BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

IN THE MATTER OF: PROPOSED AMENDMENTS TO: REGULATION OF PETROLEUM LEAKING UNDERGROUND STORAGE TANKS (35 ILL. ADM. CODE 732),	)	R04-22 (UST Rulemaking)
IN THE MATTER OF: PROPOSED AMENDMENTS TO: REGULATION OF PETROLEUM LEAKING UNDERGROUND STORAGE TANKS (35 ILL. ADM. CODE 734)	)	R04-23 (UST Rulemaking) Consolidated

NOTICE OF FILING

TO: ALL COUNSEL OF RECORD
(Service List Attached)

PLEASE TAKE NOTICE that on May 11, 2004, filed with the Clerk of the Illinois Pollution Control Board of the State of Illinois an original, executed copy of CW^{3}M Company, Inc.'s Prefiled Testimony and General Comments on the Environmental Protection Agency's Proposal to Adopt 35 Ill. Adm. Code 734 and to Adopt Amendments to 35 Ill. Adm. Code 732; and Testimony of Vince E. Smith for the Environmental Protection Agency's Proposal to Adopt Amendments to 35 Ill. Adm. Code 732 and the Environmental Protection Agency's Proposal to Adopt 35 Ill. Adm. Code 734 in the above-captioned matter.

Dated: May 11, 2004

Respectfully submitted,

CW^{3}M Company

By: Carolyn S Hesse
One of Its Attorneys

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CERTIFICATE OF SERVICE

I, on oath state that I have served the attached CW^{3}M Company, Inc.'s Prefiled Testimony and General Comments on the Environmental Protection Agency's Proposal to Adopt 35 Ill. Adm. Code 734 and to Adopt Amendments to 35 Ill. Adm. Code 732; and Testimony of Vince E. Smith for the Environmental Protection Agency's Proposal to Adopt Amendments to 35 Ill. Adm. Code 732 and the Environmental Protection Agency's Proposal to Adopt 35 Ill. Adm. Code 734 by placing a copy in an envelope addressed to the Service List Attached from CW3M Company, Inc., 701 West South Grand Avenue, Springfield, IL 62704 before the hour of 5:00 p.m., on this 11th Day of May, 2004.

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BEFORE THE POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO:	)	
REGULATION OF PETROLEUM LEAKING	)	R04-22
UNDERGROUND STORAGE TANKS	)	(UST Rulemaking)
(35 ILL. ADM. CODE 732),	)	
	)	
IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO:	)	
REGULATION OF PETROLEUM LEAKING	)	R04-23
UNDERGROUND STORAGE TANKS	)	(UST Rulemaking)
(35 ILL. ADM. CODE 734)	)	Consolidated
	)	

TESTIMONY OF VINCE E. SMITH FOR THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL TO ADOPT AMENDMENTS TO 35 ILL. ADM. CODE 732 AND THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL TO ADOPT 35 ILL. ADM. CODE 734

My name is Vince Smith. I am employed with the CW^{3}M Company as the senior environmental engineer. I have been in my current position since June 2000. Prior to assuming my current position, I was employed by the City of Springfield, Illinois, Department of Public Works, the Illinois Department of Nuclear Safety, and Alpha Testing, Inc. I received a B.A. in Mathematics from Culver-Stockton College in 1984 and a B.S. in Civil Engineering from the University of Missouri – Rolla in 1985. I am a Registered Professional Engineer in the State of Illinois. My resume is attached.

The testimony was prepared with the assistance of Carol L. Rowe and Jeffrey Wienhoff of CW^{3}M Company who are available to assist with providing information during today's proceedings. Ms. Rowe is an Illinois Licensed Professional Geologist and Mr. Wienhoff is an Illinois Enrolled Professional Engineer Intern. Their resumes are also attached.

CW^3M Company, Inc. is an environmental consultant, which has been doing LUST work since the company was created in 1991. CW^3M has the equipment and abilities to perform tank removals, excavations, groundwater treatment and soil vapor plant construction and operation, bioremediation, landfarming, and demolition work in-house. Typically, CW^3M subcontracts laboratory services, drilling, a portion of the trucking, and landfill disposal. Many of our clients own a single facility, and are located in remote parts of the state, not close to landfills, consultants, or other services.

The pre-filed testimony offers comments on the proposed technical modification of 732, creation of 734 and extensive testimony against Subpart H: Maximum Payment Amounts. The basis for our testimony against the rates proposed stems from serious concerns regarding the collection and evaluation of data utilized to support the rates as well as a concern that the streamlined approach misses payment for vital components of LUST work. The spreadsheets that have been made available for inspection have revealed serious flaws in the selection criteria, the age of the data, the input of data and the statistical evaluation. The Agency has not presented a clear rationale for its statistical formulas. In some cases that were used to develop rates in the proposed rules, the Agency only uses an average, while other times, the median value is selected, or the average plus one standard deviation is used as the basis for rate setting. From the Agency's pre-filed testimony and discussion during the March 15, 2004 hearing, it appears that the agency's intent was to use rates consistent with historically approved rates and that 90% of costs would fall into the approvable range. However, our evaluation of the rates and supporting data indicates the opposite is in fact true.

CW^3M acknowledges that the data, in the form of budgets and reimbursement requests, is presented to the Agency in various formats and that they have had difficulty in correctly

extrapolating the information. Errors have been carried forward in the rate calculations. The collection of meaningful data and proper evaluation of the data is an essential element to establishing a means of determining reasonableness.

In the Agency's attempt to streamline the review process, they have created a system that is discriminatory to owners/operators across the state who are not located in close proximity to consulting or clean-up contractors, landfills, etc. The effort to simplify the process resulted in the Agency's creation of lump sum maximum values for activities conducted to meet the technical requirements of 732 and 734. The lump sum values are arbitrary, lack understanding or consideration of site variations, and actual clean-up costs and are based upon severely flawed methods with no supporting evidence. The lump sum values exacerbated the already flawed underlying maximum rates, which incorrectly represents true costs and were improperly calculated. Even when the Agency relied on published estimator guides, they miss-used the guides.

While we agree that efforts to streamline the program are beneficial to the Fund, the Agency's oversight efforts, and consultant's compliance work, the means of streamlining has not been well thought out and we believe will have long term negative effects on the entire program. The rate structure as proposed, will ultimately lead to failure of the program. Smaller owners and operators who must rely on the Fund to afford corrective action would no longer be able to clean up their sites if the proposed rates are adopted because too many of their costs would not be reimbursable. Illinois has come a long way and has achieved technical superiority in compliance with LUST regulations. Cost cutting will result in less field oversight to assure compliance and technical reports which are less comprehensive than those the Agency reviews today. The old adage, "you get what you pay for" is applicable to this program.

OSHA requirements dictate that all excavations be conducted under the supervision of an excavation competent person. CW^3M's field practices have combined the requirements to incorporate the excavation-trained person's responsibilities with those of technical oversight. Such person cannot be performing equipment operations or other activities, which require their undivided attention and would not allow them to be observing all on-site activities. UST removal operations require considerably more observance of all activities being conducted, including excavation and confined space activities. If consultants, UST removal contractors, and excavation contractors are required to limit required personnel from the job sites to meet the Agency's budgetary numbers, serious violations of OSHA and other regulations will occur and could result in serious injuries, death and penalties.

During the March 15, 2004 presentation of Agency testimony and the subsequent question period, Mr. Jay Koch of United Science Industries, Inc. suggested that the Agency, in conjunction with the consulting industry, develop a means of gathering cost data in a format that could be accurately and statistically analyzed. The Agency responded that there was not time for such an exercise because, due to Fund solvency concerns, actions were needed immediately. This statement is in conflict with various other statements and facts regarding the proposed rates and Fund solvency.

