.) Therefore it is necessary to differentiate each change in geological material, and it is appropriate to identify each successive change as a stratigraphic unit. Finally, the Board also agrees with the arguments set forth by the Agency concerning the accuracy and intended purposes of the ISGS Bulletin 95 as compared to the site-specific information that is needed in these regulations.

Board Discussion of Sections 732.307(c)(2) and (d)(2). Although the Board found that the Agency's proposed definition of "stratigraphic unit" is appropriate for the purposes of these regulations, the Board further found that Section 732.307(c)(2) and (d)(2) should not be interpreted to mean that each stratigraphic unit must be sampled. The Board was persuaded by the statements and arguments put forth by the public commentators. Additionally, the Board also found persuasive the Agency's statement that it is concerned with the most permeable stratigraphic units. (Tr. 1 at 26, P.C. 3 at 4.)

Furthermore, the Board found it appropriate to allow the Licensed Professional Engineer to determine which stratigraphic unit is most representative and which poses the most significant threat for transportation of contaminants off-site. As testified to by Mr. Rapps and as noted in IPC's public comments, the Licensed Professional Engineer has been given the responsibility to make certain determinations at the site in these rules. (Tr. 2 at 87, P.C. 5 at 4.) For example, Section 732.307(g)(3) creates a presumption that the Licensed Professional Engineer is correct in making determinations concerning natural or manmade pathways which may allow the migration of contaminants that may threaten human health or safety or cause explosions.

As discussed previously, Sections 732.307(c)(2) and (d)(2) provide that specified tests shall be performed on a representative sample of each stratigraphic unit encountered in the native soil boring. IPC proposed the following language:

The following tests shall be performed on a representative sample of each of the stratigraphic units encountered in the native soil boring which are most conducive to transporting contaminants from the source based on site factors including but not limited to visual and tactile observations, the classification of the soil, any prior evaluation of the site stratigraphy, the volume of the release and the size or extent of the unit.

The Board found that additional changes were necessary to allow for the Licensed Professional Engineer to make the determination as to which stratigraphic units will be tested and provide the Agency with the reasoning why those units were chosen and why the other identified units were not. Thus Sections 732.307(c)(2) and (d)(2) as adopted will read:

The following tests shall be performed on a representative sample of each of the stratigraphic units encountered in the native soil boring which has been determined most conducive to transporting contaminants from the source based on site factors including but not limited to visual and tactile observations, the classification of the soil, any prior evaluation of the site stratigraphy, the volume of the release, the size or extent of the unit, and the requirements of ASTM D 2488-93, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), approved September 15, 1993:

Any concerns raised by the Agency concerning the visual determination have been addressed by these additions in the adopted rule. The addition of the ASTM Visual-Manual Procedure, which is to be used when making the determination to test a particular stratigraphic unit, provides the Licensed Professional Engineer and the Agency criteria to make a determination concerning the physical soil classification and as to which stratigraphic unit needs further testing.

Additionally the reasoning behind the Licensed Professional Engineer's decision will be included in the soil boring log submittal. The Board added a new section to Section 732.308(a)(2) that will state "[t]he reasoning behind the Licensed Professional Engineer's decision to perform or not perform soil testing pursuant to Sections 732.307(c)(2) and (d)(2) of this Part as to each identified stratigraphic unit." Therefore each identified stratigraphic unit will either be tested or the certifying Licensed Professional Engineer will have stated the reasons why a particular stratigraphic unit will not be tested. This additional provision will give the Agency a record on which the Agency may base its review of the Licensed Professional Engineer's determination. The new language also helps to develop a record for appeal to the Board.

2) Whether a non-water bearing unit should have the "yield" calculated.

Sections 732.307(d)(2) and (3) direct the owner/operator to calculate both the yield of the geologic material and the hydraulic conductivity of the stratigraphic units at the site, even if there is no water-bearing strata found in a boring. Mr. Clay stated, at the first hearing, that hydraulic conductivity needs to be calculated for a non-water-bearing unit because the unit still provides an avenue for contaminants. (Tr. 1 at 66.) Mr. Clay further testified that a yield value calculation is not beneficial unless there are seasonal fluctuations in the groundwater. (Tr. 1 at 67.) At the second hearing and in its final comments, the Agency asserted that both calculations remain important even if there is no water-bearing strata in a boring because seasonal fluctuations of groundwater elevations may result in water accumulation in a stratigraphic unit. (Tr. 2 at 19-20.)

In its final comments, the Agency stated that calculating both the yield and the hydraulic conductivity remain significant tests, even if there is no water-bearing strata in a boring, because an owner/operator "must consider seasonal fluctuation of groundwater elevations." (P.C. 3 at 5.) In addition, the Agency argued that determining the yield of

geologic material is a “very simple calculation.” (*Id.*) Therefore, the Agency contends, determining yield and hydraulic conductivity remain important parts of the site classification process and these requirements should not be changed. (*Id.*)

In its post-hearing comments, the IPC questioned the requirements of Section 732.307(d)(2) and (3) regarding testing for yield and hydraulic conductivity. IPC questioned whether or not a soil stratum subject to seasonal fluctuations would be capable of supporting a potable water use, and thus be classified as a Class I groundwater under the Part 620 regulations (35 Ill. Adm. Code 620), from which the section at issue derives its testing requirements. (P.C. 5 at 5.) IPC argues that the regulation requires a “sustained” yield; that is, an amount of water sufficient to support a household unit. (*Id.*, citing to In the Matter of Groundwater Quality Standards, (November 7, 1991) R89-14(B) at 10, footnote 11.) IPC further argues that “a unit which is seasonably dry cannot continually produce a ‘yield’ such that it should be considered a Class I groundwater under Part 620” of the Board’s regulations. (*Id.*) IPC also pointed to Mr. Rapps’ testimony in which he noted that the Agency’s suggested equations to calculate yield do not apply to non-saturated soils. (*Id.*, Tr. 2 at 91.)

Board Discussion concerning yield calculation. The Agency and the IPC disagree regarding the requirement in Section 732.307(d)(2) and (3) which requires that both yield and hydraulic conductivity be calculated even if there is no water bearing strata in a boring. The Agency states that once the yield has been determined site-specifically, the hydraulic conductivity can be calculated easily or once the hydraulic conductivity is determined, the yield can be readily calculated. The Agency further states that even if there are no water bearing units, there may be seasonal fluctuations in the water table. (Tr. 2 at 16-17.) IPC, on the other hand, believes that yield should not be calculated if there are no water bearing strata present in a boring. IPC further questions whether a soil stratum subject to seasonal fluctuations would be capable of supporting a potable water use and thus classified consistent with Class I groundwater. (P.C. 5 at 5)

It appears that once either hydraulic conductivity or yield is known, calculating the other one is a trivial matter. Further, it would be far more economical to calculate either yield from hydraulic conductivity or vice versa than to determine if there exist seasonal fluctuation of a water table. The Board agreed with the Agency that determining yield and hydraulic conductivity of the geologic material at the site is an important part of the site classification.

3) What standards are necessary to void a “No Further Remediation” letter under Section 732.704(a)(4).

Section 732.704(a)(4) allows the Agency to void a “No Further Remediation” letter (NFR) upon the subsequent discovery of contaminants, not identified as part of the investigative or remedial activities upon which the NFR was based, that pose a threat to human health or the environment. The Agency indicates that it believes the main concern regarding this issues seemed to be that the language, as proposed, was overbroad and would entitle the Agency to void a letter if any unidentified contaminants from an unidentified source appeared sometime after the issuance of the NFR letter. (P.C. 3 at 5.) The Agency agrees that it

should be clear that NFR letters issued to “No Further Action” or “Low Priority” sites that are finished with remediation based on statutory criteria should not be voided unless there is evidence of groundwater exceedences under Section 732.302(b). (*Id.*) The Agency also agrees that an NFR letter should not be voided merely based on subsequent discovery of contaminants that were not related to the initial occurrence. (*Id.*) However, the Agency believes that with its proposed language in ERRATA Sheet Number 2 to Section 732.704(a)(4) that this issue has been resolved. (P.C. 3 at 5-6.) The Agency would not void an NFR letter simply because soil sampling shows a contaminant level above the Tier 1 numbers set forth in 35 Ill. Adm. Code 742. (P.C. 3 at 6.) The Agency would also look at whether the contaminant is related to the initial occurrence and whether groundwater is being contaminated, as well as identifying potential receptors, potential migration pathways, the history of the site, the geology of the site, and land use. (*Id.*) An analysis of these elements will provide adequate protection to both the rights of the recipient of the NFR letter and to the public. (*Id.*) The Agency would certainly not agree that it is appropriate to delete the entire section. (*Id.*)

In its comment, GCD expressed concern that even with the change suggested in ERRATA sheet number 2 by the Agency, the language is too general. (P.C. 4 at 11.) Specifically, GCD is concerned that the Agency has not clarified what circumstances constitute a “threat to human health or the environment.” (P.C. 4 at 11.) GCD maintains that the language could lead to arguments that “levels of indicator compounds in soil above the Part 742 [R97-12] standard justify voiding a NFR letter, even at a NFA [No Further Action] or a Low Priority LUST site.” (P.C. 4 at 11.) However, contaminant concentrations in soil are not a basis for a NFR letter at No Further Action or Low Priority LUST sites. (P.C. 4 at 9.) Therefore, GCD argues that contaminant levels in soil are inappropriate to apply as the criteria for voidance of a NFR letter at these sites. (P. C. 4 at 11.)

GCD suggests that the language in Section 732.704(a)(4) be amended to read:

Subsequent discovery of indicator contaminants related to the occurrence upon which the “No Further Remediation” letter was based which: (i) were not identified as part of the investigative or remedial activities upon which the issuance of the “No Further Remediation” letter was based; (ii) results in the site no longer satisfying the criteria of a No Further Action or Low Priority site classification or exceeds the remedial objectives established for High Priority sites; and (iii) pose a threat to human health or the environment; or

(P.C. 4 at 12.)

GCD maintains that this change will only allow for the voidance of NFR letters in instances where the criteria upon which the NFR determination was based no longer exists. (P.C. 4 at 12.) GCD also maintains that this amendment “aligns the provision with the legislative intent” of the Act which has criteria for the issuance of NFR letters based on geology and the risk to groundwater at the site. (*Id.*)

IPC expressed concern that the language of Section 732.704(a)(4) is so broad that it might serve as a basis to void NFR letters for sites which met all of the statutory criteria but did not meet levels under Part 742 (R97-12). (P.C. 5 at 6.) IPC argues that such a provision would be contrary to the statutory intent of the Act and might call into question previously issued NFR letters. (*Id.*) IPC believes that the language proposed in ERRATA sheet 2 by the Agency is still too vague as it is not clear what is meant by “related to the occurrence” or “which were not identified.” (P.C. 5 at 7.)

IPC suggested that the section be deleted. (P. C. 5 at 7.) IPC maintains that the only “conceivable statutory allowance” for reopening a site based on discovery of new contaminants is the consideration of groundwater. (P.C. 5 at 7-8.) IPC suggests the following language:

Subsequent discovery of indicator contaminants in groundwater from a release for which the NFR letter was issued at such sites and in such levels as would require the site to be reclassified as High Priority pursuant to Section 732.302(b).

(P.C. 5 at 8.)

Board Discussion on NFR voidance. The comments and testimony regarding this issue were extensive. However, the Board decided that the participants and the Agency agreed on what the language of Section 732.704(a)(4) should mean and the only issue was whether the language was clear. All participants agreed that the NFR letter should not be voided at No Further Action or Low Priority sites that are finished with remediation based on statutory criteria unless there is evidence of groundwater exceedences. (P.C. 3 at 5; P.C. 4 at 12 and P.C. 5 at 7-8.) Thus, the Board looked to determine whether the language of the proposal reflected that intent.

The Board shared the concerns expressed by the commentators that the language in Section 732.704(a)(4) should not be read so broadly as to defeat the statutory intent of the Act. As written in ERRATA sheet number 2, Section 732.704(a)(4) is still ambiguous in this regard. The Board found that the addition of the language proposed by GCD would make clear the intent of the rule and while maintaining the Agency’s ability to appropriately void NFR letters. In this regard the Board noted that the amendment to Section 732.704(a)(4) is not meant to place an additional burden on the Agency, but intended to clarify the circumstances under which the Agency must determine whether a threat to human health or environment exists. The Board realizes that depending upon site-specific conditions a showing that a site no longer meets the classification criteria for a No Further Action or Low Priority site in itself may demonstrate that a threat to human health or environment exists. For example, for No Further Action sites at which new information demonstrates noncompliance with Section 732.302(b), that information would also demonstrate a threat to human health or environment. Therefore, the Board amended Section 732.704(a)(4) to include:

Subsequent discovery of indicator contaminants related to the occurrence upon which the “No Further Remediation” letter was based which:

- A) were not identified as part of the investigative or remedial activities upon which the issuance of the "No Further Remediation" letter was based;
- B) results in the following:
 - i) the site no longer satisfying the criteria of a No Further Action site classification.
 - ii) the site no longer satisfying the criteria of a Low Priority site classification.
 - iii) failing to meet the remedial objectives established for a High Priority site; and
- C) pose a threat to human health or the environment;

4) Whether an applicant can resubmit a request for a "No Further Remediation" letter which is denied by operation of law and whether the provisions for "90-day extensions" of Section 40 of the Act apply.

The second issue raised by GCD is whether a request for an NFR letter which is denied pursuant to Section 732.701(c) may be resubmitted or is subject to the provisions of Section 40 of the Act regarding 90-day extensions prior to an appeal to the Board. At hearing the Agency was questioned regarding denials by operation of law pursuant to Section 732.503(b). (Tr. 1 at 106.) In response to these questions the Agency proposed, in ERRATA sheet 2, to amend Section 732.503(f) to state:

If any plan or report is rejected by operation of law, in lieu of appealing to the Board the owner or operator may either resubmit the plan or report to the Agency or request a 90 day extension in the manner provided for extensions of permit decision in Section 40 of the Act.

(Tr. 1 at 113; P.C. 4 at 6.)

GCD points out that the language in subsections 732.503(b) and 732.701(b) provide for denial of the request if the Agency does not act within a certain timeframe. The denial in either subsection is based on time expiration, not the merits of the request. The Board agreed that the language of the two subsections is similar and that the subsections should be consistent. However, the Board found that additional clarification was necessary as to what steps may be taken if a request is denied by operation of law. The three steps as enunciated in this proceeding are that: the applicant may resubmit the request; the applicant may file an immediate appeal with the Board; or the applicant and the Agency may file a joint 90 day extension request. Therefore, the Board added the following language to Section 732.701(c) and Section 732.503(f):

If any request for a "No Further Remediation" letter is denied by operation of law, in lieu of an immediate appeal to the Board the owner or operator may either resubmit the request and applicable report to the Agency or file a joint request for a 90 day extension in the manner provided for extensions of permit decision in Section 40 of the Act.

5) As the proposal extensively cross-references proposed 35 Ill. Adm. Code 742, how should the Board proceed to meet the statutory deadlines adopted in P.A. 89-457.

Pursuant to P.A. 89-457, these regulations must be adopted on or before March 15, 1997. The regulations proposed in R97-12, which are extensively referenced in this proposal, are not yet adopted and most likely will not be adopted until June of 1997. Because of the separate adoption dates, the Board at the pre-hearing conference and again at hearing asked the participants to discuss options to address this potential inconsistency. (Tr. 1 at 133.) In response, Mr. King indicated that absent a legislative change, the Agency favors delaying the effective date of these rules until a date certain by which the R97-12 proposal could also be adopted. (Tr. 1 at 136-137.) Mr. David Rieser, on behalf of the Illinois Petroleum Council stated that he would agree with Mr. King. (Tr. 1 at 137.)

The provisions of Section 57.14(e) as amended by P.A. 89-457 require that the Board “shall adopt” the rules pursuant to Sections 27 and 28 of the Act within six months of the receipt of the Agency’s proposal. Therefore, the Board must adopt the regulations on or before March 15, 1997. Under the provisions of the Illinois Administrative Procedure Act (5 ILCS 1-1-100 *et seq.* (APA)) a rule is effective upon filing with the Secretary of State, unless a “later effective date is required by statute or is specified in the rulemaking.” (Section 5-40(d) of the APA.) Thus, the Board may adopt the regulation but delay the effective date of the rule until a later date as specified in the rulemaking.

Due to the extensive cross-referencing of the regulations proposed in R97-12, the Board will delay the effective date of these regulations. If these regulations were adopted with an immediate effective date, portions of the rule would have no meaning as the corresponding provisions of Part 742 are not yet adopted. The Board could not delay these proceedings because of the requirements of Section 57.14(e) of the Act. Therefore, an effective date of July 1, 1997 will be included in the filing of this rule with the Secretary of State for final adoption. The Board anticipates that the proposed Part 742 regulation will be effective by that date.

GENERAL COMMENTS

Comments of Browning-Ferris Industries by William R. Uffeleman, Divisional Vice President, Government Affairs (P.C. #1) (BFI).

BFI comments that it believes Sections 732.606 (hh) and (ii) should either be clarified or deleted. BFI argues that because the term “reasonable” is not defined and the provisions will lead to “confusion, inconsistent interpretations and determinations.” (P.C. 1 at 1.) In support of its position, BFI cites extensive case law which has found that vague laws are unconstitutional.

The Board does not believe further clarification of Section 732.606(hh) and (ii) is necessary. The language of those two subsections provide that “unreasonable” costs as a part

of a budget plan or incurred during early action are ineligible. The Board has found in a series of cases what constitutes reasonable costs. (See, Woodstock/Northern FS v. IEPA, PCB 94-258 (May 18, 1995); Shell Oil Company v. IEPA, PCB 92-154 (June 3, 1993); Smith Oil Company of Kankakee v. IEPA, PCB 91-243 (April 22, 1993).) Therefore, the Board sees no need to further clarify the language of Section 732.606 (hh) and (ii).

Comments on behalf of the Illinois Petroleum Marketers Association and Illinois Association of Convenience Stores submitted by William J. Fleischli (previously prefiled testimony) (P.C. #2).

Mr. Fleischli's comments prefaced the pre-filed testimony of Mr. Rapps.

Illinois Environmental Protection Agency Final Comment (P.C. 3).

The Agency states in its final comment that it believes that it has produced a viable proposal, well-supported by the testimony and that the proposal satisfies the amendments required by Section 57.14(e) of the Act. (P.C. 3 at 2.) Furthermore, the Agency contends that the proposal is environmentally protective, economically reasonable, and technically feasible. (*Id.*) The incorporation of the Tiered Approach to Clean Up Objectives (R97-12) as part of this proposal makes it that much more palatable to both regulators and the regulated community alike, according to the Agency. (*Id.*)

The Agency asserts that the proposal satisfies the required amendments under Title XVI as well as incorporating new amendments that were authorized, although not required, by Title XVI. (P.C. 3 at 2-3.) For instance, Section 57.7(b)(6) authorizes the Board to adopt a new physical soil classification methodology as an alternative to the statutory Berg method. In Section 732.312, the Agency maintains it has proposed an innovative, yet viable, approach to classify a site by exposure route exclusion. (P.C. 3 at 3.) If every potential exposure route (ingestion of soil, inhalation, and ingestion of groundwater) can be excluded pursuant to the applicable requirements, then the site is considered to be "No Further Action", and a "No Further Remediation" letter will be issued. (*Id.*) Conversely, if a pathway cannot be excluded, the site is considered to be "High Priority", and the owner or operator must address those elements and pathways that caused the site to be classified as "High Priority." (*Id.*)

The Agency also provided a list of appeal points under the proposed Part 732 regulations. The following is a list of provisions wherein the Agency's decision may be appealed to the Board pursuant to the amendments the Board is adopting in this opinion and order:

Section 732.202(g)

RE: Agency approval of special circumstances warranting continuing corrective action beyond 45 days after confirmation of a release.

- Section 732.202(g) RE: Agency determination whether costs incurred beyond 45 days after release confirmation are eligible for reimbursement.
- Section 732.302(b) RE: Agency reclassification of site as “High Priority” if groundwater investigation confirms exceedence of applicable indicator contaminant objectives.
- Section 732.307(j)(6)(C) RE: Agency rejection of a site-specific evaluation to demonstrate that a groundwater investigation should not be required.
- Section 732.312(j) RE: Agency approval, rejection or requirement of modification of any plan or report submitted pursuant to Section 732.312.
- Section 732.312(l) RE: Agency approval, rejection or requirement of modification of an amended site classification plan or associated budget plan.
- Section 732.608(b) RE: Agency determination of which method of apportionment of costs will be most favorable to the owner or operator.
- Section 732.701(c) RE: Agency denial of a “No Further Remediation” letter.
- Section 732.704(b,c) RE: Agency action to void a previously issued “No Further Remediation” letter.
- Section 732.307(j)(3) RE: Agency approval of request to place groundwater monitoring well further from the property boundary or UST system. However, this may be part of a plan, which would already be an appeal point under the previous rules.
- Section 732.404(b)(4) Agency approval of the sufficiency of an engineered barrier relied upon to achieve compliance with remediation objectives.

CONCLUSION

In general the proposal as submitted to the Board has been agreed to by all participants. The Board found that the proposal is economically reasonable and technically feasible. The Board also found that the Agency has generally supported the proposal and the proposal warrants approval for final notice. At second notice the Board proceeded with the proposal as

published at first notice with very few changes. During the second notice period, the Board agreed to make non-substantive changes suggested by JCAR.

The Board today adopts a rule which will implement changes adopted by the General Assembly in P.A. 89-457 and which insures consistency between the leaking underground storage tank program in Illinois and the federal program. The Board's rule includes general changes throughout Part 732 including adopting references to Part 742 for use in developing remedial objectives. In addition the Board has added a new definition for "stratigraphic unit" and provisions for testing to be done on a stratigraphic units as well as requiring a Licensed Professional Engineer to identify why testing need not be done on a stratigraphic unit.

Generally, timeframes for submission of reports and appeal periods have been clarified throughout the Board's rule. Alternative methods for soil testing and site classification have been added along with clarifications on hydraulic conductivity and yield. The rule also includes changes in groundwater monitoring including placement of wells and allowing reclassification at any time prior to the submission of a "Low Priority" completion report. The Board has also clarified the standards for when a "No Further Remediation Letter" may be revoked. The rule includes clarification regarding payments and what constitutes reasonable costs and early action. Finally, for the reasons stated in the opinion, these rules are given an effective date of July 1, 1997.