The Agency's emergency need for rate setting is self-inflicted. By and large, the consultants who perform LUST work have been good stewards of the Fund. Large drops in the balance of the Fund have not been caused by consultants, but by State reallocation of the money. We understand the State's budgetary crisis, but please don't blame Fund declines on abuse caused by consultants. The Illinois State Legislature increased the maximum amount payable from the Fund for each occurrence from $1 million to $1.5 million. Increased costs associated

with remediation of LUST sites were the driving force for increasing the maximum amount. However, the Agency's proposal further reduces the amounts payable, in direct conflict with the intention of the State Legislature.

CW^3M has serious concerns regarding the Agency's proposed auditing procedures. The language in the Act allows the IEPA to audit information that was submitted to IEPA, as necessary, to determine that the document under review is complete and accurate. The language in the proposed rule indicates that the IEPA's interpretation of the Act is that they can do whatever, to whomever, whenever. CW^3M concurs that some records should be retained, but contend that the regulated entity, which is the owner / operator, should be the keeper of the records. If the Agency wishes to periodically verify hours or other costs, particularly if they have reason to suspect illegal activities, the Agency already has the ability to obtain the information. There are currently mechanisms available for the Agency to collect necessary documentation (i.e. deny payment or approval until the proper documentation is submitted), or investigate possible fraud. If fraud or criminal acts are suspected, they should be investigated through the Illinois Attorney General's office and the Illinois State Police, who are authorized, qualified, and trained to conduct such investigations.

Detailed discussions regarding the technical and fiscal components of the proposed 734 regulations and modifications Part 732 have been presented in CW^3M's pre-filed testimony for the May 2004 hearing. My colleagues and I are available to answer questions regarding our opinions as presented in our testimony. We thank the Board and parties present for their time and efforts dedicated to this rulemaking procedure.

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO:	)	R04-22
REGULATIONS OF PETROLEUM LEAKING	)	(UST Rulemaking)
UNDERGROUND STORAGE TANKS (35	)	
ILL. ADM. CODE 732	)	

IN THE MATTER OF:	)	
	)	R04-23
REGULATIONS OF PETROLEUM LEAKING	)	(UST Rulemaking)
UNDERGROUND STORAGE TANKS	)	Consolidated
(PROPOSED NEW ILL. ADM. CODE 734	)	

CW^{3}M COMPANY, INC.'S PREFILED TESTIMONY AND GENERAL COMMENTS ON THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSAL TO ADOPT 35 ILL. ADM. CODE 734 AND TO ADOPT AMENDMENTS TO 35 ILL. ADM. CODE 732

APPENDICES

ATTACHMENT A	Resumes
APPENDIX A	CW^3M Company vs. IEPA No. 03-MR-0032
APPENDIX B	Environmental Justice
APPENDIX C	Statistical Demonstration
APPENDIX D	Porosity, Void Ration, and Unit Weight of Typical Soils in Natural State
APPENDIX E	USEPA DOCUMENTATION
APPENDIX F	"How to Select an Environmental Consultant"
APPENDIX G	Corrected IEPA Spreadsheets
APPENDIX H	PCB 92-31
APPENDIX I	CW^3M Examples Site-Specific Approved Costs
APPENDIX J	CW^3M Examples Illinois Department of Transportation 2003 Awarded Rates
APPENDIX K	National Construction Estimator Instructions and Explanations
APPENDIX L	Comparison to CECI Ad-Hoc Committee
APPENDIX M	Agency Personnel Affidavits
APPENDIX N	Historic Rate Sheet Evaluation

PROPOSED NEW 35 ILLINOIS ADMINISTRATIVE CODE 734 **CW^{3}M Company**
GENERAL COMMENTS

I. STATEMENTS OF REASONS
  A. Facts in Support, Purpose and Effect
    1. Background

The Agency states that the proposed amendments to 732 and the creation of 734 are in response to Public Acts 92-0554 and 92-0735. However, only a portion of the amendments are relative to Public Acts 92-0554 and 92-0735 and the majority of changes are beyond those required to respond to Public Acts 92-0554 and 92-0735.

The Agency indicates that the other amendments are designed to streamline the reimbursement process. Careful review of the Agency's proposed changes indicates that adoption of the changes would be detrimental to UST owners and operators as well as consultants and contractors who provide the required technical and regulatory assistance. In the Agency's attempt to streamline the review process, they have created a system that is discriminatory to owners/operators across the state who are not located in close proximity to consulting or clean-up contractors, landfills, etc. The effort to simplify the process resulted in the Agency's creation of lump sum maximum values for activities conducted to meet the technical requirements of 732 and 734. The lump sum values are arbitrary, lack understanding or consideration of site variations, and actual clean-up costs and are based upon severely flawed methods with no supporting evidence. Even when the Agency relied on published estimator guides, they miss-used the guides. In general, the technical requirements are placed in conflict with the fiscal limitations. An owner/operator will not be able to meet the technical requirements of the Act given the lump sum amounts proposed. Further, the lump sum values proposed by the Agency will force owner/operators to leave sites unremediated, particularly those with groundwater contamination, or those not located in close proximity to necessary services.

The Agency is proposing to eliminate the majority of budgeting based upon "time and materials" estimating. This is grossly inaccurate and discriminatory to a large percentage of owners/operators. Several examples are presented to illustrate this point. Further, the process of collecting and statistically analyzing the data used by the Agency to develop rates and lump sums is unscientific, inaccurate, and misleading.

The Agency's haste to draft new regulations to "simplify" budgeting and reimbursement claims is completely lacking any real world experience or knowledge of the effort and costs associated with work, or the complexities or unique characteristics of each site. Numerous requirements simply cannot be accomplished given the short-sighted lump sums. The Agency's zeal to limit appeals for reimbursement claims has lead to a proposal that will severely reduce the number and extent of UST clean-ups across the

State. The high rate of appeals is a direct result of the IEPA's recent practice of imposing maximum lump sum values although no such rule is in effect.

The Agency's proposed maximum allowable rates and lump sum costs for activities will ultimately lead to lack of proper field supervision for investigative and corrective action work. The hourly maximum rates are in conflict with the lump sum allowable costs; to conduct the required work using personnel rates at or below the maximum hourly rates do not equate to the maximum lump sum values for activities using estimated times to conduct each task. Accordingly, proper field supervision cannot be conducted. Lack of supervision seriously jeopardizes the integrity of sampling, results and assurances that the work was conducted in accordance with the approved plan and the regulations. Further, lack of supervisory personnel could result in serious OSHA violations and potential injury to on-site personnel or nearby residences and properties.

OSHA requirements dictate that all excavations be conducted under the supervision of an excavation competent person. CW^3M's field practices have combined the requirements to incorporate the excavation-trained person's responsibilities with those of technical oversight. Such person cannot be performing equipment operations or other activities, which require their undivided attention and would not allow them to be observing all on-site activities. UST removal operations require considerably more observance of all activities being conducted, including excavation and confined space activities. If consultants, UST removal contractors, and excavation contractors are required to limit required personnel from the job sites to meet the Agency's budgetary numbers, serious violations of OSHA and other regulations will occur and could result in serious injuries, death and penalties.

The Illinois State Legislature increased the maximum amount allowable for each occurrence. Increased costs associated with remediation of LUST sites were the driving force for increasing the maximum amount. However, the Agency's proposal further reduces the amounts payable, in direct conflict with the intention of the State Legislature.

The primary underlying flaw in the Agency's proposal is that it does not present anywhere the complete methods utilized to create its lump sum or hourly maximum rates. Through deposition testimony for CW^3M Company, Inc. v. Illinois Environmental Protection Agency, Docket No. 03-MR-0032, Circuit Court of Sangamon County, Illinois and in Illinois Ayers Oil Company v. Illinois Environmental Protection Agency, PCB No. 03-214, fundamental flaws were discovered in the methods used by the Agency to determine reasonableness of rates. It stands to reason that, since the rates proposed in Part 734 are even lower rates than ones utilized less than one year ago, that the flaws have been compounded. The Agency failed to collect and statistically analyze data to develop its rates. As the underlying data is not even presented for review and discussion in this proposal, the IEPA is attempting to proceed unchallenged, certain that if the IEPA's process was to be closely scrutinized, it would be thrown out as invalid. During cross-examination of Mr. Brian Bauer in Illinois Ayers v. IEPA, PCB No. 03-214 (p. 224), Mr. Bauer states that he has been involved in development of five or six rate sheets. He said that he pulled numbers from budgets that were either approved or approved as

modified CW^{3}M v. IEPA, Docket No. 03-MR-0032, Circuit Court of Sangamon County, Illinois (p. 22 of deposition), thus rates above the approved numbers were not used to develop the rate sheets and the rate sheets do not represent the full range of the rates submitted to the IEPA.

The previous rates sheets should be provided by the Agency to the Board for this rulemaking proceeding. These rate sheets could then be reviewed and evaluated to determine if the proposed rates are consistent with the previous rate sheets developed by the Agency. Although none of the previous rate sheets went through formal rulemaking, they were allegedly created using the Agency's available data. Mr. Bauer further states that no one else at the Agency or any outside statistical professionals have reviewed the rate sheets, the input data or the procedures used to evaluate the data and that there is no reason for anyone else to review the data for accuracy or validity (Illinois Ayers v. IEPA, PCB No. 03-214). Given the mathematical and statistical questions and errors, CW^{3}M believes that proposing a rate structure is premature. CW^{3}M believes that the practice and the procedures used to set rates should first be evaluated through rulemaking. It would not be necessary for the Agency have actual rates reflected in 732 and 734, however, the procedures to develop such rates should be part of the regulations. The rates themselves could be published as guidance, allowing the Agency to make, at a minimum, annual inflationary adjustments, or price adjustments due to outside factors such as new fees, without going through rulemaking each time. The procedures to develop rates are the most critical element and should be the focus of these proceedings.

Throughout the Agency's testimony during the March 15, 2004, hearing, claims were made which lacked either supporting documentation or which were not scientifically defendable; randomly selected samples were not random, averages accounted for more than 50% of the data, and recently collected data means within the past three or four years. The rate sheet was developed and prepared secretly, and as additional information is released, the entire rate development process used by the Agency becomes more suspect.

In Doug Oakley's testimony in Riverview FS, Inc. v. Illinois Environmental Protection Agency, PCB No. 97-226 (pages 29-33 Hearing Transcripts), a *guidance* excavation and disposal rate of $50 per cubic yard was developed in 1993, and was adjusted upwards to $55 in about three years. A guidance rate was not the maximum allowable rate, but was intended to be a rate at or below which claims were determined to be immediately approvable, above which required a time and materials review, which may or may not be approvable. For comparison purposes, the inflation factor proposed by the Agency in the Errata Sheet can be used to compare the 1996 guidance rate with the currently proposed maximum rate. Conservatively assuming the $55 rate began at the end of 1996, the Implicit Price Deflator for the Gross National Product was 95.054 on January 1, 1997, while it was 106.162 on October 1, 2003, the $55 *guidance* rate should now be $61.43, instead of the $57 proposed as a *maximum allowable* rate.

For years, people outside the Agency, and even some within the Agency, were lead to believe that the rates developed by the Agency were done using scientific methods to

analyze the information submitted to the Agency. Now, the Agency has admitted that the rates were not developed using random selection. For the few rates that the Agency has submitted any supporting documentation, mathematical errors are apparent in that documentation, and, instead of justifying the proposed rate, additional questions are raised.

Another belief was that the rates represented an average plus one standard deviation of budgets or costs submitted, which would include roughly five of every six submittals. Now, it is apparent that some of the proposed rates IEPA has been using are simply averages, or in some cases, less than averages. In the Agency's testimony at hearing, somehow up to 90% of all costs can be included in an average (transcript p. 299), although this is highly improbable. Although not clear, some of the rates appear to have been "created", and then data to support them was prepared. While Mr. Chappel stated at hearing that the reviewed the budgets as submitted (transcript p. 282), Mr. Bauer in a previous deposition stated the costs were taken from budgets which were approved or approved with modifications (CW^{3}M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, page 22, December 2003). Mr. Doug Clay stated during the March 15, 2004 hearing that the proposed rates are consistent with rates historically approved by the Agency (In the Matter of: Proposed Amendments to Regulations of Petroleum Leaking underground Storage Tanks 35 Ill. Adm. Code 732 and Ill. Adm. Code 734 (Consolidated), R04-22 and R04-23, Illinois Pollution Control Board, Testimony in Support of The Environmental Protection Agency's Proposal to Amend 35 Ill. Adm. Code 732, March 5, 2004.) and the costs incurred by consultants to perform corrective action work would be in line with the proposed numbers (transcript p.80 & 299). CW^{3}M strenuously disagrees with that statement and contends that the proposed rates are significantly lower than rates previously or historically approved by the Agency. Historically, the Agency would allow for higher costs where site conditions or site-specific variables created higher costs. Further discussion is provided in our comments regarding Subpart H and examples are presented in Appendix I to illustrate costs previously deemed reasonable due to site conditions or locations. Mr. King's testimony and responses to stakeholders' questions also contradicts Mr. Clay's assertion that the proposed rates are consistent with historically approved rates. On page 59 of the March 15, 2004 transcripts, Mr. King states that the Agency has "looked to narrow what the scope of what was reimbursed", thereby reducing the reasonable amounts.

In the Agency's testimony, it was implied that public sector input was sought, and included in the creation of some of the limits. It was assumed that the public sector entities that were consulted approved of the proposed limits. Now it is clear that the Agency obtained information from the public sector, only to reduce the rates or number of hours, yet still claim the public sector provided the numbers. Similarly, numbers obtained from published estimation guides are taken out of context and used improperly.

Similarly, the Agency has forgotten or ignored that the Board set a rate of 1.68 tons per cubic yard of soil during the last revision of the 732 regulations. The Agency's proposed regulations remove the references to 2.0 g/cm^3 (1.68) and replace it with 1.5.

Additionally, the Agency has inserted invasive authority to audit procedures because of rumors and innuendo which they have heard in order to inspect consultants, yet at the same time they will not to let anyone inspect their work.

In consideration of the aforementioned reasons, the credibility of any of the proposed maximum payment amounts is questionable. After reviewing the existing regulations and the Act, no references to rate setting, or limiting overall expenditures from the Fund were found. The Act states the Agency is supposed to follow a procedure promulgated by the Board (57.7(c)(3), PA 92-554). The regulations currently state the Agency is to determine reasonableness by reviewing each element necessary to accomplish a particular task. The implementation of lump sum maximum rates and hours do not comply with the currently required review process. In contrast to the current procedure, the Agency is proposing to remove even the definition of "line item estimate" from the proposed regulations.