ORDER

The Board directs the Clerk to cause the filing of the following adopted rule for Final Notice and publication in the *Illinois Register* with the Secretary of State:

PART 732 PETROLEUM UNDERGROUND STORAGE TANKS

SUBPART A: GENERAL

- | | |
|---------|---|
| 732.100 | Applicability |
| 732.101 | Election to Proceed under Part 732 |
| 732.102 | Severability |
| 732.103 | Definitions |
| 732.104 | Incorporations by Reference |
| 732.105 | Agency Authority to Initiate Investigative, Preventive or Corrective Action |

SUBPART B: EARLY ACTION

- | | |
|---------|------------------------------|
| 732.200 | General |
| 732.201 | Agency Authority to Initiate |
| 732.202 | Early Action |
| 732.203 | Free Product Removal |

732.204 Application for Payment

SUBPART C: SITE EVALUATION AND CLASSIFICATION

732.300 General
 732.301 Agency Authority to Initiate
 732.302 "No Further Action" Sites
 732.303 "Low Priority" Sites
 732.304 "High Priority" Sites
 732.305 Plan Submittal and Review
 732.306 Deferred Site Classification; Priority List for Payment
 732.307 Site Evaluation
 732.308 Boring Logs and Sealing of Soil Borings and Groundwater Monitoring Wells
 732.309 Site Classification Completion Report
 732.310 Indicator Contaminants
 732.311 Indicator Contaminant Groundwater Objectives
 732.312 Classification by Exposure Pathway Exclusion

SUBPART D: CORRECTIVE ACTION

732.400 General
 732.401 Agency Authority to Initiate
 732.402 "No Further Action" Site
 732.403 "Low Priority" Site
 732.404 "High Priority" Site
 732.405 Plan Submittal and Review
 732.406 Deferred Corrective Action; Priority List for Payment
 732.407 Alternative Technologies
 732.408 **Risk-Based** Remediation Objectives
 732.409 Groundwater Monitoring and Corrective Action Completion Reports
 732.410 "No Further Remediation" letter (Repealed)

SUBPART E: SELECTION AND REVIEW PROCEDURES FOR PLANS AND REPORTS

732.500 General
 732.501 Submittal of Plans or Reports
 732.502 Completeness Review
 732.503 Full Review of Plans or Reports
 732.504 Selection of Plans or Reports for Full Review
 732.505 Standards for Review of Plans or Reports

SUBPART F: PAYMENT OR REIMBURSEMENT

732.600 General
 732.601 Applications for Payment

732.602	Review of Applications for Payment
732.603	Authorization for Payment; Priority List
732.604	Limitations on Total Payments
732.605	Eligible Costs
732.606	Ineligible Costs
732.607	Payment for Handling Charges
732.608	Apportionment of Costs
732.609	Subrogation of Rights
732.610	Indemnification
732.611	Costs Covered by Insurance, Agreement or Court Order
732.612	Determination and Collection of Excess Payments

SUBPART G: NO FURTHER REMEDIATION LETTERS
AND RECORDING REQUIREMENTS

<u>732.700</u>	<u>General</u>
<u>732.701</u>	<u>Issuance of a No Further Remediation Letter</u>
<u>732.702</u>	<u>Contents of a No Further Remediation Letter</u>
<u>732.703</u>	<u>Duty to Record a No Further Remediation Letter</u>
<u>732.704</u>	<u>Voidance of a No Further Remediation Letter</u>
732.Appendix A	Indicator Contaminants
732.Appendix B	Groundwater and Soil Remediation Objectives; Acceptable Detection Limits (ADL) and Soil Remediation Methodology <u>Additional Parameters</u>
TABLE A	Groundwater and Soil Remediation Objectives (<u>Repealed</u>)
TABLE B	Soil remediation Methodology: Model Parameter Values (<u>Repealed</u>)
TABLE C	Soil remediation Methodology: Chemical Specific Parameters (<u>Repealed</u>)
TABLE D	Soil remediation Methodology: Objectives (<u>Repealed</u>)
732.ILLUSTRATION A	Equation for Groundwater Transport (<u>Repealed</u>)
732.ILLUSTRATION B	Equation for Soil-Groundwater Relationship (<u>Repealed</u>)
732.ILLUSTRATION C	Equation for Calculating Groundwater Objectives at the Source (<u>Repealed</u>)
732.ILLUSTRATION D	Equation for Calculating Soil Objectives at the Source (<u>Repealed</u>)
<u>732.Appendix C</u>	<u>Backfill Volumes</u>

AUTHORITY: Implementing Sections 22.12 and 57 - 57.17 and authorized by Section 57.14 of the Environmental Protection Act [415 ILCS 5/22.12, 57 - 57.17 and 57.14] (see P.A. 88-496, effective September 13, 1993).

SOURCE: Adopted in R94-2 at 18 Ill. Reg. 15008, effective September 23, 1994; amended in R97-10 at 21 Ill. Reg. _____, effective _____.

NOTE: Capitalization denotes statutory language.

SUBPART A: GENERAL

Section 732.100 Applicability

- a) This Part applies to owners or operators of any underground storage tank system used to contain petroleum and for which a release has been confirmed and required to be reported to Illinois Emergency Management Agency (IEMA) on or after September 23, 1994 in accordance with regulations adopted by the Office of State Fire Marshal (OSFM). It does not apply to owners or operators of sites for which the OSFM does not require a report to IEMA or for which the OSFM has issued or intends to issue a certificate of removal or abandonment pursuant to Section 57.5 of the Environmental Protection Act (Act) [415 ILCS 5/57.5]. Owners or operators of any underground storage tank system used to contain petroleum and for which a release was reported to IEMA on or before September 12, 1993, may elect to proceed in accordance with this Part pursuant to Section 732.101.
- b) Upon the receipt of a corrective action order from the OSFM pursuant to Section 57.5(g) of the Act, where the OSFM has determined that a release poses a threat to human health or the environment, the owner or operator of any underground storage tank system used to contain petroleum and taken out of operation before January 2, 1974, or any underground storage tank system used exclusively to store heating oil for consumptive use on the premises where stored and which serves other than a farm or residential unit shall conduct corrective action in accordance with this Part.
- c) Owners or operators subject to this Part by law or by election shall proceed expeditiously to comply with all requirements of the Act and the regulations and to obtain the "No Further Remediation" Letter signifying final disposition of the site for purposes of this Part. The Agency may use its authority pursuant to the Act and Section 732.105 of this Part to expedite investigative, preventive or corrective action by an owner or operator or to initiate such action.
- d) The following underground storage tank systems are excluded from the requirements of this Part:
 - 1) Equipment or machinery that contains petroleum substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks.
 - 2) Any underground storage tank system whose capacity is 110 gallons or less.

- 3) Any underground storage tank system that contains a de minimis concentration of petroleum substances.
- 4) Any emergency spill or overflow containment underground storage tank system that is expeditiously emptied after use.
- 5) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 *et seq.* (1972)).
- 6) Any UST system holding hazardous waste listed or identified under Subtitle C of the Solid Waste Disposal Act (42 U.S.C. 3251 *et seq.*) or a mixture of such hazardous waste or other regulated substances.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 732.101 Election to Proceed under Part 732

- a) Owners or operators of any underground storage tank system used to contain petroleum and for which a release was reported to the proper State authority on or before September 12, 1993, may elect to proceed in accordance with this Part by submitting to the Agency a written statement of such election signed by the owner or operator. Such election shall be submitted on forms prescribed and provided by the Agency. Corrective action shall then follow the requirements of this Part. The election shall be effective upon receipt by the Agency and shall not be withdrawn once made.
- b) Except as provided in Section 732.100(b) of this Part, owners or operators of underground storage tanks (USTs) used exclusively to store heating oil for consumptive use on the premises where stored and which serve other than a farm or residential unit may elect to proceed in accordance with this Part by submitting to the Agency a written statement of such election signed by the owner or operator. Such election shall be submitted on forms prescribed and provided by the Agency. Corrective action shall then follow the requirements of this Part. The election shall be effective upon receipt by the Agency and shall not be withdrawn once made.
- c) If the owner or operator elects to proceed pursuant to this Part, corrective action costs incurred in connection with the release and prior to the notification of election shall be payable or reimbursable in the same manner as was allowable under the then existing law. Corrective action costs incurred after the notification of election shall be payable or reimbursable in accordance with Subparts E and F of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.103 Definitions

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part shall be the same as that applied to the same words or terms in the Environmental Protection Act ~~{[415 ILCS 5]}~~.

"Act" means the Environmental Protection Act ~~{[415 ILCS 5]}~~.

"Agency" means the Illinois Environmental Protection Agency.

"Alternative Technology" means a process or technique, other than conventional technology, used to perform a corrective action with respect to soils contaminated by releases of petroleum from an underground storage tank.

"Board" means the Illinois Pollution Control Board.

"BODILY INJURY" MEANS BODILY INJURY, SICKNESS, OR DISEASE SUSTAINED BY A PERSON, INCLUDING DEATH AT ANY TIME, RESULTING FROM A RELEASE OF PETROLEUM FROM AN UNDERGROUND STORAGE TANK. (Section 57.2 of the Act)

"CLASS I GROUNDWATER" MEANS GROUNDWATER THAT MEETS THE CLASS I: POTABLE RESOURCE GROUNDWATER CRITERIA SET FORTH IN THE BOARD REGULATIONS ADOPTED PURSUANT TO THE ILLINOIS GROUNDWATER PROTECTION ACT. (Section 57.2 of the Act)

"CLASS III GROUNDWATER" MEANS GROUNDWATER THAT MEETS THE CLASS III: SPECIAL RESOURCE GROUNDWATER CRITERIA SET FORTH IN THE BOARD REGULATIONS ADOPTED PURSUANT TO THE ILLINOIS GROUNDWATER PROTECTION ACT. (Section 57.2 of the Act)

"Confirmed Exceedence" means laboratory verification of an exceedence of the applicable groundwater quality standards or objectives.

"Confirmed Release" means a release of petroleum that has been confirmed in accordance with regulations promulgated by the Office of the State Fire Marshal at 41 Ill. Adm. Code 170.

"Conventional Technology" means a process or technique to perform a corrective action by removal, transportation and disposal of soils contaminated by a release of petroleum from an underground storage tank in accordance with applicable laws and regulations, but without processing to remove petroleum from the soils.

"CORRECTIVE ACTION" MEANS ACTIVITIES ASSOCIATED WITH COMPLIANCE WITH THE PROVISIONS OF SECTIONS 57.6 AND 57.7 of the Act. (Section 57.2 of the Act).

"FILL MATERIAL" MEANS NON-NATIVE OR DISTURBED MATERIALS USED TO BED AND BACKFILL AROUND AN UNDERGROUND STORAGE TANK. (Section 57.2 of the Act)

"Free Product" means ~~petroleum~~ a contaminant that is present as a non-aqueous phase liquid for chemicals whose melting point is less than 30° C (e.g., liquid not dissolved in water)

"Full Accounting" means a compilation of documentation to establish, substantiate and justify the nature and extent of the corrective action costs incurred by an owner or operator.

"FUND" MEANS THE UNDERGROUND STORAGE TANK FUND. (Section 57.2 of the Act)

"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE. (Section 3.64 of the Act)

"Handling Charges" means administrative, insurance, and interest costs and a reasonable profit for procurement, oversight, and payment of subcontracts and field purchases.

"HEATING OIL" MEANS PETROLEUM THAT IS NO. 1, NO. 2, NO. 4 - LIGHT, NO. 4 - HEAVY, NO. 5 - LIGHT, NO. 5 - HEAVY OR NO. 6 TECHNICAL GRADES OF FUEL OIL; AND OTHER RESIDUAL FUEL OILS INCLUDING NAVY SPECIAL FUEL OIL AND BUNKER C. (Section 57.2 of the Act)

"IEMA" means the Illinois Emergency Management Agency.

"INDEMNIFICATION" MEANS INDEMNIFICATION OF AN OWNER OR OPERATOR FOR THE AMOUNT OF JUDGMENT ENTERED AGAINST THE OWNER OR OPERATOR IN A COURT OF LAW, FOR THE AMOUNT OF ANY FINAL ORDER OR DETERMINATION MADE AGAINST THE OWNER OR OPERATOR BY ANY AGENCY OF STATE GOVERNMENT OR ANY SUBDIVISION THEREOF, OR FOR THE AMOUNT OF ANY SETTLEMENT ENTERED INTO BY THE OWNER OR OPERATOR, IF THE JUDGMENT, ORDER, DETERMINATION, OR SETTLEMENT ARISES OUT OF BODILY INJURY OR PROPERTY

DAMAGE SUFFERED AS A RESULT OF A RELEASE OF PETROLEUM FROM AN UNDERGROUND STORAGE TANK OWNED OR OPERATED BY THE OWNER OR OPERATOR. (Section 57.2 of the Act)

"LICENSED PROFESSIONAL ENGINEER" MEANS A PERSON, CORPORATION OR PARTNERSHIP LICENSED UNDER THE LAWS OF THE STATE OF ILLINOIS TO PRACTICE PROFESSIONAL ENGINEERING. (Section 57.2 of the Act)

"Line Item Estimate" means an estimate of the costs associated with each line item (including, but not necessarily limited to, personnel, equipment, travel, etc.) which an owner or operator anticipates will be incurred for the development, implementation and completion of a plan or report.

"Man-made Pathway" means constructed routes that may allow for the transport of mobile petroleum free-liquid or petroleum-based vapors including, but not limited to, sewers, utility lines, utility vaults, building foundations, basements, crawl spaces, drainage ditches or previously excavated and filled areas.

"Monitoring Well" means a water well intended for the purpose of determining groundwater quality or quantity.

"Natural Pathway" means natural routes for the transport of mobile petroleum free-liquid or petroleum-based vapors including, but not limited to soil, groundwater, sand seams and lenses and gravel seams and lenses.

"OCCURRENCE" MEANS ~~ANY RELEASE FROM AN UNDERGROUND STORAGE TANK, INCLUDING ANY ADDITIONAL RELEASE FROM THAT UNDERGROUND STORAGE TANK AT THE SITE IDENTIFIED IN THE COURSE OF PERFORMING CORRECTIVE ACTION IN RESPONSE TO THE INITIAL RELEASE.~~ AN ACCIDENT, INCLUDING CONTINUOUS OR REPEATED EXPOSURE TO CONDITIONS, THAT RESULTS IN A SUDDEN OR NONSUDDEN RELEASE FROM AN UNDERGROUND STORAGE TANK. (Section 57.2 of the Act)

"OSFM" means the Office of the State Fire Marshal.

"Operator" means any person in control of, or having responsibility for, the daily operation of the underground storage tank. (42 U.S.C. § 6991)

BOARD NOTE: A person who voluntarily undertakes action to remove an underground storage tank system from the ground shall not be deemed an "operator" merely by the undertaking of such action.

"Owner" means:

In the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use or dispensing of regulated substances;

In the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such underground storage tank immediately before the discontinuation of its use. (42 U.S.C. § 6991)

"Person" means, for the purposes of interpreting the definitions of the terms "owner" or "operator," an individual, trust, firm, joint stock company, joint venture, consortium, commercial entity, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body and shall include the United States Government and each department, agency, and instrumentality of the United States. (Derived from 42 U.S.C. § 6991)

"Petroleum" means petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). (42 U.S.C. § 6991)

"PHYSICAL SOIL CLASSIFICATION" MEANS VERIFICATION of geological conditions consistent with regulations for identifying and protecting potable resource groundwater or verification THAT SUBSURFACE STRATA ARE AS GENERALLY MAPPED IN THE PUBLICATION ILLINOIS GEOLOGICAL SURVEY CIRCULAR (1984) ENTITLED "POTENTIAL FOR CONTAMINATION OF SHALLOW AQUIFERS IN ILLINOIS," BY BERG, RICHARD C., ET AL. SUCH CLASSIFICATION MAY INCLUDE REVIEW OF SOIL BORINGS, WELL LOGS, PHYSICAL SOIL ANALYSIS, REGIONAL GEOLOGIC MAPS, OR OTHER SCIENTIFIC PUBLICATIONS. (Section 57.2 of the Act)

"POTABLE" MEANS GENERALLY FIT FOR HUMAN CONSUMPTION IN ACCORDANCE WITH ACCEPTED WATER SUPPLY PRINCIPLES AND PRACTICES. (Section 3.65 of the Act)

"PROPERTY DAMAGE" MEANS PHYSICAL INJURY TO, DESTRUCTION OF, OR CONTAMINATION OF TANGIBLE PROPERTY owned by a person other than an owner or operator of the UST from which a release of petroleum has occurred and which tangible property is located off the site where the release occurred. Property damage includes ALL RESULTING LOSS OF USE OF THAT PROPERTY; OR LOSS OF USE OF TANGIBLE PROPERTY THAT IS NOT PHYSICALLY INJURED, DESTROYED OR

CONTAMINATED, BUT HAS BEEN EVACUATED, WITHDRAWN FROM USE, OR RENDERED INACCESSIBLE BECAUSE OF A RELEASE OF PETROLEUM FROM AN UNDERGROUND STORAGE TANK. (Derived from Section 57.2 of the Act)

"Registration" means registration of an underground storage tank with the OSFM in accordance with Section 4 of the Gasoline Storage Act (~~{430 ILCS 15/4}~~)

"REGULATED RECHARGE AREA" MEANS A COMPACT GEOGRAPHIC AREA, AS DETERMINED BY THE BOARD, THE GEOLOGY OF WHICH RENDERS A POTABLE RESOURCE GROUNDWATER PARTICULARLY SUSCEPTIBLE TO CONTAMINATION. (Section 3.67 of the Act)

"Regulated Substance" means any substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (~~{42 U.S.C. § 9601(14)}~~) (but not including any substance regulated as a hazardous waste under subtitle C of the Resource Conservation and Recovery Act (~~{42 U.S.C. §§ 6921 et seq.}~~)), and Petroleum. (42 U.S.C. § 6991)

"RELEASE" MEANS ANY SPILLING, LEAKING, EMITTING, DISCHARGING, ESCAPING, LEACHING, OR DISPOSING OF PETROLEUM FROM AN UNDERGROUND STORAGE TANK INTO GROUNDWATER, SURFACE WATER OR SUBSURFACE SOILS. (Section 57.2 of the Act)

"Residential Tank" means an underground storage tank located on property used primarily for dwelling purposes.

"Residential Unit" means a structure used primarily for dwelling purposes including multi-unit dwellings such as apartment buildings, condominiums, cooperatives or dormitories.

"SETBACK ZONE" MEANS A GEOGRAPHIC AREA, DESIGNATED PURSUANT TO THE ACT or regulations, CONTAINING A POTABLE WATER SUPPLY WELL OR A POTENTIAL SOURCE OR POTENTIAL ROUTE, HAVING A CONTINUOUS BOUNDARY, AND WITHIN WHICH CERTAIN PROHIBITIONS OR REGULATIONS ARE APPLICABLE IN ORDER TO PROTECT GROUNDWATER. (Section 3.61 of the Act)

"SITE" MEANS ANY SINGLE LOCATION, PLACE, TRACT OF LAND OR PARCEL OF PROPERTY INCLUDING CONTIGUOUS PROPERTY NOT SEPARATED BY A PUBLIC RIGHT-OF-WAY. (Section 57.2 of the Act)

"Stratigraphic Unit" means a site-specific geologic unit of native deposited material and/or bedrock of varying thickness (e.g., sand, gravel, silt, clay, bedrock, etc.). A change in stratigraphic unit is recognized by a clearly distinct contrast in geologic material or a change in physical features within a zone of gradation. For the purposes of this Part, a change in stratigraphic unit is identified by one or a combination of differences in physical features such as texture, cementation, fabric, composition, density, and/or permeability of the native material and/or bedrock.

"Surface Body of Water" or "Surface Water Body" means a natural or man-made body of water on the ground surface including, but not limited to, lakes, ponds, reservoirs, retention ponds, rivers, streams, creeks and drainage ditches. Surface body of water does not include puddles or other accumulations of precipitation, run-off or groundwater in UST excavations.

"Tank Field" means all underground storage tanks at a site that reside within a circle with a 100 foot radius.

"Underground Storage Tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 per centum or more beneath the surface of the ground. Such term does not include any of the following or any pipes connected thereto:

Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

Septic tank;

Pipeline facility (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671 et seq.), or the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001 et seq.), or which is an intrastate pipeline facility regulated under State laws as provided in either of these provisions of law, and which is determined by the Secretary of Energy to be connected to a pipeline or to be operated or intended to be capable of operating at pipeline pressure or as an integral part of a pipeline;

Surface impoundment, pit, pond, or lagoon;

Storm water or waste water collection system;

Flow-through process tank;

Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated on or above the surface of the floor. (Derived from 42 U.S.C. § 6991)

THE TERM "UNDERGROUND STORAGE TANK" SHALL ALSO MEAN AN UNDERGROUND STORAGE TANK USED EXCLUSIVELY TO STORE HEATING OIL FOR CONSUMPTIVE USE ON THE PREMISES WHERE STORED AND WHICH SERVES OTHER THAN A FARM OR RESIDENTIAL UNIT. (Section 57.2 of the Act)

"UST system" or "tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

Section 732.104 Incorporations by Reference

- a) The Board incorporates the following material by reference:

ASTM. American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103 (215) 299-5400

ASTM D 422-63, Standard Test Method for Particle-Size Analysis of Soils, approved November 21, 1963 (reapproved 1990).

ASTM D 1140-~~54~~92, Standard Test Method for Amount of Material in Soils Finer than the No. 200 (75 um) Sieve, approved ~~September 15, 1954 (reapproved 1990)~~ November 15, 1992.

ASTM D 2216-~~90~~92, Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock, approved ~~November 30, 1990~~ June 15, 1992.

ASTM D 4643-~~87~~93, Standard Test Method for Determination of Water (Moisture) Content of Soil by the Microwave Oven Method, approved ~~February 2, 1987~~ July 15, 1993.

ASTM D 2487-~~90~~93, Standard Test Method for Classification of Soils for Engineering Purposes, approved ~~June 22, 1990~~ September 15, 1993.

ASTM D 2488-~~90~~93, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), approved ~~June 29, 1990~~September 15, 1993.

ASTM D 5084-90, Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter, approved June 22, 1990.

ASTM D 4525-90, Standard Test Method for Permeability of Rocks by Flowing Air, approved May 25, 1990.

ASTM D 1587-83, Standard Practice for Thin-Walled Tube Sampling of Soils, approved August 17, 1983.

ISGS. Illinois State Geological Survey, 615 E. Peabody Drive, Champaign, IL 61820-6964 (217) 333-4747

Richard C. Berg, John P. Kempton, Keros Cartwright, "Potential for Contamination of Shallow Aquifers in Illinois" (1984), Circular No. 532.

NTIS. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (703) 487-4600

"Methods for Chemical Analysis of Water and Wastes," EPA Publication No. EPA-600/4-79-020 (March 1983), Doc. No. PB 84-128677.

"Methods for the Determination of Organic Compounds in Drinking Water," EPA, EMSL, EPA-600/4-88/039 (Dec. 1988), Doc. No. PB 89-220461.

"Practical Guide for Ground-Water Sampling," EPA Publication No. EPA-600/2-85/104 (September 1985), Doc. No. PB 86-137304.

"Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites," EPA Publication No. EPA/600/8-85/002 (February 1985), Doc. No. PB 85-192219.

"Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Publication No. SW-846, ~~(Third Edition, (September, 1986), as amended by Revision I, Final Update I (July 1992), Doc. No. PB 89-148076~~955-001-00000-1.

USGS. United States Geological Survey, 1961 Stout Street, Denver, CO 80294
(303) 844-4169

"Techniques of Water Resources Investigations of the United States Geological Survey, Guidelines for Collection and Field Analysis of Ground-Water Samples for Selected Unstable Constituents," Book I, Chapter D2 (1981).

- b) CFR (Code of Federal Regulations). Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (202) 783-3238

40 CFR 261, Appendix II (1992).

40 CFR 761.120 (1993).

- c) This Section incorporates no later editions or amendments.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

SUBPART B: EARLY ACTION

Section 732.202 Early Action

- a) Upon confirmation of a release of petroleum from a UST system in accordance with regulations promulgated by the OSFM, the owner or operator, or both, shall perform the following initial response actions within 24 hours after the release:
- 1) Report the release to IEMA (e.g., by telephone or electronic mail);
 - 2) Take immediate action to prevent any further release of the regulated substance to the environment; and
 - 3) Identify and mitigate fire, explosion and vapor hazards.
- b) Within 20 days after ~~Upon~~ confirmation of a release of petroleum from a UST system in accordance with regulations promulgated by the OSFM, the owner or operator shall perform the following initial abatement measures:
- 1) Remove as much of the petroleum from the UST system as is necessary to prevent further release into the environment;

- 2) Visually inspect any aboveground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater;
 - 3) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements);
 - 4) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement or corrective action activities. If these remedies include treatment or disposal of soils, the owner or operator shall comply with 35 Ill. Adm. Code 722, 724, 725, and 807 through 815;
 - 5) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with regulations promulgated by the OSFM. In selecting sample types, sample locations, and measurement methods, the owner or operator shall consider the nature of the stored substance, the type of backfill, depth to groundwater and other factors as appropriate for identifying the presence and source of the release; and
 - 6) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with Section 732.203 below.
- c) Within 20 days after confirmation of a release of petroleum from a UST system in accordance with regulations promulgated by the OSFM, owners or operators shall submit a report to the Agency summarizing the initial abatement steps taken under subsection (b) ~~above~~ of this Section and any resulting information or data. The report shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information~~.
- d) Within 45 days after confirmation of a release, owners ~~Owners~~ or operators shall assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsections (a) and (b) ~~above~~ of this Section. This information ~~must~~ shall include, but is not limited to, the following:
- 1) Data on the nature and estimated quantity of release;
 - 2) Data from available sources or site investigations concerning the following factors: surrounding populations, water quality, use and

approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions and land use;

- 3) Results of the site check required at subsection (b)(5) of this Section;
- 4) Results of the free product investigations required at subsection (b)(6) of this Section, to be used by owners or operators to determine whether free product must be recovered under Section 732.203.
- e) Within 45 days after confirmation of a release of petroleum from a UST system in accordance with regulations promulgated by the OSFM, owners or operators shall submit to the Agency the information collected in compliance with subsection (d) ~~above~~ of this Section in a manner that demonstrates its applicability and technical adequacy. The information shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information~~.
- f) NOTWITHSTANDING ANY OTHER CORRECTIVE ACTION TAKEN, AN OWNER OR OPERATOR MAY, AT A MINIMUM, AND PRIOR TO SUBMISSION OF ANY PLANS TO THE AGENCY, REMOVE THE TANK SYSTEM, ~~OR REPAIR~~ OR ABANDON THE UNDERGROUND STORAGE TANK IN PLACE, IN ACCORDANCE WITH THE REGULATIONS PROMULGATED BY THE OFFICE OF THE STATE FIRE MARSHAL. THE OWNER MAY REMOVE VISIBLY CONTAMINATED FILL MATERIAL AND ANY GROUNDWATER IN THE EXCAVATION WHICH EXHIBITS A SHEEN. Early action may also include disposal in accordance with applicable regulations or ex-situ treatment of contaminated fill material in accordance with Section 57.7(a)(1)(B) of the Act. (Section 57.6(b) of the Act)
- g) For purposes of reimbursement, the activities set forth in subsection (f) of this Section shall be performed within 45 days after confirmation of a release, unless special circumstances, approved by the Agency in writing, warrant continuing such activities beyond 45 days. The owner or operator shall notify the Agency in writing within 45 days of confirmation of a release of such circumstances. Costs incurred beyond 45 days shall be eligible if the Agency determines that they are consistent with early action.

BOARD NOTE: Section 57.7(a)(1)(B) of the Act limits payment or reimbursement from the Fund for removal of contaminated fill material during early action activities. Owners or operators proceeding with activities set forth in subsection (f) of this Section are advised that they may not be entitled to full payment or reimbursement. See Subpart F of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.203 Free Product Removal

Under any circumstance in which conditions at a site ~~At sites where investigations under Section 732.202(b)(6)~~ indicate the presence of free product, owners or operators shall remove free product to the maximum extent practicable while initiating or continuing any actions required pursuant to this Part or other applicable laws or regulations. In meeting the requirements of this Section, owners or operators shall:

- a) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, State and federal regulations;
- b) Use abatement of free product migration as a minimum objective for the design of the free product removal system;
- c) Handle any flammable products in a safe and competent manner to prevent fires or explosions; and
- d) Within 45 days after the confirmation of a release of petroleum presence of free product from a UST ~~in accordance with regulations promulgated by the OSFM,~~ prepare and submit to the Agency a free product removal report on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~ The report shall, at a minimum, provide the following:
 - 1) The name of the persons responsible for implementing the free product removal measures;
 - 2) The estimated quantity, type and thickness of free product observed or measured in wells, boreholes and excavations;
 - 3) The type of free product recovery system used;
 - 4) Whether any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located;
 - 5) The type of treatment applied to, and the effluent quality expected from, any discharge;
 - 6) The steps that have been or are being taken to obtain necessary permits for any discharge; and
 - 7) The disposition of the recovered free product.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

SUBPART C: SITE EVALUATION AND CLASSIFICATION

Section 732.300 General

- a) Except as provided in subsection (b) ~~below~~ of this Section, the owner or operator of any site subject to this Part shall evaluate and classify the site in accordance with the requirements of this Subpart C. All such sites shall be classified as "No Further Action," "Low Priority" or "High Priority." Site classifications shall be based on the results of the site evaluation, including, but not limited to, the physical soil classification and the groundwater investigation, if applicable.
- b) Owners or operators subject to this Part 732 may proceed without conducting site classification activities pursuant to this Subpart C under the following circumstances:
 - 1) If the owner or operator chooses to conduct remediation sufficient to satisfy the remediation objectives in Section 732.408 of this Part. Upon completion of the remediation, the owner or operator shall submit a corrective action completion report demonstrating compliance with the required levels; ~~or~~. A groundwater investigation shall be required if any of the following conditions exist, unless an evaluation through 35 Ill. Adm. Code 742 determines that no groundwater investigation is necessary:
 - A) There is evidence that groundwater wells have been impacted by the release above the Tier 1 residential numbers set forth in 35 Ill. Adm. Code 742. Appendix B (e.g., as found during release confirmation or previous corrective action measures);
 - B) Free product that may impact groundwater is found to need recovery in compliance with Section 732.203; or
 - C) There is evidence that contaminated soils may be in contact with groundwater as a result of:
 - i) Groundwater infiltrating the tank excavation; or
 - ii) Groundwater occurring at or above the invert elevation of the UST.

- 2) If, upon completion of early action requirements pursuant to Subpart B of this Part, the owner or operator can demonstrate compliance with the remediation objectives required in Section 732.408 of this Part. Upon completion of the early action requirements, the owner or operator shall submit a corrective action completion report demonstrating compliance with the required levels.

BOARD NOTE: Owners or operators proceeding under subsection (b) ~~above~~ of this Section are advised that they may not be entitled to full payment or reimbursement. See Subpart F of this Part.

- c) For corrective action completion reports submitted pursuant to subsection (b) ~~above~~ of this Section, the Agency shall issue a "No Further Remediation" Letter upon approval of the report by the Agency ~~or by operation of law~~ in accordance with Subpart E.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.302 "No Further Action" Sites

- a) Unless an owner or operator elects to classify a site under Section 732.312, sites ~~Sites~~ shall be classified as "No Further Action" if all of the following criteria are satisfied:
- 1) The physical soil classification procedure confirms either of the following:
 - A) "Berg Circular"
 - i) The site is located in an area designated D, E, F or G on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference at Section 732.104 of this Part; and
 - ii) The site's actual physical soil conditions are verified as consistent with those designated D, E, F or G on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois"; or
 - B) The site soil characteristics satisfy the criteria of Section 732.307(d)(3) of this Part;

- 2) The UST system is not within the minimum or maximum setback zone of a potable water supply well or regulated recharge area of a potable water supply well;
- 3) After completing early action measures in accordance with Subpart B of this Part, there is no evidence that, through natural pathways or man-made pathways, migration of petroleum or vapors threaten human health or human safety or may cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces;
- 4) There is no designated Class III special resource groundwater within 200 feet of the ~~site~~ UST system; and
- 5) After completing early action measures in accordance with Subpart B of this Part, no surface bodies of water are adversely affected by the presence of a visible sheen or free product layer as a result of a release of petroleum.

- b) ~~No groundwater investigation pursuant to Section 732.307(j) shall be required to demonstrate that a site meets the criteria of a "No Further Action" site.~~
Groundwater investigation shall be required to confirm that a site meets the criteria of a No Further Action site if the Agency has received information indicating that the groundwater is contaminated at levels in excess of applicable groundwater objectives specified in 35 Ill. Adm. Code 742 at the property boundary line or 200 feet from the UST system, whichever is less. In such cases, a groundwater investigation that meets the requirements of Section 732.307(j) shall be performed. If the investigation confirms there is an exceedence of applicable Tier 1 residential indicator contaminant objectives (set forth in 35 Ill. Adm. Code Appendix B), the Agency may reclassify the site as High Priority.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.303 "Low Priority" Sites

Unless an owner or operator elects to classify a site under Section 732.312, sites ~~Sites~~ shall be classified as "Low Priority" if all of the following criteria are met:

- a) The physical soil classification and groundwater investigation procedures confirm the following:
 - 1) The groundwater quality standard or groundwater objective for any applicable indicator contaminant has not been exceeded at the property boundary line or 200 feet from the UST system, whichever is less; and

2) "Berg Circular"

- A) The site is located in an area designated A1, A2, A3, A4, A5, AX, B1, B2, BX, C1, C2, C3, C4, or C5 on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference at Section 732.104 of this Part; and
- B) The site's actual physical soil conditions are verified as consistent with those designated A1, A2, A3, A4, A5, AX, B1, B2, BX, C1, C2, C3, C4, or C5 on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois"; or

3) The site soil characteristics do not satisfy the criteria of Section 732.307(d)(3) of this Part;

- b) The UST system is not within the minimum or maximum setback zone of a potable water supply well or regulated recharge area of a potable water supply well;
- c) After completing early action measures in accordance with Subpart B of this Part, there is no evidence that, through natural or man-made pathways, migration of petroleum or vapors threaten human health or human safety or may cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces;
- d) There is no designated Class III special resource groundwater within 200 feet of the site UST system; and
- e) After completing early action measures in accordance with Subpart B of this Part, there are no surface bodies of water adversely affected by the presence of a visible sheen or free product layer as a result of the release of petroleum.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.304 "High Priority" Sites

Unless an owner or operator elects to classify a site under Section 732.312, sites Sites shall be classified as "High Priority" if any of the following are met:

- a) The physical soil classification and groundwater investigation procedures confirm the following:

- 1) The groundwater quality standard or groundwater objective for any applicable indicator contaminant has been exceeded at the property boundary line or 200 feet from the UST system, whichever is less; and
- 2) "Berg Circular"
 - Ai) The site is located in an area designated A1, A2, A3, A4, A5, AX, B1, B2, BX, C1, C2, C3, C4, or C5 on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference at Section 732.104 of this Part; and
 - Bi) The site's actual physical soil conditions are verified as consistent with those designated A1, A2, A3, A4, A5, AX, B1, B2, BX, C1, C2, C3, C4, or C5 on the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois"; or
- 3) The site soil characteristics do not satisfy the criteria of Section 732.307(d)(3) of this Part;
 - b) The UST system is within the minimum or maximum setback zone of a potable water supply well or regulated recharge area of a potable water supply well;
 - c) After completing early action measures in accordance with Subpart B of this Part, there is evidence that, through natural or man-made pathways, migration of petroleum or vapors threaten human health or human safety or may cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces;
 - d) There is designated Class III special resource groundwater within 200 feet of the site UST system; or
 - e) After completing early action measures in accordance with Subpart B of this Part, a surface body of water is adversely affected by the presence of a visible sheen or free product layer as a result of a release of petroleum.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.305 Plan Submittal and Review

- a) Unless an owner or operator elects to classify a site under Section 732.312, prior ~~Prior~~ to conducting any site evaluation activities, the owner or operator shall submit to the Agency a site classification plan, including but not limited to a physical soil classification and groundwater investigation plan, satisfying the

minimum requirements for site evaluation activities as set forth in Section 732.307. The plans shall be designed to collect data sufficient to determine the site classification in accordance with Sections 732.302, 732.303 or 732.304 of this Part. Site classification plans shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~

- b) In addition to the plan required in subsection (a) ~~above~~ of this Section and prior to conducting any site evaluation activities, any owner or operator intending to seek payment from the Fund shall submit to the Agency:
- 1) An application for payment of costs associated with eligible early action costs incurred pursuant to Subpart B of this Part, except as provided in subsection (b)(2) ~~below~~ of this Section; and
 - 2) A site classification budget plan, which shall include, but not be limited to, a copy of the eligibility and deductibility determination of the OSFM and a line item estimate of all costs associated with the development, implementation and completion of the site evaluation activities required in Section 732.307. In accordance with Section 732.204 of this Part, the owner or operator may submit a site classification budget plan that includes a line item estimate of the activities and costs of early action for review and approval prior to the submittal of an application for payment. Formulation of budget plans should be consistent with the eligible and ineligible costs listed at Sections 732.605 and 732.606 of this Part. Site classification budget plans shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~
- c) The Agency shall have the authority to review and approve, reject or require modification of any plan submitted pursuant to this Section in accordance with the procedures contained in Subpart E of this Part.
- d) Notwithstanding subsections (a) and (b) ~~above~~ of this Section, an owner or operator may proceed to conduct site evaluation activities in accordance with this Subpart C prior to the submittal or approval or an otherwise required site classification plan (including physical soil classification and groundwater investigation plans and associated budget plans). However, any such plan shall be submitted to the Agency for review and approval, rejection or modification in accordance with the procedures contained in Subpart E of this Part prior to payment or reimbursement for any related costs or the issuance of a "No Further Remediation" Letter.
- e) If, following the approval of any site classification plan, an owner or operator determines that revised procedures or cost estimates are necessary in order to comply with the minimum required activities for the site, the owner or operator

shall submit, as applicable, an amended site classification plan or associated budget plan for review by the Agency. The Agency shall have the authority to review and approve, reject or require modifications of the amended plan in accordance with the procedures contained in Subpart E of this Part.

BOARD NOTE: Owners or operators proceeding under subsection (d) of this Section are advised that they may not be entitled to full payment or reimbursement. See Subpart F of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.306 Deferred Site Classification; Priority List for Payment

- a) ~~NOTWITHSTANDING ANY OTHER PROVISION OR RULE OF LAW WITH THE EXCEPTION OF THE early action requirements of Subpart B of this Part and the investigation of migratory pathways as required by Section 732.307(g), THE~~ An OWNER OR OPERATOR WHO HAS RECEIVED APPROVAL FOR SUBMITTED ANY budget- BUDGET PLAN SUBMITTED PURSUANT TO this Part AND WHO IS ELIGIBLE FOR PAYMENT FROM THE UNDERGROUND STORAGE TANK FUND SHALL BE ELIGIBLE TO ELECT TO COMMENCE site classification UPON THE AVAILABILITY OF FUNDS. SUCH ELECTION SHALL BE MADE IN WRITING TO THE AGENCY WITHIN 30 DAYS OF RECEIPT OF AGENCY APPROVAL OF A budget PLAN. At that time, or up until 60 days thereafter, the owner or operator shall also provide the results of the investigation of the migratory pathways so that the Agency can make its decision in accordance with subsection (b) of this Section. THE AGENCY SHALL PROVIDE NOTICE TO THE OWNER OR OPERATOR AT SUCH TIME AS IT APPROVES THE budget PLAN WHETHER SUFFICIENT RESOURCES ARE AVAILABLE IN ORDER TO IMMEDIATELY COMMENCE THE APPROVED MEASURES. MAY ELECT TO DEFER SITE CLASSIFICATION, LOW PRIORITY GROUNDWATER MONITORING, OR REMEDIATION ACTIVITIES UNTIL FUNDS ARE AVAILABLE IN AN AMOUNT EQUAL TO THE AMOUNT APPROVED IN THE BUDGET PLAN if the requirements of subsection (b) of this Section are met. (Section 57.8(b) of the Act)

- 1) Approvals of budget plans shall be pursuant to Agency review ~~or by operation of law~~ in accordance with Subpart E of this Part.
- 2) The Agency shall monitor the availability of funds to determine whether sufficient resources exist to provide payment in an amount equal to the total of the approved budget plans and shall provide notice to owners or operators of the availability of funds in accordance with Section 732.503(h). Funds shall not be deemed available for owners or operators electing to defer site classification so long as there are owners

or operators on the priority list established pursuant to Section 732.603(d) of this Part awaiting forwarding of vouchers to the Office of the State Comptroller.

- 3) Upon receiving written notification that an owner or operator elects to defer site classification until funds are available, the Agency shall place the site on a priority list for payment and notification of availability of sufficient funds. Sites shall enter the priority list for payment based solely on the date the Agency receives the written notification election of deferral, with the earliest dates having the highest priority. The Agency's record of the date of receipt shall be deemed conclusive, unless a contrary date is proven by a dated, signed receipt from registered or certified mail.
- 4) As funds become available, the Agency shall encumber funds for each site in the order of priority in an amount equal to the total of the approved budget plan for which deferral was sought. The Agency shall then notify owners or operators that sufficient funds have been allocated for the owner or operator's site. After such notification the owner or operator shall commence site classification activities.
- 5) Authorization of payment of encumbered funds for deferred site classification activities shall be approved in accordance with the requirements of Subpart F of this Part.
- 6) The priority list for payment and notification of availability of sufficient funds shall be the same as that used for deferred corrective action pursuant to Section 732.406 with both types of deferrals entering the list and moving up solely on the basis of the date the Agency receives written notice of the deferral.

- b) ~~SHOULD THE AGENCY OR OWNER OR OPERATOR DETERMINE A THREAT TO HUMAN HEALTH AND/OR THE ENVIRONMENT REQUIRES IMMEDIATE ACTION, INCLUDING THE EXISTENCE OF PETROLEUM OR VAPORS WHICH THREATEN HUMAN HEALTH OR HUMAN SAFETY OR MAY CAUSE EXPLOSIONS IN BASEMENTS, CRAWL SPACES, UTILITY CONDUITS, STORM OR SANITARY SEWERS, VAULTS OR OTHER CONFINED SPACES, THE ELECTION TO COMMENCE site classification UPON THE AVAILABILITY OF FUNDS SHALL NOT BE AVAILABLE. THE AGENCY SHALL NOTIFY THE OWNER OR OPERATOR BY CERTIFIED MAIL THAT A SITUATION EXISTS THAT WOULD PRECLUDE THE OWNER OR OPERATOR FROM COMMENCING site classification UPON THE AVAILABILITY OF FUNDS. SUCH ACTION BY THE AGENCY SHALL NOT BE SUBJECT TO APPEAL. (Section 57.8(b) of the Act)~~ An owner or operator who elects to

defer site classification, low priority groundwater monitoring, or remediation activities under subsection (a) of this Section shall submit a report demonstrating the following:

- 1) The early action requirements of Subpart B of this Part have been met; and
 - 2) The release does not pose a threat to human health or the environment through migratory pathways following the investigation of migration pathways requirements of Section 732.307(g).
- c) An owner or operator may withdraw the election to commence site classification activities upon the availability of funds at any time. The Agency shall be notified in writing of the withdrawal. Upon such withdrawal, the owner or operator shall proceed with site classification in accordance with the requirements of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.307 Site Evaluation

- a) Except as provided in Section 732.300(b), or unless an owner or operator elects to classify a site under Section 732.312, the owner or operator of any site for which a release of petroleum has been confirmed in accordance with regulations promulgated by the OSFM and reported to IEMA shall arrange for site evaluation and classification in accordance with the requirements of this Section. A Licensed Professional Engineer (or, where appropriate, persons working under the direction of a Licensed Professional Engineer) shall conduct the site evaluation. The results of the site evaluation shall provide the basis for determining the site classification. The site classification shall be certified **as required** by the supervising Licensed Professional Engineer.
- b) As a part of each site evaluation, the Licensed Professional Engineer shall conduct a physical soil classification in accordance with the procedures at subsections (c) or (d) **below** of this Section. Except as provided in subsection (e) **below** of this Section, all elements of the chosen method of physical soil classification must be completed for each site. In addition to the requirement for a physical soil classification, the Licensed Professional Engineer shall, at a minimum, complete the requirements at subsections (f) through (j) **below** of this Section before classifying a site as "High Priority" or "Low Priority" and subsection (f) through (i) **below** of this Section before classifying a site as "No Further Action."
- c) Method One for Physical Soil Classification:

1) Soil Borings

- A) Prior to conducting field activities, a review of scientific publications and regional geologic maps shall be conducted to determine if the subsurface strata are as generally mapped in the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference in Section 732.104 of this Part. A list of the publications reviewed and any preliminary conclusions concerning the site geology shall be included in the site classification completion report.
- B) A minimum of one soil boring to a depth that includes 50 feet of native soil or to bedrock shall be performed for each tank field with a release of petroleum.
- C) If, during boring, bedrock is encountered or if auger refusal occurs because of the density of a geologic material, a sample of the bedrock or other material shall be collected to determine permeability or an in situ test shall be performed to determine hydraulic conductivity in accordance with subsections (c)(3)(A) and (c)(3)(B) **below** of this Section. If bedrock is encountered or auger refusal occurs, the Licensed Professional Engineer shall verify that the conditions that prevented the full boring are expected to be continuous through the remaining required depth.
- D) Borings shall be performed within 200 feet of the outer edge of the tank field or at the property boundary, whichever is less. If more than one boring is required per site, borings shall be spaced to provide reasonable representation of site characteristics. The actual spacing of the borings shall be based on the regional hydrogeologic information collected in accordance with ~~Section 732.307~~ subsection (c)(1)(A). Location shall be chosen to limit to the greatest extent possible the vertical migration of contamination.
- E) Soil borings shall be continuously sampled to ensure that no gaps appear in the sample column.
- F) If anomalies are encountered, additional soil borings may be necessary to verify the consistency of the site geology.
- G) Any water bearing units encountered shall be protected as necessary to prevent cross-contamination of water bearing units during drilling.