The Agency has attempted for many years to develop reasonableness guidelines against which to review budgets and reimbursement claim submittals. The difficulty in trying to establish a protocol is acknowledged. But rather than attempting to deal with site-specific variables, the Agency has tried to simplify the process by creating lump sum arbitrary rates. The Agency states in STATEMENT OF REASONS, SYNOPSIS OF TESTIMONY, AND STATEMENT REGARDING MATERIAL INCORPORATED BY REFERENCE, I. STATEMENT of REASONS, B. Technical Feasibility and Economic Reasonableness, 2. Economic Reasonableness, that adoption of Part 734 will be a cost savings to the Agency and reduce the number of appeals to the Board. Yes, in fact, the number of appeals would be dramatically reduced as the owner or operator would no longer have any recourse to recover costs deemed unreasonable by the Agency. If Part 734 is adopted, the Agency can hide, protected from scrutiny for its development of rates and proceed unquestioned. The Agency is attempting to legitimize its flawed rate development process using the Board and failing to disclose its methods. This is the major concern of this Part. Under appeals, the Agency is forced to disclose its methods for determining reasonableness and must be accountable for its decision-making. Under the proposed Section 734 and modifications to Section 732, there is no accountability for the Agency.

Further, CW^3M contends that if the Agency didn't utilize the proposed rates or if it used its previous rates as guidance rather than law, the number of appeals before the Board would be greatly reduced. On page 78 of the March 15, 2004 hearing transcript, Mr. Doug Clay conveyed that the Agency is seeing increased costs, increased number of hours, implying that consultants are "pushing the envelope more and more as to what I would maybe characterize as seeing more abuses or attempted abuses...." (transcript p. 78). Throughout the testimony and subsequent discussions, the Agency indicated that 734 would streamline the review process and that the Agency had been overwhelmed with budget submittals and amendments. It is the opinion of CW^3M that over the past two to three years the increase in budget submittals is likely to be directly correlated with the Agency's use of its internal rates sheet as law. When the Agency issues a review letter and makes deductions to proposed budget amounts, a statement is always added to

the description of the deductions, which reads, "Please note that additional information and/or supporting documentation may be provided to demonstrate that the costs are reasonable". Accordingly, consultants will submit a budget amendment along with justification for the costs, assuming that the Agency is sincere and will re-evaluate the proposed costs. However, over the past two to three years, project managers have refused to reconsider a rate or cost because the rate sheet was used as law, even though they are telling consultants additional or supporting documentation can be submitted to support the proposed cost. CW^3M has on many occasions submitted supporting documentation and had costs rejected a second or third time; with each rejection, the Agency continues to tell us that we can submit additional information to support our costs. So the Agency has created this swamp of budget amendments by their own actions, which were ruled as illegal use of rate sheets. Based on CW^3M's experience, the contention that consultants are "pushing the envelope" is not true, consultants are merely responding to Agency deductions and implications that additional submittals would remedy the situation has lead to the animosity apparent at the March 15, 2004 hearing.

By proposing rates, the Agency should be required to disclose all data and statistical methods utilized in determining the reasonableness of the rates proposed.

Through deposition testimony for CW^3M v. IEPA, Docket No. 03-MR-0032, Circuit Court of Sangamon County, Illinois, CW^3M learned that the Agency's rate development process is a self-fulfilling prophecy. The sites the Agency gathered data from for inclusion in their database were hand selected and only included "approved" rates and not those submitted reflecting the consulting market. (CW^3M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, pp. 16-22, December 2003) By using only approved rates, the range of costs were dramatically altered and narrowed to fit the Agency's current rate structure. Once statistically analyzed, the new rates become even lower than the previous rates, as demonstrated in Appendix C. With regard to selection of rates to use in the database, the Agency did not use a random selection, but rather hand-selected budgets, stating they threw out those of duplicated consultants. (CW^3M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, p. 16, December 2003) The Agency's intent was to gather data from a cross-section of numerous consultants, however, because the party gathering the data proceeded to do so unsupervised, and had no knowledge or experience in statistical analyses, he failed to recognize the statistical importance of including rates not approved and using true random selection to sample the population (CW^3M v. IEPA, Bauer Deposition, pp. 17-19, December 2003). Random selection would have resulted in higher percentages of budgets from consulting firms doing larger percentages of LUST work. The Agency acknowledged that it had no criteria to follow to select budgets used in rate calculations. (CW^3M v. IEPA, Bauer Deposition, 15:17, December 2003)

During the March 15, 2004 presentation of Agency testimony and the subsequent question period, Mr. Jay Koch of United Science Industries, Inc. suggested that the Agency, in conjunction with the consulting industry, develop a means of gathering cost data in a format that could be accurately and statistically analyzed. The Agency responded that there was not time for such an exercise because, due to Fund solvency

concerns, actions were needed immediately. This statement is in conflict with various other statements and facts regarding the proposed rates and Fund solvency. Mr. Doug Clay, in his pre-filed testimony stated that the proposed rates were consistent with historic rates and stated during questioning that he believes 90% of consultant's rates and remediation costs will come in within the proposed maximum rates. However, Mr. Harry Chappel stated in deposition that probably 99.5% of the submitted budgets have deductions imposed. (CW^{3}M v. IEPA, Chappel Deposition, pp. 35-36, December 2003) While CW^{3}M can demonstrate that the proposed rates are lower than historic rates, the Agency's belief that historic rates are consistent with the proposed rates leads us to then question what is the urgency of adopting the proposed rates to remedy Fund solvency. The Fund has remained solvent for many years supporting remediation costs as previously incurred and approved. The only dramatic impact on the Fund was Governor Blagojevich's use of the UST Fund to balance a severe shortfall in the State's budget. If consultant's and remediation costs are unchanged and the IEPA and the OSFM are not tapping the Fund for any greater volumes than they have historically, it becomes obvious that the Fund's jeopardy was not created by consultants and remediation costs. No such references are found in Public Acts 92-0554 or 92-0735. Therefore, "fixing" the solvency of the Fund should not be the sole burden of the environmental consultants and contractors, as is proposed by the Agency. The Agency's proposed rates and maximum lump sum amounts will have severe impacts on UST owners/operators and consultants, driving many of them out of LUST remediation work or out of business. Owners and operators should not be punished for Fund solvency when they had no control over its use for other State purposes. If the Illinois General Assembly allowed the UST Fund to be utilized for other purposes, then the Agency should work with the legislature to remedy Fund solvency.

Also with regards to solvency of the UST Fund, the Pollution Control Board ruled in 1992 (City of Roodhouse v. IEPA, PCB No. 92-31, Illinois Pollution Control Board, September 17, 1992.) that it was not the Agency's statutory authority to preserve the Fund or limit payments from the Fund in order to protect the solvency of the Fund. *If the* LUST Fund is unstable, it is primarily due to the re-appropriation of money from it by the Governor and Legislature, not due to excessive rates charged by consultants. If the elected officials feel the need and wish to stabilize the UST Fund, they can do so by a combination of four things: 1. Use the revenues of the UST Fund more for UST purposes instead of other uses, 2. Decrease the expenditures for the administration of the UST Fund, 3. Create legislation to reduce the expenditures for UST Cleanups, 4. Increase the revenues for the UST Fund. None of the options are currently within the statutory authority granted to the Agency. The same Public Act that somehow, in the Agency's interpretation, necessitated the need to decrease the expenditures from the UST Fund, also raised the limit per incident from $1,000,000 to $1,500,000. The Agency does not have the authority to reduce the reimbursement levels in order to protect the LUST Fund (City of Roodhouse v. IEPA, PCB No. 92-31, Illinois Pollution Control Board, September 17, 1992.), a decision that has apparently been ignored or forgotten.

The Agency has created, implemented, and is now attempting to legitimize its "rate sheet", which was poorly designed, poorly maintained, and a poorly-kept secret. Now,

based on the Agency's declaration the fund is failing, rates which were already in effect need to be rushed through rulemaking to stabilize the UST Fund balance. Since the Agency has testified that they are currently operating consistent with the proposed rates, but not implementing them, their approval as regulation should have no impact on the Fund balance; therefore the Agency's sense of urgency is unfounded.