- H) The owner or operator may utilize techniques other than those specified in this subsection (c)(1) for soil classification provided that:
- 1) The techniques provide equivalent, or superior, information as required by this Section;
 - 2) The techniques have been successfully utilized in applications similar to the proposed application;
 - 3) Methods for quality control can be implemented; and
 - 4) The owner or operator has received written approval from the Agency prior to the start of the investigation.

2) Soil Properties

The following tests shall be performed on a representative sample of each of the stratigraphic units encountered at the site in the native soil boring which has been determined most conducive to transporting contaminants from the source based on site factors, including but not limited to visual and tactile observations, the classification of the soil, any prior evaluation of the site stratigraphy, the volume of the release, the size or extent of the unit, and the requirements of ASTM D 2488-93, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), approved September 15, 1993:

- A) A soil particle analysis using the test methods specified in ASTM (American Society for Testing and Materials) Standards D 422-63 or D 1140-~~54~~92, "Standard Test Method for Particle-Size Analysis of Soils," or "Standard Test Method for Amount of Material in Soils Finer than the No. 200 (75 um) Sieve," incorporated by reference in Section 732.104 of this Part, or other Agency approved method;
- B) A soil moisture content analysis using the test methods specified in ASTM Standards D 2216-~~90~~92 or D 4643-~~87~~93, "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock," or "Standard Test Method for Determination of Water (Moisture) Content of Soil by the Microwave Oven Method," incorporated by reference in Section 732.104 of this Part, or other Agency approved method;

- C) A soil classification using the test methods specified in ASTM Standards D 2487-~~90~~93 or D 2488-~~90~~93, "Standard Test Method for Classification of Soils for Engineering Purposes" or "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)," incorporated by reference in Section 732.104 of this Part, or other Agency approved method; ~~and~~
- D) Unconfined compression strength shall be determined in tons per square foot by using a hand penetrometer; and
- E) If representative samples of each stratigraphic unit are collected for soil property testing by the use of thin-walled tube sampling, an additional soil boring must be performed for this sampling within 5 feet of the site classification boring. Thin-walled tube sampling must be conducted in accordance with ASTM Method D 1587-83, or other Agency approved method. The boring from which the thin-walled tubes are collected must be logged in accordance with the requirements of 35 Ill. Adm. Code 732.308(a).

3) Hydraulic Conductivity

- A) If a water bearing unit is encountered while performing soil boring(s) for the physical soil classification, an in-situ hydraulic conductivity test shall be performed in the first fully saturated layer below the water table. If multiple water bearing units are encountered, an in-situ hydraulic conductivity test shall be performed on each such unit.
- i) Wells used for hydraulic conductivity testing shall be constructed in a manner that ensures the most accurate results.
- ii) The screen must be contained within the saturated zone.
- B) If no water bearing unit is encountered in the required soil boring(s), then the following laboratory analyses shall be conducted, as applicable, on a representative sample from each stratigraphic unit:
- i) A hydraulic conductivity analysis of undisturbed or laboratory compacted granular soils (i.e., clay, silt, sand or gravel) using the test method specified in ASTM (American Society for Testing and Materials) Standard D

5084-90, "Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter," incorporated by reference in Section 732.104 of this Part, or other Agency approved method.

- ii) Granular soils having estimated hydraulic conductivity of greater than 1×10^{-3} cm/s will fail the hydraulic conductivity requirements within the Berg Circular for "No Further Action" geology, and therefore, no tests need to be run on the soils.
- iii) A hydraulic conductivity analysis of bedrock using the test method specified in ASTM (American Society for Testing and Materials) Standard D 4525-90, "Standard Test Method for Permeability of Rocks by Flowing Air," incorporated by reference in Section 732.104 of this Part, or other Agency approved method.
- iv) If representative samples of each stratigraphic unit are collected for soil property testing by the use of thin-walled tube sampling, an additional soil boring must be performed for this sampling within 5 feet of the site classification boring. Thin-walled tube sampling must be conducted in accordance with ASTM Method D 1587-83, or other Agency approved method. The boring from which the thin-walled tubes are collected must be logged in accordance with the requirements of 35 Ill. Adm. Code 732.308(a).

- 4) If the results of the physical soil classification or groundwater investigation reveal that the actual site geologic characteristics are different from those generally mapped by the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference at Section 732.104 of this Part, the site classification shall be determined using the actual site geologic characteristics.

d) Method Two for Physical Soil Classification:

1) Soil Borings

- A) A minimum of one soil boring to a depth that includes native material from the invert elevation of the most shallow UST to 15 feet below the invert elevation of the deepest UST ~~at least the~~

~~first 15 feet of native material below the invert elevation of the UST~~ for each tank field with a release of petroleum.

- B) This boring shall meet the requirements of subsections (c)(1)(C) through (c)(1)(G) ~~above~~ of this Section.

2) Soil Properties

The following tests shall be performed on a representative sample of each of the stratigraphic units encountered in the native soil boring which has been determined most conducive to transporting contaminants from the source based on site factors including but not limited to visual and tactile observations, the classification of the soil, any prior evaluation of the site stratigraphy, the volume of the release, the size or extent of the unit, and the requirements of ASTM D 2488-93, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), approved September 15, 1993:

- A) A soil particle analysis satisfying the requirements of subsection (c)(2)(A) ~~above~~ of this Section; and

B) Either:

- i) A pump test or equivalent to determine the yield of the geologic material. Methodology, assumptions and any calculations performed shall be submitted as part of the site classification completion report. If the aquifer geometry and transmissivity have been obtained through a site-specific field investigation, an analytical solution may be used to estimate well yield. The Licensed Professional Engineer shall demonstrate the appropriateness of the analytical solution to estimate well yield versus an actual field test. Well yield should be determined for either confined or unconfined formations. Once the yield has been determined site-specifically, the hydraulic conductivity shall be calculated; or

- ⊖ ii) Hydraulic conductivity shall be determined in accordance with subsection (c)(3) ~~above~~ of this Section. Once the hydraulic conductivity has been determined site-specifically, the yield shall be calculated.

- C) If representative samples of each stratigraphic unit are collected for soil property testing by the use of thin-walled tube sampling, an additional soil boring must be performed for this sampling within 5 feet of the site classification boring. Thin-walled tube sampling must be conducted in accordance with ASTM Method D 1587-83, or other Agency approved method. The boring from which the thin-walled tubes are collected must be logged in accordance with the requirements of 35 Ill. Adm. Code 732.308(a).
- 3) The results of the boring(s) and tests described in subsections (d)(1) and (d)(2) ~~above~~ of this Section shall be used to demonstrate whether the native material from the invert elevation of the most shallow UST to 15 feet below the invert elevation of the deepest UST ~~first 15 feet of native material below the invert elevation of the UST~~ meets all of the following criteria:
- A) Does not contain unconsolidated sand, gravel or sand and gravel that is 5 feet or more in thickness with 12 percent or less fines (i.e., fines that pass through a No. 200 sieve tested according to ASTM (American Society for Testing and Materials) Standard D 2488-90/2487-93, "~~Standard Practice for Description and Identification of Soils (Visual Manual Procedure)~~Standard Test Method for Classification of Soils for Engineering Purposes," incorporated by reference at Section 732.104 of this Part), or other Agency approved method);
- B) Does not contain sandstone that is 10 feet or more in thickness, or fractured carbonate that is 15 feet or more in thickness; ~~and~~
- C) Is not capable of sustained groundwater yield, from up to a 12 inch borehole, of 150 gallons per day or more from a thickness of 15 feet or less; and:
- ~~i) Sustained groundwater yield, from up to a 12 inch borehole, of 150 gallons per day or more from a thickness of 15 feet or less; or~~
- ~~ii) Hydraulic conductivity of 1×10^{-4} cm/sec or greater.~~
- D) Is not capable of hydraulic conductivity of 1×10^{-4} cm/sec or greater.
- e) If, during the completion of the requirements of subsections (c) or (d) ~~above~~ of this Section, a Licensed Professional Engineer determines that the site geology

is not consistent with areas D, E, F or G of the Illinois State Geological Survey Circular (1984) entitled, "Potential for Contamination of Shallow Aquifers in Illinois," incorporated by reference in Section 732.104 of this Part or that the criteria of subsection (d)(3) are not satisfied, any remaining steps required by subsections (c) or (d) may be suspended, provided that the soil investigation has been sufficient to satisfy the requirements of subsection (g) below of this Section. If activities are suspended under this subsection (e), the Licensed Professional Engineer shall complete the requirements of subsections (f) through (j) below of this Section in order to determine whether the site is "High Priority" or "Low Priority." The site conditions upon which the suspension of the requirements of subsections (c) or (d) above of this Section is based shall be documented in the site classification completion report.

f) Survey of Water Supply Wells

- 1) The Licensed Professional Engineer shall conduct a survey of water supply wells for the purpose of identifying and locating all community water supply wells within 2500 feet of the UST system and all potable water supply wells within 200 feet of the UST system. The survey shall include, but not be limited to, contacting the Illinois State Geological Survey and the Illinois State Water Survey. The local unit of government with authority over the site shall be contacted to determine if there is a local ordinance or policy regulating the usage of potable water supply wells.
- 2) The Licensed Professional Engineer shall provide a map to scale showing the locations of all community water supply wells and all potable water supply wells identified pursuant to subsection (f)(1) above of this Section. Radii of 200, 400, ~~and~~ 1000, and 2500 feet from the UST system shall be marked on the map.
- 3) The Licensed Professional Engineer shall provide a table indicating the setback zone for each community water supply well and potable water supply well identified pursuant to subsection (f)(1) above of this Section and the distance from the UST system to the well. The locations of each well shall be identified on the map by numbers corresponding to the information provided in the table.
- 4) The Licensed Professional Engineer shall determine if the UST system is within the regulated recharge area of any community water supply well or potable water supply well. The sources consulted in making this determination shall be described in the site classification completion report.

g) Investigation of Migration Pathways

- 1) The Licensed Professional Engineer shall conduct an investigation either separately or in conjunction with the physical soil classification to identify all potential natural and man-made migration pathways that are on the site, in rights-of-way attached to the site, or in any area surrounding the site that may be adversely affected as a result of the release of petroleum from the UST system. Once the migration pathways have been identified, the areas along all such pathways shall be further investigated in a manner sufficient to determine whether or not there is evidence that migration of petroleum or vapors along such pathways:
 - A) May potentially threaten human health or human safety; or
 - B) May cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces.
- 2) The Licensed Professional Engineer shall provide a map of the site and any surrounding areas that may be adversely affected by the release of petroleum from the UST system. At a minimum, the map shall be to scale, oriented with north at the top, and shall show the location of the leaking UST system(s) with any associated piping and all potential natural and man-made pathways that are on the site, in rights-of-way attached to the site, or that are in areas that may be adversely affected as a result of the release of petroleum.
- 3) Unless the Agency's review reveals objective evidence to the contrary, the Licensed Professional Engineer shall be presumed correct when certifying whether or not there is evidence that, through natural or man-made pathways, migration of petroleum or vapors:
 - A) May potentially threaten human health or human safety; or
 - B) May cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces.
- h) The Licensed Professional Engineer shall verify whether Class III groundwater exists within 200 feet of the UST system.
- i) The Licensed Professional Engineer shall locate all surface bodies of water on site and within 100 feet of the site and provide a map noting the locations. All such surface bodies of water shall be inspected to determine whether they have

been adversely affected by the presence of a sheen or free product layer resulting from the release of petroleum from the UST system.

j) Groundwater Investigation

- 1) ~~For any site that fails to satisfy the requirements for a "No Further Action" site classification, the~~ For sites at which such investigation is required pursuant to this Part, the Licensed Professional Engineer shall perform a groundwater investigation as required under this Part in accordance with this subsection (j) to determine whether an applicable indicator contaminant groundwater quality standard has been exceeded at the property boundary or 200 feet from the excavation UST system, whichever is less, as a result of the UST release of petroleum.
- 2) Applicable indicator contaminants and groundwater quality standards shall be those identified pursuant to Sections 732.310 and 732.311 of this Part.
- 3) Except as provided in subsection (j)(6), a minimum of four groundwater monitoring wells shall be installed at the property boundary or 200 feet from the UST system, whichever is less. In the event that a groundwater monitoring well cannot be physically installed at the property line or 200 feet from the UST system, whichever is closer, in accordance with this subsection, the owner or operator shall request approval from the Agency to place the well further out, but at the closest practical point to the compliance point. The owner or operator may elect to place a monitoring well in a location that is closer to the UST system than the rule requires. However, once the election is made the owner or operator may not withdraw the election at a later time. The Agency may require the installation of additional monitoring wells to ensure that at least one monitoring well is located hydraulically upgradient and three monitoring wells are located hydraulically downgradient of the UST system. The wells must be installed so that they provide the greatest likelihood of detecting migration of groundwater contamination. At a minimum, monitoring well construction shall satisfy the following requirements:
 - A) Construction shall be in a manner that will enable the collection of representative groundwater samples;
 - B) All monitoring wells shall be cased in a manner that maintains the integrity of the borehole. Casing material shall be inert so as not to affect the water sample. Casing requiring solvent-cement type couplings shall not be used;

- C) Wells shall be screened to allow sampling only at the desired interval. Annular space between the borehole wall and well screen section shall be packed with clean, well-rounded and uniform material sized to avoid clogging by the material in the zone being monitored. The slot size of the screen shall be designed to minimize clogging. Screens shall be fabricated from material that is inert with respect to the constituents of the groundwater to be sampled;
 - D) Annular space above the well screen section shall be sealed with a relatively impermeable, expandable material such as cement/bentonite grout, which does not react with or in any way affect the sample, in order to prevent contamination of groundwater samples and groundwater and avoid interconnections. The seal shall extend to the highest known seasonal groundwater level;
 - E) The annular space shall be backfilled with expanding cement grout from an elevation below the frost line and mounded above the surface and sloped away from the casing so as to divert surface water away;
 - F) All monitoring wells shall be covered with vented caps and equipped with devices to protect against tampering and damage. Locations of wells shall be clearly marked and protected against damage from vehicular traffic or other activities associated with expected site use; and
 - G) All wells shall be developed to allow free entry of water, minimize turbidity of the sample, and minimize clogging.
- 4) Monitoring well construction diagrams prescribed and provided by the Agency ~~or diagrams using a similar format and containing the same information~~ shall be completed for each monitoring well.
 - 5) Static water elevations shall be measured for each monitoring well. Groundwater samples shall be taken from each well and analyzed for the applicable indicator contaminants. The data collected shall be used to determine the direction of groundwater flow and whether the applicable groundwater quality standards or clean-up objectives have been exceeded. Samples shall be collected and analyzed in accordance with the following procedures:
 - A) Samples shall be collected in accordance with the procedures set forth in the documents "Methods for Chemical Analysis of Water

and Wastes," "Methods for the Determination of Organic Compounds in Drinking Water," "Practical Guide for Ground-Water Sampling," "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," or "Techniques of Water Resources Investigations of the United States Geological Survey, Guidelines for Collection and Field Analysis of Ground-Water Samples for Selected Unstable Constituents," as appropriate for the applicable indicator contaminants or groundwater objectives and as incorporated by reference at Section 732.104 of this Part.

- B) Groundwater elevation in a groundwater monitoring well shall be determined and recorded to establish the gradient of the groundwater table.
- C) The analytical methodology used for the analysis of the indicator contaminants shall be consistent with both of the following:
- i) The methodology shall have a practical quantitation limit (PQL) at or below the objectives or detection levels of ~~Appendix B~~ set forth in 35 Ill. Adm. Code 742 or as set for mixtures or degradation products as provided in Section 732.310 of this Part; and
 - ii) The methodology must be consistent with the methodologies contained in "Methods for Chemical Analysis of Water and Wastes," "Methods for the Determination of Organic Compounds in Drinking Water," "Practical Guide for Ground-Water Sampling," "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," and "Techniques of Water Resources Investigations of the United States Geological Survey, Guidelines for Collection and Field Analysis of Ground-Water Samples for Selected Unstable Constituents," as incorporated by reference at Section 732.104, or other Agency approved methods.
- D) In addition to analytical results, sampling and analytical reports shall contain the following information:
- i) Sample collection information including but not limited to the name of sample collector, time and date of sample collection, method of collection, and monitoring location;
 - ii) Sample preservation and shipment information including but not limited to field quality control;

- iii) Analytical procedures including but not limited to the method detection limits and the practical quantitation limits (PQL);
 - iv) Chain of custody and control; and
 - v) Field and lab blanks.
- 6) As an alternative to the installation of monitoring wells under subsection (j)(3), the Licensed Professional Engineer may demonstrate to the Agency through a site-specific evaluation that the groundwater monitoring should not be required.
- A) The evaluation shall be based on a demonstration of the following factors:
 - i) Whether groundwater is present within the depth of the boring used to perform physical soil classification under the selected method (Method One under subsection (c) or Method Two under subsection (d));
 - ii) Whether groundwater is withdrawn for potable use within 1000 feet of the UST system and at what depths; and
 - iii) Whether seasonal fluctuation in groundwater could result in groundwater contacting contaminated soil (e.g., historical records).
 - B) The presence or absence of a water bearing unit under subsection (j)(6)(A)(i) of this Section shall be determined on the basis of at least one soil boring to the depth necessary to perform physical soil classification under the selected method (Method One under subsection (c) or Method Two under subsection (d)), unless auger refusal occurs because of the density of a geologic material or because bedrock is encountered. If auger refusal occurs, then the Licensed Professional Engineer must demonstrate the depth to a water bearing unit from the available site specific or regional information.
 - C) If the evaluation fails to demonstrate to the Agency that a groundwater investigation should not be required as part of site classification activities, then the Licensed Professional Engineer shall perform a groundwater investigation in accordance with the remainder of this subsection (j).

- D) If the evaluation demonstrates to the Agency that a groundwater investigation should not be required, then the site shall be classified as Low Priority, unless other High Priority criteria are present. Upon Agency approval of the evaluation to demonstrate that a groundwater investigation should not be required, then the site shall be classified as Low Priority and a No Further Remediation Letter shall be issued to the owner or operator of the site, unless other High Priority criteria are present.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.308 Boring Logs and Sealing of Soil Borings and Groundwater Monitoring Wells

- a) Soil boring logs shall be kept for all soil borings. The logs shall be submitted along with the site classification completion report and shall be on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~
- 1) Soil boring logs shall contain the following information at a minimum:
 - A) Sampling device, sample number and amount of recovery;
 - B) Total depth of boring to the nearest 6 inches;
 - C) Detailed field observations describing materials encountered in boring, including soil constituents, consistency, color, density, moisture, odors, and the nature and extent of sand or gravel lenses or seams equal to or greater than 1 inch in thickness;
 - D) Petroleum hydrocarbon vapor readings (as determined by continuous screening of borings with field instruments capable of detecting such vapors);
 - E) Locations of sample(s) used for physical or chemical analysis; and
 - F) Groundwater levels while boring and at completion.
 - 2) Boring logs for soil boring(s) completed for physical soil classification also shall include the following information, as applicable for the classification method chosen, for each stratigraphic unit encountered at the site:
 - A) Moisture content;

- B) Unconfined compression strength in tons per square foot (TSF) using a hand penetrometer; ~~and~~
 - C) Unified Soil Classification System (USCS) soil classification group symbol in accordance with ASTM Standard D 2487-~~90~~93, "Standard Test Method for Classification of Soils for Engineering Purposes," incorporated by reference in Section 732.104 of this Part, or other Agency approved method-; and
 - D) The reasoning behind the Licensed Professional Engineer's decision to perform or not perform soil testing pursuant to Section 732.307(c)(2) and (d)(2) of this Part as to each identified stratigraphic unit.
- b) Boreholes and monitoring wells shall be abandoned pursuant to regulations promulgated by the Illinois Department of Public Health at 77 Ill. Adm. Code 920.120.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.309 Site Classification Completion Report

- a) Within 30 days after the completion of a site evaluation in accordance with Section 732.307, the owner or operator shall submit to the Agency a site classification completion report addressing all applicable elements of the site evaluation. The report shall contain all maps, diagrams, and any other information required by Section 732.307, as well as the results or conclusions of all surveys and investigations and any documentation necessary to demonstrate those results or conclusions. The report shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information~~, shall be signed by the owner or operator, and shall contain the certification of a Licensed Professional Engineer of the site's classification as "No Further Action," "Low Priority" or "High Priority" in accordance with this Subpart C.
- b) The Agency shall have the authority to review and approve, reject or require modification of any report submitted pursuant to this Section in accordance with the procedures contained in Subpart E of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.310 Indicator Contaminants

- a) For purposes of this Part, the term "indicator contaminants" shall mean the parameters listed in subsections (b) through (g) below of this Section.
- b) For gasoline, including but not limited to leaded, unleaded, premium and gasohol, the indicator contaminants shall be benzene, ethylbenzene, toluene and total xylenes. For leaded gasoline, lead shall also be an indicator contaminant.
- c) For aviation turbine fuels, jet fuels, diesel fuels, gas turbine fuel oils, heating fuel oils, illuminating oils, kerosene, lubricants, liquid asphalt and dust laying oils, cable oils, crude oil, crude oil fractions, petroleum feedstocks, petroleum fractions and heavy oils, the indicator contaminants shall be benzene, ethylbenzene, toluene, total xylenes and the polynuclear aromatics listed in Appendix A. For leaded aviation turbine fuels, lead shall also be an indicator contaminant.
- d) For transformer oils the indicator contaminants shall be benzene, ethylbenzene, toluene, total xylenes, the polynuclear aromatics listed in Appendix B and the polychlorinated biphenyl parameters listed in Appendix B.
- e) For hydraulic fluids the indicator contaminants shall be benzene, ethylbenzene, toluene, total xylenes the polynuclear aromatics listed in Appendix B and barium.
- f) For petroleum spirits, mineral spirits, Stoddard solvents, high-flash aromatic naphthas, moderately volatile hydrocarbon solvents and petroleum extender oils, the indicator contaminants shall be the volatile, base/neutral and polynuclear aromatic parameters listed in Appendix B. The Agency may add degradation products or mixtures of any of the above pollutants in accordance with 35 Ill. Adm. Code 620.615.
- g) For used oil the indicator contaminants shall be determined by the results of a used oil soil sample analysis. Prior to the submission of a site classification plan the owner or operator shall collect a grab sample from a location representative of soil contaminated by a release from the used oil UST. If an area of contamination cannot be identified, the sample shall be collected from beneath the used oil UST. The sample shall be analyzed for:
- 1) All volatile, base/neutral, polynuclear aromatic and metal parameters listed at Appendix B and any other parameters the Licensed Professional Engineer suspects may be present based on UST usage. The Agency may add degradation products or mixtures of any of the above pollutants in accordance with 35 Ill. Adm. Code 620.615.
 - 2) The used oil indicator contaminants shall be those volatile, base/neutral, polynuclear aromatic and metal parameters listed at Appendix B or as

otherwise identified at subsection ~~(a)~~ above (g)(1) of this Section that exceed their cleanup remediation objective at Appendix B 35 Ill. Adm. Code 742 or as determined by the Agency in addition to benzene, ethylbenzene, toluene, total xylenes and PNAs.

- 3) If none of the parameters exceed their cleanup remediation objective, the used oil indicator contaminants shall be benzene, BETX ethylbenzene, toluene and total xylenes and the polynuclear aromatics listed in Appendix B.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.311 Indicator Contaminant Groundwater Objectives

For purposes of this Part, indicator contaminant groundwater quality standards shall be the groundwater objectives specified in Appendix B 35 Ill. Adm. Code 742 for the applicable indicator contaminants. For mixtures and degradation products that have been included as indicator contaminants in accordance with Section 732.310 of this Part, the Agency shall determine groundwater objectives on a site-by-site basis.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.312 Classification by Exposure Pathway Exclusion

- a) An owner or operator electing to classify a site by exclusion of human exposure pathways under 35 Ill. Adm. Code 742, Subpart C or I shall meet the requirements of this Section.
- 1) Such election shall be made in writing by the owner or operator as part of the submission of the site classification plan under subsection (c) of this Section. The election may be made at any time until the Agency issues a No Further Remediation Letter.
 - 2) An owner or operator who chooses to revoke an election submitted under subsection (c) of this Section shall do so in writing.
- b) Upon completion of early action requirements pursuant to Subpart B of this Part, the owner or operator shall determine whether the areas or locations addressed under early action (e.g., backfill) meet the requirements applicable for a Tier 1 evaluation pursuant to 35 Ill. Adm. Code 742, Subpart E.
- 1) If the remediation objectives have been met, the owner or operator shall submit a corrective action completion report demonstrating compliance with the required levels.

- 2) If the remediation objectives have not been met, evaluation shall continue in accordance with subsection (c) of this Section.
- c) If, upon completion of early action requirements pursuant to Subpart B of this Part, the requirements under subsection (b) of this Section have not been met, then the owner or operator, prior to conducting any site evaluation activities, shall submit to the Agency a site classification plan including, but not limited to, a physical soil classification, contaminant identification, and groundwater investigation plan (if applicable in accordance with Section 732.300(b)(1)), satisfying the minimum requirements for site evaluation activities as set forth in this Section. Site classification plans shall be submitted on forms prescribed and provided by the Agency. The plans shall be designed to:
- 1) Determine the full extent of soil or groundwater contamination exceeding remediation objectives for Tier 1 sites under 35 Ill. Adm. Code 742, Subpart E. Such activities may include soil borings with sampling and analysis, groundwater monitoring wells with sampling and analysis, groundwater modeling, or a combination of these activities.
- 2) Collect data sufficient to determine which, if any, of the applicable exposure routes under 35 Ill. Adm. Code 742 can be excluded pursuant to 35 Ill. Adm. Code 742, Subpart C or I.
- d) A Licensed Professional Engineer (or, where appropriate, persons working under the direction of a Licensed Professional Engineer) shall conduct the site evaluation. The results of the site evaluation shall provide the basis for determining the site classification. The site classification shall be certified by the supervising Licensed Professional Engineer.
- e) As a part of each site evaluation, the Licensed Professional Engineer shall conduct physical soil classification and contaminant identification in accordance with the procedures at subsection (c) of this Section.
- f) In addition to the plan required in subsection (c) of this Section and prior to conducting any site evaluation activities, any owner or operator intending to seek payment from the Fund shall submit to the Agency:
- 1) An application for payment of costs associated with eligible early action costs incurred pursuant to Subpart B of this Part, except as provided in subsection (f)(2) of this Section; and
- 2) A site classification budget plan, which shall include, but not be limited to, a copy of the eligibility and deductibility determination of the OSFM and a line item estimate of all costs associated with the development,

implementation and completion of the site evaluation activities required under subsection (c) of this Section.

- g) Sites shall be classified as No Further Action if all applicable exposure routes can be excluded from further consideration pursuant to 35 Ill. Adm. Code 742, Subpart C or I.
- h) Sites shall be classified as High Priority if any of the applicable exposure routes cannot be excluded from further consideration pursuant to 35 Ill. Adm. Code 742, Subpart C or I.
- i) Within 30 days after the completion of a site evaluation in accordance with this Section, the owner or operator shall submit to the Agency a site classification completion report addressing all applicable elements of the site evaluation. The report shall contain all maps, diagrams, and any other information required by this Section, as well as the results or conclusions of all surveys and investigations and any documentation necessary to demonstrate those results or conclusions. The report shall be submitted on forms prescribed and provided by the Agency, shall be signed by the owner or operator, and shall contain the certification of a Licensed Professional Engineer of the site's classification as No Further Action, or High Priority in accordance with this Section. For any site classified as High Priority, the report shall also contain the certification of a Licensed Professional Engineer as to which exposure routes, if any, have been excluded from further consideration under 35 Ill. Adm. Code 742, Subpart C.
- j) The Agency shall have the authority to review and approve, reject or require modification of any plan or report submitted pursuant to this Section in accordance with the procedures contained in Subpart E of this Part.
- k) Notwithstanding subsections (c) and (f) of this Section, an owner or operator may proceed to conduct site evaluation activities in accordance with this Section prior to the submittal or approval of any otherwise required site classification plan and associated budget plans. However, any plan shall be submitted to the Agency for review and approval in accordance with the procedures contained in Subpart E prior to receiving payment or reimbursement for any related costs or the issuance of a No Further Remediation Letter.
- l) If, following the approval of any site classification plan, an owner or operator determines that revised procedures or cost estimates are necessary in order to comply with the minimum required activities for the site, the owner or operator shall submit, as applicable, an amended site classification plan or associated budget plan for review by the Agency. The Agency shall have the authority to review and approve, reject or require modification of the amended plan in accordance with the procedures contained in Subpart E of this Part.

BOARD NOTE: Owners or operators proceeding under subsection (a)(2) or (k) of this Section are advised that they may not be entitled to full payment or reimbursement. Furthermore, owners or operators may only be reimbursed for one method of site classification. See Subpart F of this Part.

(Source: Added at 21 Ill. Reg. _____, effective _____)

SUBPART D: CORRECTIVE ACTION

Section 732.400 General

- a) Following approval of the site evaluation and classification by the Agency ~~or by operation of law~~ pursuant to Subpart C of this Part and except as provided in subsection (b) or (c) ~~below~~ of this Section, the owner or operator of an UST system subject to the requirements of this Part shall develop and submit a corrective action plan and perform corrective action activities in accordance with the procedures and requirements contained in this Subpart D.
- b) Owners or operators of sites classified in accordance with the requirements of Subpart C as "No Further Action" may choose to conduct remediation sufficient to satisfy the remediation objectives referenced in Section 732.408 of this Part.
- c) Owners or operators of sites classified in accordance with the requirements of Subpart C as "Low Priority" may choose to conduct remediation sufficient to satisfy the remediation objectives referenced in Section 732.408 of this Part. Any owner or operator choosing to conduct remediation sufficient to satisfy the remediation objectives in Section 732.408 of this Part shall so notify the Agency in writing prior to conducting such efforts. Upon completion of the remediation activities, owners or operators choosing to conduct remediation sufficient to satisfy the remediation objectives in Section 732.408 of this Part shall submit a corrective action completion report to the Agency demonstrating compliance with the required levels. Upon approval of the corrective action completion report by the Agency ~~or by operation of law~~ in accordance with Subpart E, a "No Further Remediation" Letter shall be issued by the Agency.

BOARD NOTE: Owners or operators proceeding under subsection (b) or (c) ~~above~~ of this Section are advised that they may not be entitled to full payment or reimbursement. See Subpart F of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.402 "No Further Action" Site

The owner or operator of a site that has been certified as a "No Further Action" site by a Licensed Professional Engineer and approved as such by the Agency ~~or by operation of law~~

shall have no additional remediation responsibilities beyond those performed pursuant to Subparts B or C of this Part. Unless the Agency takes action to reject or modify the site classification completion report within 120 days after receipt of the completion report pursuant to Section 732.309, or Section 732.312, the site classification completion report is rejected by operation of law. ~~the Agency shall issue to the owner or operator within 120 days after the receipt of a complete report a "No Further Remediation" letter in accordance with Section 732.410.~~

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.403 "Low Priority" Site

- a) The owner or operator of a site that has been certified as a "Low Priority" site by a Licensed Professional Engineer and approved as such by the Agency ~~or by operation of law~~ shall develop a groundwater monitoring plan and perform groundwater monitoring in accordance with the requirements of this Section.
- b) The owner or operator of a site certified as "Low Priority" by a Licensed Professional Engineer and approved as such by the Agency ~~or by operation of law~~ shall develop a groundwater monitoring plan designed to satisfy the following requirements at a minimum:
 - 1) Groundwater monitoring shall be conducted for a period of three years following the Agency's approval of the site classification, unless subsection (b)(6) or subsection (i) of this Section applies;
 - 2) Groundwater monitoring wells shall be placed at the property line or 200 feet from the UST system, whichever is closer. The wells shall be placed in a configuration designed to provide the greatest likelihood of detecting migration of groundwater contamination. In the event that a groundwater monitoring well cannot physically be installed at the property line or 200 feet from the UST system, whichever is closer, in accordance with this subsection (b)(2), the owner or operator shall request approval from the Agency to place the well further out, but at the closest practical point to the compliance point. The owner or operator may elect to place a monitoring well in a location that is closer to the UST system than the rule requires. However, once the election is made the owner or operator may not withdraw the election at a later time;
 - 3) Groundwater monitoring wells shall satisfy the requirements at Sections 732.307(j)(3) and ~~732.307(j)(4)~~ of this Part;
 - 4) During the first year of groundwater monitoring, samples from each well shall be collected and analyzed on a quarterly basis. During the second

year of groundwater monitoring, samples from each well shall be collected and analyzed during the second and fourth quarters. During the third and final year of groundwater monitoring, at a minimum, samples from each well shall be collected and analyzed in the fourth quarter;

- 5) To determine whether groundwater quality standards or Agency approved objectives have been exceeded, samples for groundwater monitoring shall be collected and analyzed in accordance with the procedures set forth in Section 732.307(j)(5) of this Part for the applicable indicator contaminants determined pursuant to Section 732.310 of this Part;
- 6) The owner or operator may use groundwater monitoring data that has been collected up to 3 years prior to the site being certified as Low Priority, if the data meets the requirements of subsections (b)(2) through (b)(5) of this Section. This data may be used to satisfy all or part of the three year period of groundwater monitoring required under this Section.
- c) Prior to the implementation of groundwater monitoring, except as provided under subsection (b)(6) of this Section, the owner or operator shall submit the groundwater monitoring plan to the Agency for review in accordance with Section 732.405. If the owner or operator intends to seek payment from the Fund, a groundwater monitoring budget plan also shall be submitted to the Agency for review. The groundwater monitoring budget plan shall include a line item estimate of all costs associated with the implementation and completion of the groundwater monitoring plan. Groundwater monitoring plans and budgets shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~
- d) Groundwater analysis results obtained pursuant to subsection (b) ~~above~~ of this Section shall be submitted to the Agency within 30 days after the end of each annual sampling period on forms prescribed and provided by the Agency, except as provided under subsection (b)(6) of this Section. Groundwater analysis data being used pursuant to subsection (b)(6) shall be submitted to the Agency as part of a Low Priority groundwater monitoring plan or the Low Priority groundwater monitoring completion report ~~or in a similar format containing the same information.~~
- 1) The information to be collected shall include but not be limited to the information set forth in Section 732.307(j)(5) of this Part.
- 2) If at any time the groundwater analysis results indicate a confirmed exceedence of the applicable indicator contaminant groundwater quality standards or Agency approved objectives as a result of the underground

storage tank release of petroleum, the owner or operator shall notify the Agency of the exceedence within 30 days and provide supporting documentation of the nature and extent of the exceedence.

- 3) Indicator contaminant groundwater quality standards shall be determined in accordance with Section 732.311 of this Part.
- e) Within 30 days after the completion of the "Low Priority" groundwater monitoring plan, the owner or operator shall submit to the Agency a groundwater monitoring completion report in accordance with Section 732.409 of this Part. If there is no confirmed exceedence of applicable indicator contaminant objectives during the three year groundwater monitoring period, the report shall contain a certification to that effect by a Licensed Professional Engineer.
 - f) The Agency shall review the groundwater monitoring completion report in accordance with the procedures set forth in Subpart E of this Part and shall issue a "No Further Remediation" Letter to the owner or operator in accordance with Section 732.410 Subpart G upon approval of the report by the Agency ~~or by operation of law~~. If the owner or operator elects to appeal an Agency action to disapprove, modify, or reject by operation of law a Low Priority groundwater monitoring completion report, the Agency shall indicate to the Board in conjunction with such appeal whether it intends to reclassify the site as High Priority.
 - g) If at any time groundwater analysis results indicate a confirmed exceedence of applicable indicator contaminant objectives, the Agency may reclassify the site as a "High Priority" site ~~within 60 days after the receipt of an annual groundwater sampling report, a groundwater monitoring completion report, or a notification by the owner or operator pursuant to subsection (d)(2) above.~~ any time before the Agency's final approval of a Low Priority groundwater monitoring completion report. The Agency shall notify the owner or operator in writing if a site is reclassified. Notice of reclassification shall be by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action shall be deemed to have taken place on the post marked date that such notice is mailed. Any action by the Agency to reclassify the site as a "High Priority" site shall be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for in the review of permit decisions in Section 40 of the Act.
 - h) The owner or operator of a "Low Priority" site reclassified to "High Priority" pursuant to subsection (g) ~~above~~ of this Section shall develop and submit for Agency approval a "High Priority" corrective action plan satisfying the requirements of Section 732.404 of this Part within 120 days after receiving the notice of reclassification. If the owner or operator intends to seek

reimbursement from the Fund, a corrective action plan budget also shall be submitted within 120 days after receiving the notice of reclassification.

- i) As a result of the demonstration under Section 732.307(j)(6), the owner or operator of a site classified as Low Priority by a Licensed Professional Engineer.
- 1) Shall prepare a report in accordance with Section 732.409 of this Part, which supports the issuance of a No Further Remediation Letter or reclassification of the site as a High Priority site.
 - 2) In the event the site is reclassified as a High Priority site, the owner or operator shall develop and submit for Agency approval a High Priority corrective action plan in accordance with Section 732.403(h).

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.404 "High Priority" Site

- a) The owner or operator of a site that has been certified by a Licensed Professional Engineer as a "High Priority" site and approved as such by the Agency ~~or by operation of law~~ shall develop a corrective action plan and perform corrective action in accordance with the requirements of this Section. The purpose of the corrective action plan shall be to remediate or eliminate each of the criteria set forth in subsection (b) ~~below~~ of this Section that caused the site to be classified as "High Priority."
- b) The owner or operator of a site certified as "High Priority" by a Licensed Professional Engineer and approved as such by the Agency ~~or by operation of law~~ or reclassified as "High Priority" by the Agency pursuant to Section 732.403(g) shall develop a corrective action plan based on site conditions and designed to achieve the following as applicable to the site:
 - 1) For sites submitting a site classification report under Section 732.309:
 - 1)A) Provide that, after complete performance of the corrective action plan, applicable indicator contaminant objectives are not exceeded at the property boundary line or 200 feet from the UST system, whichever is less, as a result of the underground storage tank release for any indicator contaminant identified in the groundwater investigation. If off-site sampling is included within an approved corrective action plan and if an adjoining property owner will not allow the owner or operator access to his or her property so as to ascertain information sufficient to satisfy this requirement or if the owner cannot be located, adequate

documentation of the owner or operators' efforts to gain access to the property shall satisfy this subsection (b)(1)(A);

- ~~2)~~ B) Provide that, after complete performance of the corrective action plan, Class III special resource groundwater quality standards for Class III special resource groundwater within 200 feet of the UST system are not exceeded as a result of the underground storage tank release for any indicator contaminant identified in the groundwater investigation;
- ~~3)~~ C) Remediate threats due to the presence or migration, through natural or manmade pathways, of petroleum in concentrations sufficient to harm human health or human safety or to cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces;
- ~~4)~~ D) Remediate threats to potable water supplies; and
- ~~5)~~ E) Remediate threats to bodies of surface water.

2) For sites submitting a site classification completion report under Section 732.312, provide that, after complete performance of the corrective action plan, the concentrations of applicable indicator contaminants meet the remediation objectives developed under Section 732.408 for any applicable exposure route not excluded from consideration under Section 732.312.

3) Where there has been no reliance on an engineered barrier to achieve compliance with remediation objectives developed under Section 732.408, compliance with remediation objectives shall be demonstrated as follows:

A) For groundwater remediation objectives:

- i) Except as provided in subsection (ii) of this Section, or Section 732.307(j)(3) where there is a separate sampling point agreed to by the Agency, sampling points shall be located at the property boundary line or 200 feet from the UST system, whichever is less.
- ii) If an institutional control prohibiting the use of groundwater as a potable supply is obtained under 35 Ill. Adm. Code 742.Subpart J, sampling points shall be located at the property boundary line.

- iii) Compliance with groundwater remediation objectives at applicable sampling points shall be determined in accordance with 35 Ill. Adm. Code 742.225.
 - B) For soil remediation objectives:
 - i) Following site classification under this Part, sampling points shall be located on the site in areas where concentrations of indicator contaminants exceeded remediation objectives.
 - ii) Compliance with soil remediation objectives at applicable sampling points shall be determined in accordance with 35 Ill. Adm. Code 742.225.
- 4) Where an engineered barrier has been relied upon to achieve compliance with remediation objectives developed under Section 732.408, compliance shall be determined based on approval by the Agency of the sufficiency of the engineered barrier.
- c) In developing the corrective action plan, if the Licensed Professional Engineer selects soil or groundwater remediation, or both, to satisfy any of the criteria set forth in subsection (b) ~~above~~ of this Section, remediation objectives shall be determined in accordance with Section 732.408 of this Part. Groundwater monitoring wells shall satisfy the requirements of Sections 732.307(j)(3) and ~~732.307(j)(4)~~ of this Part.
- d) Except where provided otherwise pursuant to Section 732.312, in ~~In~~ developing the corrective action plan, additional investigation activities beyond those required for the site evaluation and classification may be necessary to determine the full extent of soil or groundwater contamination and of threats to human health or the environment. Such activities may include, but are not limited to, additional soil borings with sampling and analysis or additional groundwater monitoring wells with sampling and analysis. Such activities as are technically necessary and consistent with generally accepted engineering practices may be performed without submitting a work plan or receiving prior approval from the Agency, and associated costs may be included in a "High Priority" corrective action budget plan. A description of these activities and the results shall be included as a part of the corrective action plan.
- e) The owner or operator shall submit the corrective action plan to the Agency for review in accordance with Section 732.405 of this Part. If the owner or operator intends to seek payment from the Fund, a corrective action plan budget also shall be submitted to the Agency for review. The corrective action plan budget shall include a line item estimate of all costs associated with the

implementation and completion of the corrective action plan. The corrective action plan and corrective action plan budget shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~

- f) Within 30 days after completing the performance of the "High Priority " corrective action plan, the owner or operator shall submit to the Agency a corrective action completion report in accordance with Section 732.409 of this Part.
- g) Within 120 days, the Agency shall review the corrective action completion report in accordance with the procedures set forth in Subpart E of this Part and shall issue a "No Further Remediation" Letter to the owner or operator in accordance with ~~Section 732.410~~ Subpart G upon approval by the Agency ~~or by operation of law.~~

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.405 Plan Submittal and Review

- a) Prior to conducting any corrective action activities pursuant to this Subpart D, the owner or operator shall submit to the Agency a "Low Priority" groundwater monitoring plan or a "High Priority" corrective action plan satisfying the minimum requirements for such activities as set forth in Sections 732.403 or 732.404 of this Part, as applicable. Groundwater monitoring and corrective action plans shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~
- b) In addition to the plans required in subsection (a) ~~above~~ of this Section and prior to conducting any groundwater monitoring or corrective action activities, any owner or operator intending to seek payment from the Fund shall submit to the Agency a groundwater monitoring or corrective action budget plan. Such budget plans shall include, but not be limited to, a copy of the eligibility and deductibility determination of the OSFM and a line item estimate of all costs associated with the development, implementation and completion of the applicable activities. Formulation of budget plans should be consistent with the eligible and ineligible costs listed at Sections 732.605 and 732.606 of this Part. Groundwater monitoring and corrective action budget plans shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~
- c) The Agency shall have the authority to review and approve, reject or require modification of any plan submitted pursuant to this Section in accordance with the procedures contained in Subpart E of this Part.