The Agency interpretation of the auditing authority described in the Act finds a similar approach. In reviewing the language in the Act, it appears that the intent was to allow the IEPA to obtain information, as necessary, to determine that the document under review is complete and accurate. The IEPA's interpretation of the language is that they can do whatever, to whomever, whenever.

Additionally, while Mr. Clay stated during the hearing that the Agency is not currently enforcing the proposed regulations, they are only using the costs they have found to be reasonable. A review of their practices reveals a different truth. In two recent review letters from the agency, CW^3M has had their proposed drilling plan modified to meet the Stage 1 investigation requirements by the IEPA Project Manager (Mathias Development Co., #03-0411, 2/9/04 & L.E. Anderson Bros., Inc., #03-0909, 2/11/04).

The IEPA is currently enforcing regulations that have not been enacted, and now wishes to expand their duties to include the investigation of crimes, which have yet to be committed. Without any cause, and without any limits, the IEPA is now attempting to empower themselves to regulate consultants and regulate registered professionals. The proposed language would allow IEPA to conduct raids at a frequency and intensity of their choosing. Do the limits of the audit stop at the consultant's office, or can it be extended to the homes of employees?

There are currently mechanisms available for the Agency to collect necessary documentation (i.e. deny payment or approval until the proper documentation is submitted), or investigate possible fraud. If fraud or criminal acts are suspected, they should be investigated through the Illinois Attorney General's office and the Illinois State Police, who are authorized, qualified, and trained to conduct such investigations.

As clearly demonstrated during the March 15, 2004 hearing, there is mutual mistrust and a tenuous relationship between the IEPA and the consultants. The same Agency that refused to release data used to create the mystical rates proposed in Appendix H is now requesting that the consultants allow them unrestricted access to every computer, file cabinet, and scrap of paper in their possession.

If the Board decides that the "auditing" described in the Act extends to consultants and registered professionals, then strict limitations as to the basis, frequency, and depth need to be developed.

PROPOSED AMENDMENTS TO 35 ILLINOIS ADMINISTRATIVE CODE 732 AND PROPOSED NEW 35 ILLINOIS ADMINISTRATIVE CODE 734 **CW^{3}M Company**

SECTION-SPECIFIC COMMENTS

The following comments are presented to the Board regarding the proposed 734 regulations presented by the Agency. For ease of review, CW^{3}M has duplicated the language and reference from the Section being commented on followed by the comments, which are presented in italics.

732.110 & 734.135 Form and Delivery of Plans, Budgets, and Reports: Signatures and Certifications

> b) All plans, budgets, and 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.

As many documents are hand-delivered or sent by private carrier, such as Federal Express and UPS, to ensure receipt (as is also implied by the language of this section), CW^{3}M recommends the following additional language to encompass hand-delivered documents:

> ***b) All plans, budgets, and reports shall be mailed or otherwise 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 executed by Agency personnel acknowledging receipt of documents, by hand delivery, by private delivery service, or by postal service dated signed receipt of certified or registered mail.***

> d) All plans, budgets, and reports submitted pursuant to this Part, excluding Corrective Action Completion Reports submitted pursuant to Section 734.345 of this Part, shall contain the following certification from a Licensed Professional Engineer or Licensed Professional Geologist. Corrective Action Completion Reports submitted pursuant to Section 734.345 of this Part shall contain the following certification from a Licensed Professional Engineer.
>
> I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me: that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been

completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 734, and generally accepted engineering practices or principles of professional geology; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Agency, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

The certification has two primary flaws or contradictions. First, the certification is requiring the Licensed Professional Engineer to certify that the plan, budget, or report has been completed in accordance with principles of professional geology. This certification should be revised with a selection or distinguishment for which profession the certification is being made.

Secondly, the certification requires compliance with the Environmental Protection Act [415 ILCS 5] and 35 Ill. Adm. Code 734. As will be demonstrated in later Sections and discussions, the requirements cannot be met both on technical levels as well as within the cost structure proposed by the Agency. In calculating costs for certain activities in many areas of the State, the proposed lump sum values are unattainable utilizing standard industry costs and generally accepted engineering practices, principles of professional geology and/or OSHA requirements.

732.202 & 734.210 Early Action

h) The owner or operator shall determine whether the areas or locations of soil contamination exposed as a result of early action excavation (e.g., excavation boundaries, piping runs) or surrounding USTs that remain in place meet the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.

1) At a minimum, for each UST removed, the owner or operator shall collect and analyze soil samples as follows:

A) One wall sample shall be collected from each UST excavation wall. The samples shall be collected from locations representative of soil that is the most contaminated as a result of the release. If an area of contamination cannot be identified on a wall, the sample shall be collected from the center of the wall length at a point located one-third of the distance from the excavation floor to the ground surface. For walls that exceed 20 feet in length, one sample shall be collected for each 20 feet of length, or fraction thereof, and the samples shall be evenly spaced along the length of the wall.

B) Two samples shall be collected from the excavation floor below each UST with a volume of 1,000 gallons or more. One sample shall be collected from the excavation floor below each UST with a volume of less than 1,000 gallons. The samples shall be collected from locations representative of soil that is the most contaminated as a result of the release. If areas of contamination cannot be identified, the samples shall be collected from below each end of the UST if its volume is 1,000 gallons or more, and from below the center of the UST if its volume is less than 1,000 gallons.

C) One sample shall be collected from the floor of each 20 feet of UST piping run excavation, or fraction thereof. The samples shall be collected from a location representative of soil that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a length of piping run excavation being sampled, the sample shall be collected from the center of the length being sampled. For UST piping abandoned in place, the samples shall be collected in accordance with subsection (h)(2)(B) of this Section.

D) If backfill is returned to the excavation, one representative sample of the backfill shall be collected for each UST with a volume of less than 12,000 gallons and two representative samples of the backfill shall be collected for each UST with a volume of 12,000 gallons or more.

The additional sampling requirements of this Section have technical merit; however, the personnel costs associated with field oversight, inspection and sampling have been ignored within the Agency's lump sum proposed costs.

In order to collect samples in accordance with the proposed criteria, a senior professional (such as an engineer or a geologist) would be required to be on site throughout the entire excavation process. The entire excavation would need to be completed in order to evaluate each wall and the excavation floor to assess the proper sample locations and to collect representative samples from the backfill material. It has been the practice of the CW^{3}M Company to have a senior professional on site during these types of activities and while we concur that a senior professional should be on site to evaluate the excavation, fill material and sampling locations, the proposed lump sum costs do not allow for the presence of such personnel. The maximum payment amounts listed in Section 734.845(a)(2) allow only one-half day of oversight for UST removal or one-half day for UST removal with disposal of 250 cubic yards of contaminated fill material.

As discussed in much greater detail in comments to Section 734.800, the allowable time and lump sum costs do not begin to cover the actual time and costs associated with these early action activities. In an instance where no backfill is disposed, but the USTs are removed, there is no allowance for time or the personnel costs associated with excavating and sampling the piping.

Section 734.210(f) prohibits removal of fill material in excess of 4 feet from the outside dimensions of the tanks; however, Section 734.210 (h)(C) required excavating and sampling of the piping trenches. One must assume that this fill material should be returned to its excavation and not be disposed of. However, the lump sum costs provide no allowance for the costs incurred with excavating the piping trenches, examining and sampling the trench, nor backfilling the trench.

CW^{3}M recommends adding or altering the language regarding sample collection to accommodate for situations, which may be encountered that prohibit sample collection. One example of such a situation is an excavation, which cannot be dewatered effectively to obtain wall or floor samples or where wall or floor samples are so saturated that accurate laboratory analysis cannot be completed. Another example is a situation where the excavation wall adjoins to or ends at a structure, such as a footing, basement or retaining wall, which prevents soil sample collection. The current language makes no allowance for such field conditions prohibiting sample collection.

732.307 Site Evaluation

732.307(f) Contacting the Illinois State Geological Survey, the Illinois State Water Survey, and the Illinois Department of Public Health (or the county of local health department delegated by the Illinois Department of Public Health to permit potable water supply wells) to identify potable water supply wells other than community water supply wells; and

The Agency made no allowance for the costs of conducting the initial water supply well surveys in Subpart H. The time spent conducting the well survey is variable from site to site dependent upon the area surrounding the LUST site and the number of wells that are reported in the surveys; collecting, and organizing and reporting the data.

732.309 Site Classification Completion Report

732.309(a)(3) A narrative that, at a minimum, identifies each entity contacted to identify potable water supply wells pursuant to this Section, the name and title of each person contacted at each entity, and field observations associated with the identification of potable water supply wells;

Subpart H provides no allowance or reimbursement for detailed surveys, which may include property inspections and interviews, contacting property owners, securing

access for inspections, etc or for preparing the report required in 732.309. Costs associated with this type of activity should be allowable and should be estimated on a site-specific time and materials basis.

732.312 Classification by Exposure Pathway Exclusion

BOARD NOT: Owners or operators proceeding under subsection (a)(2) or (j) ~~(k)~~ of this Section are advised that they may not be entitled to full payment from the Fund and that applications for payment must be submitted no later than one year after the date the Agency issues a No Further Remediation Letter ~~or reimbursement~~. Furthermore, owners or operators may only be reimbursed for one method of site classification. See Subpart F of this Part.

While modification to the Section 732.312 Board Note may allow the Agency to archive its files sooner than they currently are able to do so, this submittal limitation may cause severe hardship for owners or operators or their beneficiaries.

As has been CW^{3}M's experience on a few cases, Illinois Pollution Control Board appeals may be pending and settlement negotiations are in progress. There is no incentive for the Agency to expedite the process and final disposition of a case when it can exceed one year. In such a circumstance, the owner or operator would be prevented from submittal of a claim until the appeal is settled or reaches a decision by the Board.

Should an owner or operator submit a plan or budget, which is rejected by the Agency and deems an appeal is its best course of action, the time to reach settlement or a decision by the Board may extend beyond the timeframe for allowance of submittal for an application for payment (following approval of the budget).

For 731 sites (where no budget is in place), the Agency has historically utilized the general review and payment guidelines for 732 sites, except for the 120-day review clock. If the review process exceeds one year, as it often does, and some costs are denied or resubmittal is required, the owner or operator would not have the opportunity to do so with the time constraints of this Board Note.

An owner or operator's incapacitation, illness, inaccessibility or even death can cause delays in submittal of final plans, budgets or requests for payment.

For these reasons and other unanticipated reasons, modifications to the 732.312 Board Note should be stricken.

734.310 Site Investigation -- General

a) Prior to conducting site investigation activities pursuant to Section 734.315, 734.320, or 734.325 of this Part, the owner or operator shall submit to the Agency for review a site investigation plan. The plan shall be designed to satisfy the minimum requirements set forth in the applicable section and to collect the information required to be reported in the site investigation plan for the next stage of the investigation, or in the site investigation completion report, whichever is applicable.

b) Any owner or operator intending to seek payment from the Fund shall, prior to conducting any site investigation activities, submit to the Agency a site investigation budget with the corresponding site investigation plan. The budget shall include, but not be limited to, a copy of the eligibility and deductible determination of the OSFM and an estimate of all costs associated with the development, implementation, and completion of the site investigation plan, excluding handling charges and costs associated with monitoring well abandonment. Costs associated with monitoring well abandonment shall be included in the corrective action budget. Site investigation budgets should be consistent with the eligible and ineligible costs listed in Sections 734.625 and 734.630 of this Part and the maximum payment amounts set forth in Subpart H of this Part. A budget for a Stage 1 site investigation shall consist of a certification signed by the owner or operator, and by a Licensed Professional Engineer or Licensed Professional Geologist, that the costs of the Stage 1 site investigation will not exceed the amounts set forth in Subpart H of this Part.

This Subsection requires an estimate of all costs associated with the development, implementation, and completion of the site investigation plan along with certification that the costs do not exceed the amounts set forth in Subpart H. As is demonstrated in detail in comments regarding Subpart H, for many sites, accurate completion of site investigation activities cannot be conducted for the amounts listed in Subpart H. Estimates are developed by professional consultants on a time and material basis which includes significant experience regarding the amount of time required to complete each task, location of the site relative to consulting and drilling service providers, as well as contingencies for frequently encountered difficulties (such as auger refusal, poor sample recovery, concrete boring, etc.).

Utilizing the Agency's lump sum estimates, which provide no site-specific factors, the cost estimates for many sites will exceed the maximum payment amounts, and therefore, the budget cannot be certified. If a true estimate exceeds the amounts in Subpart H, the licensed professional would be required to submit a fraudulent certification or the plan would be rejected without such certification.

Further, the technical requirements of 734.315(a) may be dramatically different from site to site, dependent upon the number and size of tanks, depths of tanks, size of excavation, size of the property, number of excavation samples, number and length of piping runs and associated number of piping excavation samples, and depth to

groundwater. The maximum payment amount does not allow for any deviation or adjustment of costs for sites that require a much more comprehensive Stage 1 investigation.

734.315 Stage 1 Site Investigation

Section 734.315 fails to address situations where sample recovery is poor or non-existent due to the nature of subsurface materials, such as weathered bedrock, coarse or wet sand. There is no provision of allowable associated cost for additional drilling in attempt to secure sufficient recoverable sample as required by 734.315(a)(1)(G).

734.320 Stage 2 Site Investigation

The technical requirements of 734.320(a) may be dramatically different from site to site, dependent upon the number of samples collected during the Stage 1 investigation (which were based on the number of early action samples exceeding Tier 1 remediation objectives which were collected on the basis of the number and size of tanks). 734.320(a)(1) requires "Soil samples be collected in appropriate locations and at appropriate depths, based upon the results of the soil sampling and other investigation activities conducted to date...." The language itself implies that the Agency cannot establish a set number of borings or pre-determine sample depths, however, Subpart H pre-establishes the amount of time for professional consulting services for report preparation. However, the length of time to prepare a report will vary due based on the quantity of bore logs, well completion reports, and samples included.

b) The Stage 2 site investigation plan shall include, but not be limited to, the following:

2) A characterization of the site and surrounding area, including, but not limited to, the following:

A) The current and post-remediation uses of the site and surrounding properties; and

B) The physical setting of the site and surrounding area including, but not limited to, features relevant to environmental, geographic, geologic, hydrologic, hyrogeologic, and topographic conditions;

CW³M objects to the characterization requiring the post-remediation uses of the site and the surrounding properties. Only in limited instances does the property owner of the UST site know with any certainty the future use of the property. If the LUST site is an active facility and the owner or operator plans to continue fuel sales, the future use is definable. If the LUST site is a closed or soon to be closed facility and the property owner plans to sell the real estate, the owner or operator will have no idea what the

future use of the property will be. Similarly, post-remediation use of the surrounding properties is anyone's guess. If the entire investigation and remediation process requires several years to complete, the site investigation characterization of the properties will likely be outdated.