- d) Notwithstanding subsections (a) and (b) ~~above~~ of this Section and except as provided at Section 732.407 of this Part, an owner or operator may proceed to conduct "Low Priority" groundwater monitoring or "High Priority" corrective action activities in accordance with this Subpart D prior to the submittal or approval of an otherwise required groundwater monitoring plan or budget or corrective action plan or budget. However, any such plan shall be submitted to the Agency for review and approval, rejection or modification in accordance with the procedures contained in Subpart E of this Part prior to payment or reimbursement for any related costs or the issuance of a "No Further Remediation" Letter.

BOARD NOTE: Owners or operators proceeding under subsection (d) of this Section are advised that they may not be entitled to full payment or reimbursement. See Subpart F of this Part.

- e) If, following approval of any groundwater monitoring plan, corrective action plan or associated budget plan, an owner or operator determines that revised procedures or cost estimates are necessary in order to comply with the minimum required activities for the site, the owner or operator shall submit, as applicable, an amended groundwater monitoring plan, corrective action plan or associated budget plan for review by the Agency. The Agency shall review and approve, reject or require modifications of the amended plan in accordance with the procedures contained in Subpart E of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.406 Deferred Corrective Action; Priority List for Payment

- a) ~~NOTWITHSTANDING ANY OTHER PROVISION OR RULE OF LAW WITH THE EXCEPTION OF THE early action requirements of Subpart B of this Part, THE~~ An OWNER OR OPERATOR WHO HAS RECEIVED APPROVAL FOR ~~SUBMITTED~~ ANY ~~budget-~~ BUDGET PLAN SUBMITTED PURSUANT TO this Part AND WHO IS ELIGIBLE FOR PAYMENT FROM THE UNDERGROUND STORAGE TANK FUND ~~SHALL BE ELIGIBLE TO ELECT TO COMMENCE site classification UPON THE AVAILABILITY OF FUNDS. SUCH ELECTION SHALL BE MADE IN WRITING TO THE AGENCY WITHIN 30 DAYS OF RECEIPT OF AGENCY APPROVAL OF A budget PLAN. THE AGENCY SHALL PROVIDE NOTICE TO THE OWNER OR OPERATOR AT SUCH TIME AS IT APPROVES THE budget PLAN WHETHER SUFFICIENT RESOURCES ARE AVAILABLE IN ORDER TO IMMEDIATELY COMMENCE THE APPROVED MEASURES.~~ MAY ELECT TO DEFER SITE CLASSIFICATION, LOW PRIORITY GROUNDWATER MONITORING, OR REMEDIATION ACTIVITIES UNTIL FUNDS ARE AVAILABLE IN AN AMOUNT EQUAL TO THE

AMOUNT APPROVED IN THE BUDGET PLAN if the requirements of subsection (b) of this Section are met. (Section 57.8(b) of the Act)

- 1) Approvals of budget plans shall be pursuant to Agency review ~~or by operation of law~~ in accordance with Subpart E of this Part.
- 2) The Agency shall monitor the availability of funds to determine whether sufficient resources exist to provide payment approved budget plans and shall provide notice to owners or operators of the availability of funds in accordance with Section 732.503(h). Funds shall not be deemed available for owners or operators electing to defer corrective action so long as there are owners or operators on the priority list established pursuant to Section 732.603(d) of this Part awaiting forwarding of vouchers to the Office of the State Comptroller.
- 3) Upon receiving written notification that an owner or operator elects to defer corrective action until funds are available, the Agency shall place the site on a priority list for payment and notification of availability of sufficient funds. Sites shall enter the priority list for payment and move up based solely on the date the Agency receives the written ~~notification election~~ of deferral, with the earliest dates having the highest priority. The Agency's record of the date of receipt shall be deemed conclusive, unless a contrary date is proven by a dated, signed receipt from registered or certified mail.
- 4) As funds become available, the Agency shall encumber funds for each site in the order of priority in an amount equal to the total of the approved budget plan for which deferral was sought. The Agency shall then notify owners or operators that sufficient funds have been allocated for the owner's or operator's site. After such notification the owner or operator shall commence corrective action.
- 5) Authorization of payment of encumbered funds for deferred corrective action activities shall be approved in accordance with the requirements of Subpart F of this Part.
- 6) The priority list for payment and notification of availability of sufficient funds shall be the same as that used for deferred site classification pursuant to Section 732.306 with both types of deferrals entering the list and moving up solely on the basis of the date the Agency receives written notice of the deferral.

- b) ~~SHOULD THE AGENCY OR OWNER OR OPERATOR DETERMINE A THREAT TO HUMAN HEALTH AND/OR THE ENVIRONMENT REQUIRES IMMEDIATE ACTION, INCLUDING THE EXISTENCE OF~~

~~PETROLEUM OR VAPORS WHICH THREATEN HUMAN HEALTH OR HUMAN SAFETY OR MAY CAUSE EXPLOSIONS IN BASEMENTS, CRAWL SPACES, UTILITY CONDUITS, STORM OR SANITARY SEWERS, VAULTS OR OTHER CONFINED SPACES, THE ELECTION TO COMMENCE CORRECTIVE ACTION UPON THE AVAILABILITY OF FUNDS SHALL NOT BE AVAILABLE. THE AGENCY SHALL NOTIFY THE OWNER OR OPERATOR BY CERTIFIED MAIL THAT A SITUATION EXISTS THAT WOULD PRECLUDE THE OWNER OR OPERATOR FROM COMMENCING site classification UPON THE AVAILABILITY OF FUNDS. SUCH ACTION BY THE AGENCY SHALL NOT BE SUBJECT TO APPEAL. (Section 57.8(b) of the Act)~~ An owner or operator who elects to defer site classification, low priority groundwater monitoring, or remediation activities under subsection (a) of this Section shall submit a report certified by a Licensed Professional Engineer demonstrating the following:

- 1) The early action requirements of Subpart B of this Part have been met; and
 - 2) The release does not pose a threat to human health or the environment through migratory pathways following the investigation of migration pathways requirements of Section 732.307(g).
- c) An owner or operator may withdraw the election to commence corrective action upon the availability of funds at any time. The Agency shall be notified in writing of the withdrawal. Upon such withdrawal, the owner or operator shall proceed with corrective action in accordance with the requirements of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.407 Alternative Technologies

- a) An owner or operator may choose to use an alternative technology for corrective action in response to a release of petroleum at a "High Priority" site. Corrective action plans proposing the use of alternative technologies shall be submitted to the Agency in accordance with Section 732.405 of this Part. In addition to the requirements for corrective action plans contained in Section 732.404, the owner or operator who seeks approval of an alternative technology shall submit documentation along with the corrective action plan demonstrating that:
 - 1) The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and all corrective action remediation objectives necessary to comply with the Act and regulations and to protect human health or the environment;

- 2) The proposed alternative technology will not adversely affect human health or the environment;
 - 3) The owner or operator will obtain all Agency permits necessary to legally authorize use of the alternative technology;
 - 4) The owner or operator will implement a program to monitor whether the requirements of subsection (a)(1) ~~above~~ of this Section have been met; and
 - 5) Within one year from the date of Agency approval the owner or operator will provide to the Agency monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (a)(1) ~~above~~ of this Section and any other applicable regulations. The Agency may require interim reports as necessary to track the progress of the alternative technology. The Agency will specify in the approval when those interim reports shall be submitted to the Agency.
- b) An owner or operator intending to seek payment or reimbursement for costs associated with the use of an alternative technology shall submit a corresponding budget plan in accordance with Section 732.405 of this Part. In addition to the requirements for corrective action budget plans at Section 732.404 of this Part, the budget plan must demonstrate that the cost of the alternative technology will not exceed the cost of conventional technology.
- c) If an owner or operator has received approval of a corrective action plan and associated budget plan from the Agency ~~or by operation of law~~ prior to implementing the plan and the alternative technology fails to satisfy the requirements of subsections (a)(1) or (a)(2) ~~above~~ of this Section, such failure shall not make the owner or operator ineligible to seek payment or reimbursement for the activities associated with the subsequent performance of a corrective action using conventional technology. However, in no case shall the total payment or reimbursement for the site exceed the statutory maximums. Owners or operators implementing alternative technologies without obtaining pre-approval shall be ineligible to seek payment or reimbursement for the subsequent performance of a corrective action using conventional technology.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.408 ~~Risk Based~~-Remediation Objectives

- a) For sites requiring "High Priority" corrective action or for which the owner or operator has elected to conduct corrective action pursuant to Sections 732.300(b), 732.400(b), or 732.400(c) of this Part, the owner or operator may

~~propose shall propose remediation objectives for applicable indicator contaminants based on a site specific assessment of risk in accordance with 35 Ill. Adm. Code 742. In support of site specific remediation objectives, the owner or operator shall demonstrate to the Agency that the proposed objectives will be protective of human health and the environment.~~

- ~~1) Except as provided in subsection (a)(2) of this Section, the owner or operator may propose site specific remediation objectives for applicable indicator contaminants.~~
 - ~~2) For applicable indicator contaminants that have a groundwater quality standard promulgated pursuant to 35 Ill. Adm. Code 620, site specific groundwater remediation objectives may be proposed so as to achieve groundwater quality standards established pursuant to, and using the procedures approved under, 35 Ill. Adm. Code 620.~~
- ~~b) In reviewing a proposal for site specific remediation objectives pursuant to subsection (a)(1) above, the Agency shall evaluate the following factors:~~
- ~~1) The potential for any remaining contaminants to pose a significant threat to human health or the environment;~~
 - ~~2) Circumstances related to the practicality of remediation;~~
 - ~~3) The management of risk relative to any remaining contamination;~~
 - ~~4) Background levels for the applicable indicator contaminants; and~~
 - ~~5) Appropriateness of the scientific methodology selected as a basis for the demonstration of protectiveness and correct application of the methodology. Methodologies adopted by a nationally recognized entity such as American Society for Testing and Materials (ASTM), or equivalent methodologies, shall be acceptable for use as a basis for the demonstration of protectiveness.~~
- ~~e) For sites requiring "High Priority" corrective action or for which the owner or operator has elected to conduct corrective action pursuant to Sections 732.300(b), 732.400(b) or 732.400(c) of this Part, if the owner or operator does not elect to propose remediation objectives pursuant to subsection (a) above, the owner or operator shall use remediation objectives, as applicable, based on Appendix B of this Part. Where indicator contaminants based on mixtures or degradation products have been designated by the Agency pursuant to Section 732.310 of this Part, the Agency shall determine remediation objectives on a site by site basis;~~

~~BOARD NOTE: The remediation objectives contained in Appendix B are not soil or groundwater standards. The remediation objectives contained in Appendix B of this Part are not remediation objectives for purposes of remediation of releases other than LUST releases pursuant to this Part 732.~~

- ~~d) The election to proceed under either subsection (a) or (c) above does not prohibit the owner or operator from exercising the other option at a later time.~~

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.409 Groundwater Monitoring and Corrective Action Completion Reports

- a) Within 30 days after completing the performance of a "Low Priority" groundwater monitoring plan or "High Priority" corrective action plan, the owner or operator shall submit to the Agency a groundwater monitoring completion report or a corrective action completion report.
- 1) The "Low Priority" groundwater monitoring completion report shall include, but not be limited to, a narrative describing the implementation and completion of all elements of the groundwater monitoring plan and the procedures used for collection and analysis of samples, analytical results in tabular form, actual analytical results, laboratory certification and any other information or documentation relied upon by the Licensed Professional Engineer in reaching the conclusion that the requirements of the Act and regulations have been satisfied and that no further remediation is required at the site.
 - 2) The "High Priority" corrective action completion report shall include, but not be limited to, a narrative and timetable describing the implementation and completion of all elements of the corrective action plan and the procedures used for the collection and analysis of samples, soil boring logs, actual analytical results, laboratory certification, site maps, well logs and any other information or documentation relied upon by the Licensed Professional Engineer in reaching the conclusion that the requirements of the Act and regulations have been satisfied and that no further remediation is required at the site. A "High Priority" corrective action completion report shall demonstrate the following:
 - A) For sites submitting a site classification report under Section 732.309:
 - ~~A)i)~~ Applicable indicator contaminant groundwater objectives are not exceeded at the property boundary line or 200 feet from the UST system, whichever is less, as a result of the

release of petroleum for any indicator contaminant identified during the groundwater investigation;

~~B~~ii) Class III resource groundwater quality standards, for Class III special use resource groundwater within 200 feet of the UST system are not exceeded as a result of the release of petroleum for any indicator contaminant identified during the groundwater investigation;

~~C~~iii) The release of petroleum does not threaten human health or human safety due to the presence or migration, through natural or manmade pathways, of petroleum in concentration sufficient to harm human health or human safety or to cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces;

~~D~~iv) The release of petroleum does not threaten any surface water body; and

~~E~~v) The release of petroleum does not threaten any potable water supply.

B) For sites submitting a site classification completion report under Section 732.312, the concentrations of applicable indicator contaminants meet the remediation objectives developed under Section 732.408 for any applicable exposure route not excluded from further consideration under Section 732.312.

- b) The applicable report shall be submitted on forms prescribed and provided by the Agency ~~or in a similar format containing the same information~~, shall be signed by the owner or operator, and shall be accompanied by a certification from a Licensed Professional Engineer that the information presented in the applicable report is accurate and complete, that groundwater monitoring or corrective action have been completed in accordance with the requirements of the Act and this Subpart D, and that no further remediation is required at the site.
- c) The Agency shall have the authority to review and approve, reject or require modification of any report submitted pursuant to this Section in accordance with the procedures contained in Subpart E of this Part.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.410 "No Further Remediation" letter (Repealed)

- a) ~~Upon approval by the Agency or by operation of law of a "No Further Action" site classification report, a "Low Priority" groundwater monitoring completion report, or a "High Priority" corrective action completion report, the Agency shall issue to the owner or operator a "no further remediation" letter. The "no further remediation" letter shall have the legal effect prescribed in Section 57.10 of the Act. The "no further remediation" letter shall be denied if the Agency rejects or requires modification of the applicable report.~~
- b) ~~The Agency shall have 120 days from the date of receipt of a complete report to issue a "no further remediation" letter and may include the "no further remediation" letter as part of the notification of approval of the applicable report in accordance with Subpart E of this Part.~~
- c) ~~If an applicable report is approved by operation of law pursuant to Subpart E of this Part and a "no further remediation" letter is not received from the Agency, the legal presumptions prescribed by Section 57.10 of the Act also shall become effective by operation of law.~~
- d) ~~The notice of denial of a "no further remediation" letter by the Agency may be included with the notification of rejection or modification of the applicable report. The reasons for the denial shall be stated in the notification. The denial shall be considered a final determination appealable to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act.~~

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

SUBPART E: SELECTION AND REVIEW PROCEDURES
FOR PLANS AND REPORTS

Section 732.501 Submittal of Plans or Reports

All plans or reports shall be made on forms prescribed and provided by the Agency ~~or in a similar format containing the same information.~~ Plans or reports shall be mailed or delivered to the address designated by the Agency. The Agency's record of the date of receipt shall be deemed conclusive unless a contrary date is proven by a dated, signed receipt from certified or registered mail.

(Source: Amended at 21 Ill. Reg. _____, effective _____.)

Section 732.502 Completeness Review

- a) The Agency shall review for completeness all plans submitted pursuant to this Part 732. The completeness review shall be sufficient to determine whether all

information and documentation required by the Agency form for the particular plan are present. The review shall not be used to determine the technical sufficiency of a particular plan or of the information or documentation submitted along with the plan.

- b) The Agency shall have 45 days from the receipt of a plan to finish the completeness review. If the completeness review finds that the plan is complete, the Agency shall so notify the owner or operator in writing and proceed, where appropriate, to approval, rejection or modification of the substantive portions of the plan. If the completeness review finds that the plan is incomplete, the Agency shall notify the owner or operator in writing. The notification shall include an explanation of the specific type of information or documentation that the Agency deems necessary to complete the plan.
- 1) The Agency may, to the extent consistent with Agency deadlines, provide the owner or operator with a reasonable opportunity to correct deficiencies prior to a final determination on completeness.
 - 2) The Agency shall mail notice of incompleteness by registered or certified mail, post marked with a date stamp and with return receipt requested. The decision shall be deemed to have taken place on the post marked date that such notice is mailed.
 - 3) All time limits for Agency final action on a plan or report shall be calculated from the date the Agency receives a plan or report. Receipt of an amended plan or report, after a notice of incompleteness, shall restart all time limits for Agency final action on that plan or report.
- c) Any budget plan submitted must be preceded or accompanied by an associated technical plan in order for the budget plan to be deemed complete.
- d) The failure of the Agency to notify an owner or operator within 45 days that a plan is ~~either complete or~~ incomplete shall result in the plan being deemed complete ~~by operation of law~~. Any action by the Agency pursuant to this Section shall be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for in the review of permit decisions in Section 40 of the Act.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.503 Full Review of Plans or Reports

- a) In addition to the completeness review for plans conducted pursuant to Section 732.502, the Agency may conduct a full review of plans or reports selected in accordance with the requirements of Section 732.504. A full review may

include any or all technical or financial information, or both, relied upon by the owner or operator or Licensed Professional Engineer in developing the plan or report selected for review. The full review also may include the review of any other plans or reports submitted in conjunction with the site.

- b) The Agency shall have the authority to approve, reject or require modification of any plan or report that has been given a full review. The Agency shall notify the owner or operator in writing of its final action on any such plan or report. Except as provided in subsections (c) and (d) below of this Section, if the Agency fails to notify the owner or operator of its final action on a plan or report within 120 days after the receipt of a plan or report, the owner or operator may deem the plan or report approved rejected by operation of law, except in the case of 20 day, 45 day or free product reports, in which case no notification is necessary. If the Agency rejects a plan or report or requires modifications, the written notification shall contain the following information, as applicable:
- 1) An explanation of the specific type of information, if any, that the Agency needs to complete the full review;
 - 2) An explanation of the Sections of the Act or regulations that may be violated if the plan or report is approved; and
 - 3) A statement of specific reasons why the cited Sections of the Act or regulations may be violated if the plan or report is approved.
- c) For "High Priority" corrective action plans submitted by owners or operators not seeking reimbursement from the Fund, the Agency may delay final action on such plans until 120 days after it receives the corrective action completion report required pursuant to Section 732.409 of this Part.
- d) An owner or operator may waive the right to a final decision within 120 days after the submittal of a complete plan or report by submitting written notice to the Agency prior to the applicable deadline. Any waiver shall be for a minimum of 60 days.
- e) The Agency shall mail notices of final action on plans or reports by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action shall be deemed to have taken place on the post marked date that such notice is mailed.
- f) Any action by the Agency to reject or require modification, or rejection by failure to act, of a plan or report shall be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act. Any If the owner or operator may

~~elect~~ elects to incorporate modifications required by the Agency ~~and shall do so by submitting~~ rather than appeal, a revised plan or report shall be submitted to the Agency within 30 35 days after the receipt of the Agency's written notification. If no revised plan or report is submitted to the Agency or no appeal to the Board filed within the specified time frames, the plan or report shall be deemed approved as modified by the Agency. If any plan or report is rejected by operation of law, in lieu of an immediate appeal to the Board the owner or operator may either resubmit the plan or report to the Agency or file a joint request for a 90 day extension in the manner provided for extensions of permit decision in Section 40 of the Act.

g) Notification of Selection for Full Review

1) Owners or operators submitting plans shall be notified by the Agency within 60 days from the date the plan is ~~received whether or not the plan has been~~ deemed complete if the plan has not been selected for full review in accordance with Section 732.504 of this Part. Failure of the Agency to so notify the owner or operator shall mean that the plan has been selected for full review. ~~or notification~~ Notification by the Agency that the plan has not been selected for full review shall constitute approval of the plan ~~by operation of law.~~

2) Owners or operators submitting reports shall be notified by the Agency within 60 days after the receipt of the report ~~whether or not the report has been~~ if the report has not been selected for full review in accordance with Section 732.504 of this Part, except in the case of 20 day, 45 day or free product reports, in which case no notification of selection is necessary. Failure of the Agency to so notify the owner or operator shall mean that the report has been selected for full review. ~~or notification~~ Notification by the Agency that the report has not been selected for full review shall constitute approval of the report ~~by operation of law.~~

3) Notice shall be sent and the date of notification shall be computed in accordance with subsection (e) ~~above~~ of this Section.

h) In accordance with Sections 732.306 and 732.406 of this Part, upon the approval of any budget plan by the Agency ~~or by operation of law,~~ the Agency shall include as part of the final notice to the owner or operator a statement of whether or not the Fund contains sufficient resources in order to immediately commence the approved measures.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

SUBPART F: PAYMENT OR REIMBURSEMENT

Section 732.601 Applications for Payment

- a) An owner or operator seeking payment from the Fund shall submit to the Agency an application for payment on forms prescribed and provided by the Agency ~~or in a similar format containing the same information~~. The owner or operator may submit an application for partial payment or final payment for materials, activities or services contained in an approved budget plan. An application for payment also may be submitted for materials, activities or services for early action conducted pursuant to Subpart B of this Part and for which no budget plan is required.
- b) A complete application for payment shall consist of the following elements:
 - 1) A certification from a Licensed Professional Engineer acknowledged by the owner or operator that the work performed has been in accordance with a technical plan approved by the Agency ~~or by operation of law~~ or, for early action activities, in accordance with Subpart B;
 - 2) A statement of the amount approved in the corresponding budget plan and the amount actually sought for payment along with a certified statement by the owner or operator that the amount so sought has been expended in conformance with the elements of a budget plan approved by the Agency ~~or by operation of law~~;
 - 3) A copy of the OSFM or Agency eligibility and deductibility determination;
 - 4) Proof that approval of the payment requested will not exceed the limitations set forth in the Act and Section 732.604 of this Part;
 - 5) A federal taxpayer identification number and legal status disclosure certification;
 - 6) A Private Insurance Coverage form; and
 - 7) A Minority/Women's Business Usage form.
- c) Applications for payment shall be mailed or delivered to the address designated by the Agency. The Agency's record of the date of receipt shall be deemed conclusive unless a contrary date is proven by a dated, signed receipt from certified or registered mail.
- d) Applications for partial or final payment may be submitted no more frequently than once every 90 days.