Further, the current or future uses of properties should have no bearing on the results of the site investigation or development of corrective action plans. If an off-site property is affected by a release, remediation of that property should not be downgraded if future use may be commercial rather than residential. Decisions as to conduct remediation or to rely upon land use or institutional controls should lie with the property owner and not the Agency. Property owners should not be discriminated against or disallowed remediation of their property by the Agency based on the sole potential future use of the property. Mr. Doug Clay stated during the Agency's testimony on March 15, 2004 that the development of higher clean-up objectives or use of institutional controls or engineered barriers was at the discretion of the tank and property owners. Such decisions should remain in the property owners discretion.

If off-site access or investigation is not required of an off-site property and no communication has been established, that property owner has no reason to disclose information regarding their property to the UST owner, operator or their professional consultant.

734.325 Stage 3 Site Investigation

c) Upon completion of the Stage 3 site investigation the owner or operator shall proceed with the submission of a site investigation completion report that meets the requirements of Section 734.330 of this Part.

The Stage 3 site investigation should contain a provision that allows for additional off-site investigation, if necessary, to completely define the extent of soil and groundwater contamination and to allow for collection of all data required for submittal of the site investigation completion report.

For example, during Stage 3 site investigation activities, three off-site properties are investigated as a result of contamination found at the property boundaries of the LUST site. Stage 3 investigation includes one soil boring/groundwater monitoring well on each of the properties. (Previous experience with the Agency indicates that proposing numerous borings/monitoring wells on each off-site property would be denied as exceeding the minimum requirements of the Act.) The results of the investigation confirm soil and groundwater contamination on one of the off-site properties at levels well in exceedance of the most stringent Tier 1 remediation objectives. In order to define the full extent of soil and groundwater contamination and to complete the site investigation completion report, additional off-site investigation is necessary.

There was considerable debate during the Agency's testimony on March 15, 2003 regarding the extent of site investigation plans and what happens when the plume has not been delineated at the end of Stage 3. The Agency's suggestion was that the proposals include contingencies for additional drilling so that all work can be done within the 3 stages. However, there is no criteria for how much additional drilling should be proposed or if the Agency modifies or reduces the drilling plan and it is later determined that the drilling is necessary. If additional drilling is necessary, there is no mechanism for the owner or operator to be reimbursed for the additional costs. The Agency stated that it is not their intention to modify the plans proposed by consultants. CW³M recommends that if the Agency alters plans or circumstances arise for which the consultant built in contingency borings, but the Agency approved investigationt is still not sufficient to delineate the plume, that these circumstances qualify as unusual or extraordinary and receive adequate reimbursement to complete the task in a technically competent manner.

734.330 Site Investigation Completion Report

b) A description of the site, including but not limited to the following:

1) General site information, including but not limited to the site's and surrounding area's regional location; geography, hydrology, geology, hydrogeology, and topography; existing and potential migration pathways and exposure routes; and current and post-remediation uses;

CW³M objects to the site investigation completion report requiring the post-remediation uses of the site and the surrounding properties. Only in limited instances does the property owner of the UST site know with any certainty the future use of the property. If the LUST site is an active facility and the owner or operator plans to continue fuel sales, the future use is definable. If the LUST site is a closed or soon to be closed facility and the property owner plans to sell the real estate, the owner or operator will have no idea what the future use of the property will be. Similarly, post-remediation use of the surrounding properties is anyone's guess. If the entire investigation and remediation process requires several years to complete, the site investigation characterization of the properties will likely be outdated.

Further, the current or future uses of properties should have no bearing on the results of the site investigation or development of corrective action plans. If an off-site property is affected by a release, remediation of that property should not be downgraded if future use may be commercial rather than residential. Decisions as to conduct remediation or rely upon land use or institutional controls should lie with the property owner and not the Agency. Property owners should not be discriminated against or disallowed remediation of their property by the Agency based on the sole potential future use of the property.

If off-site access or investigation is not required of an off-site property and no communication has been established, that property owner has no reason to disclose information regarding their property to the UST owner, operator or their professional consultant.

732.404 High Priority Site

732.404(e)(2) The Agency may require additional investigation of potable water supply wells, regulated recharge areas, or wellhead protection areas if site-specific circumstances warrant. Such circumstances shall include, but not be limited to, the existence of one or more parcels of property within 200 feet of the current or modeled extent of soil or groundwater contamination exceeding the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants where potable water is likely to be used, but that is not served by a public water supply or a well identified pursuant to subsections (1) or (b) of this Section. The additional investigation may include, but shall not be limited to, physical well surveys (e.g., interviewing property owners, investigating individual properties for wellheads, distributing door hangers or other material that requests information about the existence of potable wells on the property, etc.).

The Agency made no allowance for the costs of conducting the initial water supply well surveys in Subpart H, much less allowance for detailed surveys which may include property inspections and interviews, contacting property owners, securing access for inspections, etc. The time spent conducting the well survey is variable from site to site dependent upon the area surrounding the LUST site and the number of wells that are reported in the surveys; collecting, organizing and reporting the data which the Agency may require of 732.404(e)(2) could be exponentially variable. Costs associated with this type of activity should be allowable and should be estimated on a site-specific time and materials basis.

The additional investigation requirement provides no relief to owners or operators who have made good faith attempts to secure the information, but were unable to attain the information for reasons beyond their control, such as no response for property/well owners, no access to properties to visually inspect/locate the wells, etc.

732.405 Plan Submittal and Review

Section 732.405(b) contains language that could place contradictory requirements upon the certifying professional.

Such budget plans shall include, but not be limited to, a copy of the eligibility and deductibility determination of the OSFM and <u>an</u> ~~a line item~~ estimate of all costs associated with the development, implementation and completion of the

applicable activities, excluding handling charges. Formulation of budget plans should be consistent with the eligible and ineligible costs listed at Sections 732.605 and 732.606 of this Part and the maximum payment amounts set forth in Subpart H of this Part.

Providing a true estimate of all costs associated with a proposed plan may not be consistent with the costs set forth in Subpart H. Please review detailed discussions regarding the rates proposed in Subpart H.

734.335 Corrective Action Plan

734.335(1)(5) A description of the current and projected future uses of the site;

CW³M objects to the corrective action plan requiring the projected future uses of the site. Only in limited instances does the property owner of the UST site know with any certainty the future use of the property. If the LUST site is an active facility and the owner or operator plans to continue fuel sales, the future use is definable. If the LUST site is a closed or soon to be closed facility and the property owner plans to sell the real estate, the owner or operator will have no idea what the future use of the property will be. Similarly, post-remediation use of the surrounding properties is anyone's guess. If the entire investigation and remediation process requires several years to complete, the projected future use of the property may become outdated and irrelevant.

Further, the current or future uses of properties should have no bearing on the results of the site investigation or development of corrective action plans. If a property is affected by a release, remediation of that property should not be downgraded if future use may be commercial rather than residential. Decisions as to conduct remediation or rely upon land use or institutional controls should lie with the property owner and not the Agency. Property owners should not be discriminated against or disallowed remediation of their property by the Agency based on the sole potential future use of the property.

732.407 & 734.340 Alternative Technologies

(b) An owner or operator intending to seek payment for costs associated with the use of an alternative technology shall submit a corresponding budget in accordance with Section 734.335 of this Part. In addition to the requirements for a corrective action budget at Section 734.335 of this Part, the budget must demonstrate that the cost of the alternative technology will not exceed the cost of conventional technology and is not substantially higher than other available alternative technologies.