- e) Except for applications for payment for costs of early action conducted pursuant to Subpart B of this Part, in no case shall the Agency review an application for payment unless there is an approved budget plan on file corresponding to the application for payment.
- f) In no case shall the Agency authorize payment to an owner or operator in an amount greater than the amount approved by the Agency ~~or by operation of law~~ in a corresponding budget plan. Revised cost estimates or increased costs resulting from revised procedures must be submitted to the Agency for review in accordance with Subpart E of this Part using amended budget plans in accordance with Sections 732.305(e) or 732.405(e) of this Part.
- g) Applications for payment of costs associated with site classification may not be submitted prior to approval or modification of the site classification completion report.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.602 Review of Applications for Payment

- a) The Agency shall conduct a review of any application for payment submitted pursuant to this Part 732. Each application for payment shall be reviewed to determine whether the application contains all of the elements and supporting documentation required by Section 732.601(b) of this Part and whether the amounts sought for payment have been certified in accordance with Section 732.601(b)(2) of this Part as equal to or less than the amounts approved in the corresponding budget plan. Any action by the Agency pursuant to this subsection shall be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act.
- b) The Agency may conduct a full review of any application for payment:
 - 1) If the amounts sought for payment exceed the amounts approved in the corresponding budget plan;
 - 2) If the Agency has reason to believe that the application for payment is fraudulent; or
 - 3) If the application for payment includes costs for early action activities conducted pursuant to Subpart B of this Part and either of the following circumstances exist:

- A) The application for payment is solely for early action costs that have not been approved as part of a prior budget plan; or
 - B) The application for payment includes early action costs that have not been approved as part of a prior budget plan, except that only the portion of the application for the unapproved early action costs may be given a full review.
- c) When conducting a full review of any application for payment, the Agency may require the owner or operator to submit a full accounting supporting all claims as provided in subsection (d) below of this Section.
- d) A full review of an application for payment shall be sufficient to determine which line items contained in the application for payment have caused the application for payment to exceed the corresponding approved budget plan pursuant to subsection (b)(1) above of this Section, which line items, if any, are ineligible for payment pursuant to subsections (b)(2) or (b)(3) above of this Section, and whether there is sufficient documentation to demonstrate that line items have been completed in accordance with a plan approved by the Agency ~~or by operation of law~~. A full review may include review of any or all elements and supporting documentation relied upon by the owner or operator in developing the application for payment, including but not limited to a review of invoices or receipts supporting all claims. The full review also may include the review of any plans or reports previously submitted for the site to ensure that the application for payment is consistent with work proposed and actually performed in conjunction with the site.
- e) Following a review, the Agency shall have the authority to approve, deny or require modification of applications for payment or portions thereof. The Agency shall notify the owner or operator in writing of its final action on any such application for payment. Except as provided in subsection (f) below of this Section, if the Agency fails to notify the owner or operator of its final action on an application for payment within 120 days after the receipt of a complete application for payment, the owner or operator may deem the application for payment ~~approved~~ rejected by operation of law. If the Agency denies payment for an application for payment or for a portion thereof or requires modification, the written notification shall contain the following information, as applicable:
- 1) An explanation of the specific type of information, if any, that the Agency needs to complete the full review;
 - 2) An explanation of the Sections of the Act or regulations that may be violated if the application for payment is approved; and

- 3) A statement of specific reasons why the cited Sections of the Act or regulations may be violated if the application for payment is approved.
- f) An owner or operator may waive the right to a final decision within 120 days after the submittal of a complete application for payment by submitting written notice to the Agency prior to the applicable deadline. Any waiver shall be for a minimum of 30 days.
- g) The Agency shall mail notices of final action on applications for payment by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action shall be deemed to have taken place on the post marked date that such notice is mailed.
- h) Any action by the Agency to deny payment for an application for payment or portion thereof or to require modification shall be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act. ~~Any~~ If the owner or operator ~~may elect~~ elects to incorporate modifications required by the Agency and shall do so by submitting rather than appeal, a revised application for payment shall be submitted to the Agency within ~~30~~ 35 days after the receipt of the Agency's written notification. If no revised application for payment is submitted to the Agency or no appeal to the Board is filed within the specified time frames, the application for payment shall be deemed approved as modified by the Agency and payment shall be authorized in the amount approved.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.603 Authorization for Payment; Priority List

- a) Within 60 days after notification of an owner or operator that the application for payment or a portion thereof has been approved by the Agency or by operation of law, the Agency shall forward to the Office of the State Comptroller in accordance with subsections (c) or (d) ~~below~~ of this Section a voucher in the amount approved. If the owner or operator has filed an appeal with the Board of the Agency's final decision on an application for payment, the Agency shall have 60 days from the final resolution of the appeal to forward to the Office of the State Comptroller a voucher in the amount ordered as a result of the appeal. Notwithstanding the time limits imposed by this Section, the Agency shall not forward vouchers to the Office of the State Comptroller until sufficient funds are available to issue payment.
- b) Any deductible, as determined by the OSFM or the Agency, shall be subtracted from any amount approved for payment by the Agency or by operation of law.

- c) For owners or operators who have deferred site classification or corrective action in accordance with Sections 732.306 or 732.406 of this Part, payment shall be authorized from funds encumbered pursuant to Sections 732.306(a)(4) or 732.406(a)(4) of this Part upon approval of the application for payment by the Agency or by operation of law.
- d) For owners or operators not electing to defer site classification or corrective action in accordance with Sections 732.306 or 732.406 of this Part, the Agency shall form a priority list for payment for the issuance of vouchers pursuant to subsection (a) above of this Section.
- 1) All such applications for payment shall be assigned a date that is the date upon which the complete application for partial or final payment was received by the Agency. This date shall determine the owner or operator's priority for payment in accordance with subsection (d)(2) below of this Section, with the earliest dates receiving the highest priority.
 - 2) Once payment is approved by the Agency or by operation of law or ordered by the Board or courts, the application for payment shall be assigned priority in accordance with subsection (d)(1) above of this Section. The assigned date shall be the only factor determining the priority for payment for those applications approved for payment.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.604 Limitations on Total Payments

- a) Limitations per occurrence:
- 1) THE AGENCY SHALL NOT APPROVE ANY PAYMENT FROM THE FUND TO PAY AN OWNER OR OPERATOR FOR COSTS OF CORRECTIVE ACTION INCURRED BY SUCH OWNER OR OPERATOR IN AN AMOUNT IN EXCESS OF \$1,000,000 PER OCCURRENCE. (Section 57.8(g) of the Act)
 - 2) THE AGENCY SHALL NOT APPROVE ANY PAYMENT FROM THE FUND TO PAY AN OWNER OR OPERATOR FOR COSTS OF INDEMNIFICATION OF SUCH OWNER OR OPERATOR IN AN AMOUNT IN EXCESS OF \$1,000,000 PER OCCURRENCE. (Section 57.8(g) of the Act)
- b) Aggregate limitations:

- 1) NOTWITHSTANDING ANY OTHER PROVISION OF THIS Part 732, THE AGENCY SHALL NOT APPROVE PAYMENT TO AN OWNER OR OPERATOR FROM THE FUND FOR COSTS OF CORRECTIVE ACTION OR INDEMNIFICATION INCURRED DURING A CALENDAR YEAR IN EXCESS OF THE FOLLOWING AMOUNTS BASED ON THE NUMBER OF PETROLEUM UNDERGROUND STORAGE TANKS OWNED OR OPERATED BY SUCH OWNER OR OPERATOR IN ILLINOIS:

AMOUNT	NUMBER OF TANKS
\$1,200,000 <u>1,000,000</u>	FEWER THAN 101
\$2,000,000	101 OR MORE

- 2) COSTS INCURRED IN EXCESS OF THE AGGREGATE AMOUNTS SET FORTH IN subsection (b)(1) above of this Section SHALL NOT BE ELIGIBLE FOR PAYMENT IN SUBSEQUENT YEARS. (Section 57.8(d) of the Act)
- c) FOR PURPOSES OF subsection (b) of this Section, REQUESTS SUBMITTED BY ANY OF THE AGENCIES, DEPARTMENTS, BOARDS, COMMITTEES OR COMMISSIONS OF THE STATE OF ILLINOIS SHALL BE ACTED UPON AS CLAIMS FROM A SINGLE OWNER OR OPERATOR. (Section 57.8(d) of the Act)
- d) FOR PURPOSES OF subsection (b) of this Section, OWNER OR OPERATOR INCLUDES;
- (1) ANY SUBSIDIARY, PARENT, OR JOINT STOCK COMPANY OF THE OWNER OR OPERATOR; AND
 - (2) ANY COMPANY OWNED BY ANY PARENT, SUBSIDIARY, OR JOINT STOCK COMPANY OF THE OWNER OR OPERATOR. (Section 57.8(d) of the Act)

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.605 Eligible Costs

- a) Types of costs that may be eligible for payment from the Fund include those for corrective action activities and for materials or services provided or performed in conjunction with corrective action activities. Such activities and services may include but are not limited to:
- 1) Early action activities conducted pursuant to Subpart B of this Part;

- 2) Engineering oversight services;
- 3) Remedial investigation and design;
- 4) Feasibility studies;
- 5) Laboratory services necessary to determine site classification and whether the established corrective action objectives have been met;
- 6) Installation and operation of groundwater investigation and groundwater monitoring wells;
- 7) The removal, treatment, transportation and disposal of soil contaminated by petroleum at levels in excess of the established corrective action objectives;
- 8) The removal, treatment, transportation and disposal of water contaminated by petroleum at levels in excess of the established corrective action objectives;
- 9) The placement of clean backfill to grade to replace excavated soil contaminated by petroleum at levels in excess of the established corrective action objectives;
- 10) Groundwater corrective action systems;
- 11) Alternative technology;
- 12) Recovery of free phase petroleum from groundwater;
- 13) The removal and disposal of any UST if a release of petroleum from the UST was identified and IEMA was notified prior to its removal;
- 14) Costs incurred as a result of a release of petroleum because of vandalism, theft or fraudulent activity by a party other than an owner, operator or agent of an owner or operator;
- 15) Engineering costs associated with seeking payment or reimbursement from the Fund including, but not limited to, completion of an application for partial or final payment;
- 16) Costs associated with obtaining an Eligibility and Deductibility Determination from the OSFM or the Agency;

- 17) Costs for destruction and replacement of concrete, asphalt and paving to the extent necessary to conduct corrective action and if the destruction and replacement has been certified as necessary to the performance of corrective action by a Licensed Professional Engineer;
 - 18) The destruction or dismantling and reassembly of above grade structures in response to a release of petroleum if such activity has been certified as necessary to the performance of corrective action by a Licensed Professional Engineer. For purposes of this subsection, destruction, dismantling or reassembly of above grade structures does not include costs associated with replacement of pumps, pump islands, buildings, wiring, lighting, bumpers, posts or canopies; and
 - 19) Preparation of site classification plans (including physical soil classification and groundwater investigation plans) and associated budget plans, site classification reports, groundwater monitoring plans and associated budget plans, groundwater monitoring completion reports, "High Priority" corrective action plans and associated budget plans, and "High Priority" corrective action completion reports.
- b) An owner or operator may submit a budget plan or application for partial or final payment that includes an itemized accounting of costs associated with activities, materials or services not identified in subsection (a) above of this Section if the owner or operator submits detailed information demonstrating that the activities, materials or services not identified in subsection (a) above of this Section are essential to the completion of the minimum corrective action requirements of the Act and this Part 732.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.606 Ineligible Costs

Costs ineligible for payment from the Fund include but are not limited to:

- a) Costs for the removal, treatment, transportation, and disposal of more than four feet of fill material from the outside dimensions of the UST, as set forth in Appendix C of this Part, during early action activities conducted pursuant to Section 732.202(f), and costs for the replacement of contaminated fill materials with clean fill materials in excess of the amounts set forth in Appendix C of this Part during early action activities conducted pursuant to Section 732.202(f);
- b) Costs or losses resulting from business interruption;

- c) Costs incurred as a result of vandalism, theft or fraudulent activity by the owner or operator or agent of an owner or operator including the creation of spills, leaks or releases;
- d) Costs associated with the replacement of above grade structures such as pumps, pump islands, buildings, wiring, lighting, bumpers, posts or canopies, including but not limited to those structures destroyed or damaged during corrective action activities;
- e) COSTS OF CORRECTIVE ACTION OR INDEMNIFICATION INCURRED BY AN OWNER OR OPERATOR PRIOR TO JULY 28, 1989 (Section 57.8(j) of the Act);
- f) Costs associated with the procurement of a generator identification number;
- g) LEGAL DEFENSE COSTS INCLUDING LEGAL COSTS FOR SEEKING PAYMENT UNDER these regulations UNLESS THE OWNER OR OPERATOR PREVAILS BEFORE THE BOARD and the Board authorizes payment of legal fees (Section 57.8(l) of the Act);
- h) Purchase costs of non-expendable materials, supplies, equipment or tools, except that a reasonable rate may be charged for the usage of such materials, supplies, equipment or tools;
- i) Costs associated with activities that violate any provision of the Act or Board or Agency regulations;
- j) Costs associated with investigative action, preventive action, corrective action, or enforcement action taken by the State of Illinois if the owner or operator failed, without sufficient cause, to respond to a release or substantial threat of a release upon, or in accordance with, a notice issued by the Agency pursuant to Section 732.105 of this Part and Section 57.12 of the Act;
- k) Costs for removal, disposal or abandonment of UST if the tank was removed or abandoned, or permitted for removal or abandonment, by the OSFM before the owner or operator provided notice to IEMA of a release of petroleum;
- l) Costs associated with the installation of new USTs and the repair of existing USTs;
- m) Costs exceeding those contained in a budget plan or amended budget plan approved by the Agency ~~or by operation of law~~;

- n) Costs of corrective action or indemnification incurred before providing notification of the release of petroleum to IEMA in accordance with Section 732.202 of this Part;
- o) Costs for corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act;
- p) Costs associated with improperly installed sampling or monitoring wells;
- q) Costs associated with improperly collected, transported or analyzed laboratory samples;
- r) Costs associated with the analysis of laboratory samples for constituents other than applicable indicator contaminants or groundwater objectives;
- s) Costs for any corrective activities, services or materials unless accompanied by a letter from OSFM or the Agency confirming eligibility and deductibility in accordance with Section 57.9 of the Act;
- t) Interest or finance costs charged as direct costs;
- u) Insurance costs charged as direct costs;
- v) Indirect corrective action costs for personnel, materials, service or equipment charged as direct costs;
- w) Costs associated with the compaction and density testing of backfill material;
- x) Costs associated with sites that have not reported a release to IEMA or are not required to report a release to IEMA;
- y) Costs related to activities, materials or services not necessary to stop, minimize, eliminate, or clean up a release of petroleum or its effects in accordance with the minimum requirements of the Act and regulations;
- z) Costs incurred after completion of early action activities in accordance with Subpart B by owners or operators choosing, pursuant to Section 732.300(b) of this Part, to conduct remediation sufficient to satisfy the remediation objectives;
- aa) Costs incurred after completion of site classification activities in accordance with Subpart C by owners or operators choosing, pursuant to Section 732.400(b) or (c) of this Part, to conduct remediation sufficient to satisfy the remediation objectives;

- bb) Costs of alternative technology that exceed the costs of conventional technology;
~~and~~
- cc) Costs for investigative activities and related services or materials for developing a "High Priority" corrective action plan that are unnecessary or inconsistent with generally accepted engineering practices or unreasonable costs for justifiable activities, materials or services;
- dd) Costs to prepare site classification plans and associated budget plans under Section 732.305, to perform site classification under Section 732.307, or to prepare site classification completion reports under Section 732.309, for sites where owners or operators have elected to classify under Section 732.312;
- ee) Costs to prepare site classification plans and associated budget plans under Section 732.312, to perform site classification under Section 732.312, or to prepare site classification completion reports under Section 732.312, for sites where owners or operators have performed classification activities under Sections 732.305, 732.307, or 732.309;
- ff) Costs requested that are based on mathematical errors;
- gg) Costs that lack supporting documentation;
- hh) Costs proposed as part of a budget plan that are unreasonable;
- ii) Costs incurred during early action that are unreasonable;
- jj) Costs incurred at a site that has entered the Site Remediation Program under Title XVII and 35 Ill. Adm. Code 740; and
- kk) Costs incurred for additional remediation after receipt of a No Further Remediation Letter for the occurrence for which the No Further Remediation Letter was received.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.608 Apportionment of Costs

- a) The Agency may apportion payment of costs if:
 - 1) THE OWNER OR OPERATOR WAS DEEMED ELIGIBLE TO ACCESS THE FUND FOR PAYMENT OF CORRECTIVE ACTION COSTS FOR SOME, BUT NOT ALL, OF THE UNDERGROUND STORAGE TANKS AT THE SITE; AND

2) THE OWNER OR OPERATOR FAILED TO JUSTIFY ALL COSTS ATTRIBUTABLE TO EACH UNDERGROUND STORAGE TANK AT THE SITE. (Derived from Section 57.8(m) of the Act)

b) ~~Upon notification from the Agency of an apportionment of costs pursuant to this Section, the owner or operator shall within 30 days notify the Agency whether the apportionment shall be based upon the total number of all the USTs at the site or the total volume of all of the USTs at the site.~~ The Agency will determine, based on volume or number of tanks, which method of apportionment will be most favorable to the owner or operator. The Agency will notify the owner or operator of such determination in writing.

(Source: Amended at 21 Ill. Reg. _____, effective _____)

Section 732.612 Determination and Collection of Excess Payments

a) If, for any reason, the Agency determines that an excess payment has been paid from the Fund, the Agency may take steps to collect the excess amount pursuant to subsection (c) ~~below~~ of this Section.

- 1) Upon identifying an excess payment, the Agency shall notify the owner or operator receiving the excess payment by certified or registered mail, return receipt requested.
- 2) The notification letter shall state the amount of the excess payment and the basis for the Agency's determination that the payment is in error.
- 3) The Agency's determination of an excess payment shall be subject to appeal to the Board in the manner provided for the review of permit decisions in Section 40 of the Act.

b) An excess payment from the Fund includes, but is not limited to:

- 1) Payment for a non-corrective action cost;
- 2) Payment in excess of the limitations on payments set forth in Sections 732.604 and 732.607 of this Part;
- 3) Payment received through fraudulent means;
- 4) Payment calculated on the basis of an arithmetic error;
- 5) Payment calculated by the Agency in reliance on incorrect information.

c) Excess payments may be collected using any of the following procedures:

- 1) Upon notification of the determination of an excess payment in accordance with subsection (a) above of this Section or pursuant to a Board order affirming such determination upon appeal, the Agency may attempt to negotiate a payment schedule with the owner or operator. Nothing in this subsection (c)(1) of this Section shall prohibit the Agency from exercising at any time its options at subsections (c)(2) or (c)(3) below of this Section or any other collection methods available to the Agency by law.
- 2) If an owner or operator submits a subsequent claim for payment after previously receiving an excess payment from the Fund, the Agency may deduct the excess payment amount from any subsequently approved payment amount. If the amount subsequently approved is insufficient to recover the entire amount of the excess payment, the Agency may use the procedures in this Section or any other collection methods available to the Agency by law to collect the remainder.
- 3) The Agency may deem an excess payment amount to be a claim or debt owed the Agency, and the Agency may use the Comptroller's Setoff System for collection of the claim or debt in accordance with Section 10.5 of the "State Comptroller Act." 15 ILCS 405/10.05 (1993).

(Source: Amended at 21 Ill. Reg. _____, effective _____)

SUBPART G: NO FURTHER REMEDIATION LETTERS
AND RECORDING REQUIREMENTS

Section 732.700 General

Subpart G provides the procedures for issuance of No Further Remediation Letters under Title XVI and this Part. Subpart G also sets forth the recording requirements and the circumstances under which the letter may be voidable.

(Source: Added at 21 Ill. Reg. _____, effective _____)

Section 732.701 Issuance of a No Further Remediation Letter

- a) Upon approval by the Agency of a No Further Action site classification report, a Low Priority groundwater monitoring completion report, or a High Priority corrective action completion report, the Agency shall issue to the owner or operator a No Further Remediation Letter. The No Further Remediation Letter shall have the legal effect prescribed in Section 57.10 of the Act. The No Further Remediation Letter shall be denied if the Agency rejects or requires modification of the applicable report.

- b) The Agency shall have 120 days from the date of receipt of a complete report to issue a No Further Remediation Letter and may include the No Further Remediation Letter as part of the notification of approval of the applicable report in accordance with Subpart E of this Part. If the Agency fails to send the No Further Remediation Letter within 120 days, it shall be deemed denied by operation of law.
- c) The notice of denial of a No Further Remediation Letter by the Agency may be included with the notification of rejection or modification of the applicable report. The reasons for the denial shall be stated in the notification. The denial shall be considered a final determination appealable to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act. If any request for a No Further Remediation Letter is denied by operation of law, in lieu of an immediate appeal to the Board the owner or operator may either resubmit the request and applicable report to the Agency or file a joint request for a 90 day extension in the manner provided for extensions of permit decision in Section 40 of the Act.
- d) The Agency shall mail the No Further Remediation Letter by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action shall be deemed to have taken place on the postmarked date that the letter is mailed.

(Source: Added at 21 Ill. Reg. _____, effective _____)

Section 732.702 Contents of a No Further Remediation Letter

A No Further Remediation Letter issued pursuant to this Part shall include all of the following:

- a) An acknowledgment that the requirements of the applicable report were satisfied;
- b) A description of the location of the affected property by adequate legal description or by reference to a plat showing its boundaries;
- c) The remediation objectives determined in accordance with 35 Ill. Adm. Code 742 and any land use limitation, as applicable, required by 35 Ill. Adm. Code 742 as a condition of the remediation objectives;
- d) A statement that the Agency's issuance of the No Further Remediation Letter signifies that:

- 1) ALL CORRECTIVE ACTION REQUIREMENTS under Title XVI and Part 732 APPLICABLE TO THE OCCURRENCE HAVE BEEN COMPLIED WITH;
 - 2) ALL CORRECTIVE ACTION CONCERNING THE REMEDIATION OF THE OCCURRENCE HAS BEEN COMPLETED; AND
 - 3) NO FURTHER CORRECTIVE ACTION CONCERNING THE OCCURRENCE IS NECESSARY FOR THE PROTECTION OF HUMAN HEALTH, SAFETY AND THE ENVIRONMENT. (Section 57.10(c) of the Act)
- e) The prohibition under Section 732.703(c) against the use of any site in a manner inconsistent with any applicable land use limitation, without additional appropriate remedial activities;
 - f) A description of any approved preventive, engineering, and institutional controls identified in the plan or report and notification that failure to manage the controls in full compliance with the terms of the plan or report may result in avoidance of the No Further Remediation Letter;
 - g) The recording obligations pursuant to Section 732.703 of this Part;
 - h) The opportunity to request a change in the recorded land use pursuant to Section 732.704(c) of this Part;
 - i) Notification that further information regarding the site can be obtained from the Agency through a request under the Freedom of Information Act [5 ILCS 140]; and
 - j) Any other provisions agreed to by the Agency and the owner or operator.

(Source: Added at 21 Ill. Reg. _____, effective _____)

Section 732.703 Duty to Record a No Further Remediation Letter

- a) An owner or operator receiving a No Further Remediation Letter from the Agency pursuant to this Subpart G shall submit the letter to the Office of the Recorder or the Registrar of Titles of the county in which the site is located within 45 days after receipt of the letter. The letter shall be filed in accordance with Illinois law so that it forms a permanent part of the chain of title.
- b) A No Further Remediation Letter shall not become effective until officially recorded in accordance with subsection (a) of this Section. The owner or

operator shall obtain and submit to the Agency a certified, or otherwise accurate and official copy of the letter as recorded.

- c) At no time shall any site for which a land use limitation has been imposed as a result of corrective action under this Part be used in a manner inconsistent with the land use limitation unless further investigation or remedial action has been conducted that documents the attainment of objectives appropriate for the new land use and a new letter is obtained and recorded in accordance with this Part.

(Source: Added at 21 Ill. Reg. _____, effective _____)

Section 732.704 Voidance of a No Further Remediation Letter

- a) The No Further Remediation Letter shall be voidable if site activities are not carried out in full compliance with the provisions of this Part, and 35 Ill. Adm. Code 742 where applicable, or the remediation objectives upon which the issuance of the No Further Remediation Letter was based. Specific acts or omissions that may result in voidance of the No Further Remediation Letter include, but shall not be limited to:
- 1) Any violations of institutional controls or land use restrictions, if applicable;
 - 2) The failure of the owner or operator or any subsequent transferee to operate and maintain preventive, engineering and institutional controls or comply with a groundwater monitoring plan, if applicable;
 - 3) Obtaining the No Further Remediation Letter by fraud or misrepresentation;
 - 4) Subsequent discovery of indicator contaminants related to the occurrence upon which the No Further Remediation Letter was based which:
 - A) were not identified as part of the investigative or remedial activities upon which the issuance of the No Further Remediation Letter was based;
 - B) results in the following:
 - i) the site no longer satisfying the criteria of a No Further Action site classification.
 - ii) the site no longer satisfying the criteria of a Low Priority site classification.

- iii) failing to meet the remedial objectives established for a High Priority site; and
 - C) pose a threat to human health or the environment;
 - 5) Failure to record the No Further Remediation Letter in accordance with Section 732.703; or.
 - 6) Disturbance or removal of contamination left in place under an approved plan.
- b) If the Agency seeks to void a No Further Remediation Letter, it shall provide notice to the current title holder of the site and the owner or operator at his or her last known address.
- 1) The notice shall specify the cause for the voidance and describe the facts in support of the cause.
 - 2) The Agency shall mail Notices of Voidance by registered or certified mail, date stamped with return receipt requested.
- c) Within 35 days after receipt of the Notice of Voidance, the current title holder and owner or operator of the site at the time the No Further Remediation Letter was issued may appeal the Agency's decision to the Board in the manner provided for the review of permits in Section 40 of the Act.
- d) If the Board fails to take final action within 120 days, unless such time period is waived by the petitioner, the petition shall be deemed denied and the petitioner shall be entitled to an appellate court order pursuant to subsection (d) of Section 41 of the Act. The Agency shall have the burden of proof in such action.
- 1) If the Agency's action is appealed, the action shall not become effective until the appeal process has been exhausted and a final decision is reached by the Board or courts.
 - A) Upon receiving a notice of appeal, the Agency shall file a Notice of Lis Pendens with the Office of the Recorder or the Registrar of Titles for the county in which the site is located. The notice shall be filed in accordance with Illinois law so that it becomes a part of the chain of title for the site.
 - B) If the Agency's action is not upheld on appeal, the Notice of Lis Pendens shall be removed in accordance with Illinois law within

45 days after receipt of the final decision of the Board or the courts.

- 2) If the Agency's action is not appealed or is upheld on appeal, the Agency shall submit the Notice of Voidance to the Office of the Recorder or the Registrar of Titles for the county in which the site is located. The Notice shall be filed in accordance with Illinois law so that it forms a permanent part of the chain of title for the site.

(Source: Added at 21 Ill. Reg. _____, effective _____)

Section 732. Appendix B ~~Groundwater and Soil Remediation Objectives and Acceptable Detection Limits~~ Additional Parameters

Volatiles

1. Benzene
2. Bromoform
3. Carbon tetrachloride
4. Chlorobenzene
5. Chloroform
6. Dichlorobromomethane
7. 1,2-Dichloroethane
8. 1,1-Dichloroethene
9. cis-1,2-Dichloroethylene
10. trans-1,2-Dichloroethylene
11. Dichloromethane (Methylene chloride)
12. 1,2-Dichloropropane
13. 1,3-Dichloropropylene (cis + trans)
14. Ethylbenzene
15. Styrene
16. Tetrachloroethylene
17. Toluene
18. 1,1,1-Trichloroethane
19. 1,1,2-Trichloroethane
20. Trichloroethylene
21. Vinyl chloride
22. Xylenes (total)

Base/Neutrals

1. Bis(2-chloroethyl)ether
2. Bis(2-ethylhexyl)phthalate
3. 1,2-Dichlorobenzene
4. 1,4-Dichlorobenzene
5. Hexachlorobenzene
6. Hexachlorocyclopentadiene
7. *n*-Nitrosodi-*n*-propylamine
8. *n*-Nitrosodiphenylamine
9. 1,2,4-Trichlorobenzene

Polynuclear Aromatics

1. Acenaphthene
2. Anthracene
3. Benzo(a)anthracene
4. Benzo(a)pyrene
5. Benzo(b)fluoranthene

6. Benzo(k)fluoranthene
7. Chrysene
8. Dibenzo(a,h)anthracene
9. Fluoranthene
10. Fluorene
11. Indeno(1,2,3-c,d)pyrene
12. Naphthalene
13. Pyrene
Other Non-Carcinogenic PNAs (total)
14. Acenaphthylene
15. Benzo(g,h,i)perylene
16. Phenanthrene

Metals (total inorganic and organic forms)

1. Arsenic
2. Barium
3. Cadmium
4. Chromium (total)
5. Lead
6. Mercury
7. Selenium

Acids

1. Pentachlorophenol
2. Phenol (total)
3. 2,4,6-Trichlorophenol

Pesticides

1. Aldrin
2. alpha-BHC
3. Chlordane
4. 4,4'-DDD
5. 4,4'-DDE
6. 4,4-DDT
7. Dieldrin
8. Endrin
9. Heptachlor
10. Heptachlor epoxide
11. Lindane (gamma-BHC)
12. Toxaphene

(Source: Amended at 21 Ill. Reg. _____, effective _____.)

<u>Parameters</u>	<u>Objectives</u>		<u>ADLs[†]</u>	
	<u>Soil</u> <u>(mg/kg)</u>	<u>Groundwater</u> <u>(mg/l)</u>	<u>Soil</u> <u>(mg/kg)</u>	<u>Groundwater</u> <u>(mg/l)</u>
<u>Volatiles</u>				
1. Benzene		0.005		
2. Bromoform		0.001		0.001
3. Carbon tetrachloride		0.005		
4. Chlorobenzene		0.1		
5. Chloroform		0.0002		0.0002
6. Dichlorobromomethane		0.0002		0.0002
7. 1,2 Dichloroethane		0.005		
8. 1,1-Dichloroethene		0.007		
9. cis 1,2 Dichloroethene		0.07		
10. trans 1,2 Dichloroethene		0.01		
11. Dichloromethane		0.005		
12. 1,2-Dichloropropane		0.005		
13. cis 1,3 Dichloropropene		0.001		0.001
14. trans 1,3 Dichloropropene		0.001		0.001
15. Ethylbenzene		0.7		
16. Styrene		0.1		
17. Tetrachloroethene		0.005		
18. Toluene		1.0		
19. 1,1,1 Trichloroethane		0.2		
20. 1,1,2-Trichloroethane		0.005		
21. Trichloroethene		0.005		
22. Vinyl chloride		0.002		
23. Xylenes (total)		10.0		
24. BETX (total)		11.705		
<u>Base/Neutrals</u>				
1. Bis(2-chloroethyl)ether		0.01		0.01
2. Bis(2-ethylhexyl)phthalate		0.006		0.006
3. 1,2-Dichlorobenzene		0.6		
4. 1,4-Dichlorobenzene		0.075		
5. Hexachlorobenzene		0.0005		0.0005
6. Hexachlorocyclopentadiene		0.05		
7. N-Nitrosodi-n-propylamine		0.01		0.01
8. N-Nitrosodiphenylamine		0.01		0.01
9. 1,2,4-Trichlorobenzene		0.07		
<u>Polynuclear Aromatics</u>				
1. Acenaphthene		0.42		

2. Anthracene	2.1		
3. Benzo(a)anthracene	0.00013		0.00013
4. Benzo(a)pyrene	0.0002		0.00023
5. Benzo(b)fluoranthene	0.00018		0.00018
6. Benzo(k)fluoranthene	0.00017		0.00017
7. Chrysene	0.0015		0.0015
8. Dibenzo(a,h)anthracene	0.0003		0.0003
9. Fluoranthene	0.28		
10. Fluorene	0.28		
11. Indeno(1,2,3-c,d)pyrene	0.00043		0.00043
12. Naphthalene	0.025		
13. Pyrene	0.21		
14. other			
Non-Carcinogenic			
PNAs (total)	0.21		
Acenaphthylene			
Benzo(g,h,i)perylene			
Phenanthrene			
Metals ²			
1. Arsenic	0.05	0.05	
2. Barium	2.0	2.0	
3. Cadmium	0.005	0.005	
4. Chromium (total)	0.1	0.1	
5. Lead	0.0075	0.0075	0.0075
6. Mercury	0.002	0.002	
7. Selenium	0.05	0.05	
Acids			
1. Pentachlorophenol	0.001		0.001
2. Phenol (total)	0.1		
3. 2,4,6 Trichlorophenol	0.0064		0.0064
Pesticides			
1. Aldrin	0.00004		0.00004
2. alpha BHC	0.00003		0.00003
3. Chlordane	0.002		
4. 4,4' DDE	0.00004		0.00004
5. 4,4' DDD	0.00011		0.00011
6. 4,4' DDT	0.00012		0.00012
7. Dieldrin	0.00002		0.00002
8. Endrin	0.002		
9. Heptachlor	0.0004		
10. Heptachlor epoxide	0.0002		
11. Lindane (gamma BHC)	0.0002		

12. Toxaphene _____ 0.003

Polychlorinated Biphenyls

1. Polychlorinated Biphenyls _____ * _____ 0.0005
 (as Decachlorobiphenyl)

* See 40 CFR 761.120, as incorporated by reference at Section 732.104, for USEPA "PCB Spill Cleanup Policy."

1) ~~Acceptable Detection Limit "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Publication No. SW-846 and "Methods for the Determination of Organic Compounds in Drinking Water," EPA, EMSL, EPA 600/4-88/039, as incorporated by reference at Section 732.104 of this Part, must be used. For parameters where the specified objective is below the ADL, the ADL shall serve as the objective until the USEPA promulgates lower ADLs. When promulgated, the new USEPA ADL or the specified objective, whichever is higher, shall apply. For other parameters the ADL must be below the specified cleanup objective.~~

2) ~~For soil, based upon the concentration determined by the Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) at 40 CFR 261, Appendix II, as incorporated by reference at Section 732.104 of this Part.~~

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Table BSoil Remediation Methodology: Model Parameter Values (Repealed)

PARAMETER	DEFINITION (UNIT)	MODEL VALUES
S_d	Source width (vertical plane) [cm]	304.8
S_w	Source width (horizontal plane) [cm]	609.6
a_x	Longitudinal dispersivity [cm]	$0.1 * x$
a_y	Transverse dispersivity [cm]	$a_x/3$
a_z	Vertical dispersivity [cm]	$a_x/20$
U	Specific discharge ($K_s i/q_s$) [cm/day]	0.346
K_s	Saturated hydraulic conductivity [cm/d]	86.4
k_s	Sorption coefficient [$\text{cm}^3 \text{H}_2\text{O/g}$ -soil]	Chemical specific
q_s	Volumetric water content of saturated zone	0.25
i	Groundwater gradient [cm/cm]	0.001
l	First order degradation constant [day^{-1}]	Chemical specific
x	Distance along the center line from edge of dissolved plume source zone [cm]	152-6096
U_{gw}	Groundwater Darcy Velocity [cm/year]	2500
d_{gw}	Groundwater mixing zone thickness [cm]	304.8
ρ_s	Soil bulk density [g/cm^3]	1.7
q_{as}	Volumetric air content in vadose zone soils [cm^3 -air/ cm^3 -soil]	0.22
q_{ws}	Volumetric water content in vadose zone soils [cm^3 -water/ cm^3 -soil]	0.12
H	Henry's Law constant [cm^3 -water/ cm^3 -soil]	Chemical specific

I	Infiltration rate of water through soil [cm/year]	30
W	Width of source parallel to groundwater flow [cm]	1500

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Table C

Soil Remediation Methodology: Chemical Specific
Parameters-(Repealed)

Chemical	Sorption Coefficient (K_s)	Degradation Constant (D)	Henry's Law Constant (H)	Solubility (mg/l)	Ground water Objective (mg/l)
Benzene	0.38	0.0009	0.22	1750	0.005
Toluene	1.349	0.011	0.26	535	1.0
Ethyl Benzene	0.955	0.003	0.32	152	0.7
Xylene	2.399	0.0019	0.29	130	10.0
Naphthalene	12.88	0.0027	0.049	31.7	0.025
Benzo(a)pyrene	3890.45	0.0007	1.49 x 10 ⁻⁹	0.0012	0.0002

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Distance (ft)	Chemical Name					
	Benzen e	Toluene	Ethyl Benzene	Xylene s	Naphthale ne	Benzo(a) pyrene
	Soil Cleanup Objectives (PPM) (mg/kg)					
5	0.005	1.0	0.7	10.0	0.025	0.019
10	0.005	11.010	0.7	10.0	0.025	0.025
15	0.005	13.943	0.7	10.0	0.025	0.033
20	0.005	13.943	0.7	10.0	0.025	0.045
25	0.005	13.943	1.507	10.0	0.459	0.065
30	0.005	13.943	2.908	10.0	0.991	0.084
35	0.005	13.943	2.908	10.0	2.095	0.084
40	0.005	13.943	2.908	10.0	4.305	0.084
45	0.005	13.943	2.908	10.0	7.366	0.084
50	0.005	13.943	2.908	10.0	7.366	0.084
55	0.005	13.943	2.908	10.0	7.366	0.084
60	0.005	13.943	2.908	10.0	7.366	0.084
65	0.007	13.943	2.908	10.0	7.366	0.084
70	0.010	13.943	2.908	10.0	7.366	0.084
75	0.015	13.943	2.908	10.0	7.366	0.084
80	0.020	13.943	2.908	10.0	7.366	0.084
85	0.028	13.943	2.908	10.0	7.366	0.084
90	0.038	13.943	2.908	10.0	7.366	0.084
95	0.051	13.943	2.908	10.0	7.366	0.005
100	0.069	13.943	2.908	10.0	7.366	0.084

Section 732. Table D (Cont'd.) Soil Remediation Methodology: Objectives

Distance (ft)	Chemical Name					
	Benzen e	Toluen e	Ethyl Benzene	Xylene s	Naphthale ne	Benzo(a)pyrene
	Soil Cleanup Objectives (PPM) (mg/kg)					
105	0.091	13.943	2.908	10.0	7.366	0.084
110	0.120	13.943	2.908	10.0	7.366	0.084
115	0.157	13.943	2.908	10.0	7.366	0.084
120	0.205	13.943	2.908	10.0	7.366	0.084
125	0.265	13.943	2.908	10.0	7.366	0.084
130	0.341	13.943	2.908	10.0	7.366	0.084
135	0.436	13.943	2.908	10.0	7.366	0.084
140	0.555	13.943	2.908	10.0	7.366	0.084
145	0.704	13.943	2.908	10.0	7.366	0.084
150	0.888	13.943	2.908	10.0	7.366	0.084
155	1.115	13.943	2.908	10.0	7.366	0.084
160	1.395	13.943	2.908	10.0	7.366	0.084
165	1.738	13.943	2.908	10.0	7.366	0.084
170	2.157	13.943	2.908	10.0	7.366	0.084
175	2.668	13.943	2.908	10.0	7.366	0.084
180	3.289	13.943	2.908	10.0	7.366	0.084
185	4.042	13.943	2.908	10.0	7.366	0.084
190	4.950	13.943	2.908	10.0	7.366	0.084
195	6.046	13.943	2.908	10.0	7.366	0.084
200	7.362	13.943	2.908	10.0	7.366	0.084

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Illustration A Equation For Groundwater Transport (Repealed)

The Board used the following correct ASTM equation for steady state attenuation of chemical concentration obtained from Domenico, P.A., "An Analytical Model for Multidimensional Transport of a Decaying Contaminant Species." *Journal of Hydrology*, Vol. 91, pp:49-58, 1987,

$$\frac{C(x)}{C_{source}} = \exp\left[-\frac{x}{2a_x} \left(1 + \sqrt{1 + \frac{4l a_x}{U}}\right)\right] \operatorname{erf}\left(\frac{S_w}{4\sqrt{a_y x}}\right) \operatorname{erf}\left(\frac{S_d}{4\sqrt{a_z x}}\right)$$

referenced in the ASTM guide for Risk-Based Corrective Action Applied at Petroleum Release Sites, approved May, 1994:

C = Dissolved hydrocarbon concentration along centerline of dissolved plume [g/cm³ H₂O]

C_{source} = Dissolved hydrocarbon concentration in dissolved plume source area [g/cm³ H₂O]

S_d = Source width (vertical plane) [cm]

S_w = Source width (horizontal plane) [cm]

a_x = Longitudinal dispersivity [cm]

a_y = Transverse dispersivity [cm]

a_z = Vertical dispersivity [cm]

U = $K_s i / q_s$

K_s = Saturated hydraulic conductivity [cm/d]

k_s = Sorption coefficient

q_s = Volumetric water content of saturated zone

i = Groundwater gradient [cm/cm]

l = First order degradation constant

$\operatorname{erf}(_)$ = Error function evaluated for value of $_$

x = Distance along the center line from edge of dissolved plume source zone [cm]

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Illustration B Equation For Soil-Groundwater Relationship (Repealed)

The Board used the following equation drawn from the ASTM guide as referenced in Illustration A to calculate the soil leaching factor (identified as "Equation No. 4" in the IPMA proposal discussed within the Board's Second Notice Opinion and order, Docket R94-2(a), entitled In the Matter of: Regulation of Petroleum Leaking Underground Storage Tanks (35 Ill. Adm. Code 732)):

$$\frac{LF_{sw} \frac{(mg/l - Water)}{(mg/kg - Soil)}}{[q_{ws} + k_s r_s + H q_{as}] \left(1 + \frac{U_{gw} d_{gw}}{IW}\right)} = \frac{r_s}{L - g} \times 10^0 \frac{cm^3 - kg}{L - g}$$

~~LF_{sw} = Leaching factor~~
~~k_s = Soil water sorption coefficient~~
~~U_{gw} = Groundwater Darcy Velocity [cm/sec]~~
~~d_{gw} = Groundwater mixing zone thickness [cm]~~
~~r_s = Soil bulk density~~
~~q_{as} = Volumetric air content in vadose zone soils~~
~~q_{ws} = Volumetric water content in vadose zone soils~~
~~H = Henry's Law constant~~
~~I = Infiltration rate of water through soil~~
~~W = Width of source parallel to groundwater flow~~

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Illustration C Equation For Calculating Groundwater Objectives at the Source
(Repealed)

The Board used the following equation drawn from the IPMA proposal (see Illustration B) to calculate the groundwater objectives at the source:

$$\underline{\hspace{10em}} \quad \underline{GW_{source}} = \frac{GW_{comp}}{(C(x) / C_{source})}$$

~~GW_{source} = Groundwater objective at the source~~
~~GW_{comp} = Groundwater objective at compliance point~~
~~C(x)/C_{source} = Calculated for a distance of 5 to 200 feet using equation 1~~

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Illustration D Equation For Calculating Soil Objectives at the Source (Repealed)

_____ The Board used the following equation drawn from the IPMA proposal (see Illustration B) to calculate the soil remediation objectives:

$$\underline{\hspace{10em}} \quad \underline{SoilTarget} = \frac{GW_{source}}{(LF_{sw})SF}$$

~~Soil Target = Soil objective at the source~~
~~LF_{sw} = Soil leaching factor calculated using equation 2~~
~~SF = Safety factor (1000)~~

(Source: Repealed at 21 Ill. Reg. _____, effective _____.)

Section 732. Appendix C Backfill Volumes

<u>Volume of Tank in Gallons</u>	<u>Maximum amount of backfill material to be removed in cubic yards in place</u>	<u>Maximum amount of backfill material to be replaced in cubic yards in place</u>
<u>< 285</u>	<u>54</u>	<u>56</u>
<u>285 to 299</u>	<u>55</u>	<u>57</u>
<u>300 to 559</u>	<u>56</u>	<u>58</u>
<u>560 to 999</u>	<u>67</u>	<u>70</u>
<u>1000 to 1049</u>	<u>81</u>	<u>87</u>
<u>1050 to 1149</u>	<u>89</u>	<u>96</u>
<u>1150 to 1999</u>	<u>94</u>	<u>101</u>
<u>2000 to 2499</u>	<u>112</u>	<u>124</u>
<u>2500 to 2999</u>	<u>128</u>	<u>143</u>
<u>3000 to 3999</u>	<u>143</u>	<u>161</u>
<u>4000 to 4999</u>	<u>175</u>	<u>198</u>
<u>5000 to 5999</u>	<u>189</u>	<u>219</u>
<u>6000 to 7499</u>	<u>198</u>	<u>235</u>
<u>7500 to 8299</u>	<u>206</u>	<u>250</u>
<u>8300 to 9999</u>	<u>219</u>	<u>268</u>
<u>10000 to 11999</u>	<u>252</u>	<u>312</u>
<u>12000 to 14999</u>	<u>286</u>	<u>357</u>
<u>15000 to 19999</u>	<u>345</u>	<u>420</u>

(Source: Added at 21 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the ____ day of _____, 1997, by a vote of _____.

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board