For several reasons, CW³M recommends striking a portion of the last sentence. CW³M, by standard practice evaluates corrective action options, including alternative technologies, for every site. Often, there are technical and legal reasons, which limit

the use of some or all alternative technologies. For example, some alternative technologies are patented and may not be used by anyone other than the patent holder without a licensing agreement with the patent holder. To adequately compare costs for all other technologies requires that corrective action plans be developed for each in order to develop cost estimates. This is overly burdensome and the Agency in no way provides the resources necessary to complete multiple plans and budgets and then fully evaluate one against another. Further, by limiting the use of alternative technologies on the basis of cost alone will not promote development of new technologies or allow the alternative technologies to be refined and possibly become more efficient and less costly. Additionally, some alternative technologies are proprietary and cost and licensing information may not be readily available. Accordingly, CW³M recommends that the last sentence be re-written as follows, "In addition to the requirements for a corrective action budget at Section 734.335 of this Part, the budget must demonstrate that the cost of the alternative technology will not exceed the cost of conventional technology ~~and is not substantially higher than other available alternative technologies.~~"

734.340(d) The Agency may require remote monitoring of an alternative technology. The monitoring may include, but shall not be limited to, monitoring the alternative technology's operation and progress in achieving applicable remediation objectives.

The Agency needs to better define what it means by remote monitoring and for what types of remediation it may require such monitoring. The Agency also must recognize that a remote monitoring system cannot monitor "progress in achieving the applicable remediation objectives". Only qualified personnel can extract and evaluate data gathered by remote monitoring to determine effectiveness. The Agency also must recognize the cost for installation, maintenance and data management of remote monitoring systems must all be deemed reasonable costs associated with such type of system.

732.409 Groundwater Monitoring and Corrective Action Completion Reports

732.409(a)(2)(C) A narrative that, at a minimum, identifies each entity contacted to identify potable water supply wells pursuant to this Section, the name and title of each person contacted at each entity, and field observations associated with the identification of potable water supply wells;

Subpart H provides no allowance or reimbursement for detailed surveys, which may include property inspections and interviews, contacting property owners, securing access for inspections, etc or for preparing the report required in 732.409. Costs associated with this type of activity should be allowable and should be estimated on a site-specific time and materials basis.

734.345 Corrective Action Completion Report

734.345(1)(D) The anticipated post-corrective action uses of the site and areas immediately adjacent to the site;

CW³M objects to the corrective action completion report requiring the post-corrective action uses of the site and the surrounding properties. The current or future use of the properties has no bearing on completion of corrective action or the demonstration that remediation objectives have been obtained. Decisions as to conduct remediation or rely upon land use or institutional controls should lie with the property owner and not the Agency. Property owners should not be discriminated against or disallowed remediation of their property by the Agency based on the sole potential future use of the property.

If off-site access is denied or investigation is not required of an off-site property and no communication has been established with the off-site property owner, that property owner has no reason to disclose information regarding his or her property to the UST owner, operator or their professional consultant.

732.411 & 734.350 Off-site Access

(b)(3) That, in performing the requested investigation, the owner or operator will work so as to minimize any disruption on the property, will maintain, or its consultant will maintain, appropriate insurance and will repair any damage caused by the investigation;

The costs associated with minimizing disruption to a property (such as non-business hours, weekends, etc.) or damage repair (such as repairing tire tracks, asphalt, concrete, landscaping, etc.) have not been considered in Subpart H. If the Agency is requiring that these potential issues be addressed with off-site property owners, the Agency must present a mechanism for reimbursing more than the lump sum investigation costs for investigation activities.

(f) The owner or operator is not relieved of responsibility to clean up a release that has migrated beyond the property boundary even where off-site access is denied.

(f) should be stricken in its entirety. To include this language is contradictory to all previous requirements of owners or operators and the Agency's determination of best efforts regarding attempts to secure off-site access. If an owner or operator has made every reasonable and required effort to access an off-site property for purposes of investigation and/or remediation, the owner or operator should be relieved of clean-up responsibilities under 732 & 734. By removing this paragraph, an off-site property owner is still not prohibited from pursuing a civil action against the tank owner or operator. If an off-site property owner denies access after being informed of the

provisions of these sections, that property owner should be held accountable for their own actions.

Section 734.445 Water Supply Well Survey

The Agency made no allowance for the costs of conducting water supply well surveys in Subpart H. The time spent conducting the well survey is variable from site to site dependent upon the area surrounding the LUST site and the number of wells that are reported in the surveys. This activity should be conducted and charged on a time and material basis, which accounts for sites with numerous wells identified.

> 734.445(a)(2) Contacting the Illinois State Geological Survey, the Illinois State Water Survey, and the Illinois Department of Public Health (or the county or local health department delegated by the Illinois Department of Public Health to permit potable water supply wells) to identify potable water supply wells other than community water supply wells; and
>
> 734.445(c) The Agency may require additional investigation of potable water supply wells, regulated recharge areas, or wellhead protection areas if site-specific circumstances warrant. Such circumstances shall include, but not be limited to, the existence of one or more parcels of property within 200 feet of the current or modeled extent of soil or groundwater contamination exceeding the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants where potable water is likely to be used, but that is not served by a public water supply or a well identified pursuant to subsections (1) or (b) of this Section. The additional investigation may include, but shall not be limited to, physical well surveys (e.g., interviewing property owners, investigating individual properties for wellheads, distributing door hangers or other material that requests information about the existence of potable wells on the property, etc.).

The Agency made no allowance for the costs of conducting the initial water supply well surveys in Subpart H, much less allowance for detailed surveys which may include property inspections and interviews, contacting property owners, securing access for inspections, etc. As mentioned above, the time spent conducting the well survey is variable from site to site dependent upon the area surrounding the LUST site and the number of wells that are reported in the surveys; collecting, organizing and reporting the data which the Agency may require of 734.445(c) could be exponentially variable. Costs associated with this type of activity should be allowable and should be estimated on a site-specific time and materials basis.

The additional investigation requirement provides no relief to owners or operators who have made good faith attempts to secure the information, but were unable to attain the information for reasons beyond their control, such as no response for property/well owners, no access to properties to visually inspect/locate the wells, etc.

734.445(d)(3) A narrative that, at a minimum, identifies each entity contacted to identify potable water supply wells pursuant to this Section, the name and title of each person contacted at each entity, and field observations associated with the identification of potable water supply wells;

Subpart H provides no allowance or reimbursement for detailed surveys, which may include property inspections and interviews, contacting property owners, securing access for inspections, etc or for preparing the report required in 734.445(d)(3). Costs associated with this type of activity should be allowable and should be estimated on a site-specific time and materials basis.

732.503 & 734.505 Review of Plans, Budget, or Reports

(c) For corrective action plans submitted by owners or operators not seeking payment 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 734.345 of this Part

To delay review of corrective action plans submitted by owners or operators not seeking payment from the Fund is highly discriminatory against those owners or operators. These owners or operators may need the assurance that a plan to be implemented by the Agency is approvable prior to committing their resources. With no guaranty that implementation of the plan will result in approval of their corrective action completion report, they are exposing themselves to rejection and increased costs to conduct additional work that will be required for approval of the corrective action completion report. Accordingly, the Agency should be required to review those plans under the same time requirements as an owner or operator seeking payment from the Fund.

732.505 & 734.510 Standards for Review of Plans, Budgets, or Reports

734.510(a) A technical review shall consist of a detailed review of the steps proposed or completed to accomplish the goals of the plan and to achieve compliance with the Act and regulations. Items to be reviewed, if applicable, shall include, but not be limited to, number and placement of wells and borings, number and types of samples and analysis, results of sample analysis, and protocols to be followed in making determinations. The overall goal of the technical review for plans shall be to determine if the plan is sufficient to satisfy the requirements of the Act and regulations and has been prepared in accordance with generally accepted engineering practices or principles of professional geology. The overall goal of the technical review for reports shall be to determine if the plan has been fully implemented in accordance with generally accepted engineering practices or principles of professional geology, if the conclusions are

consistent with the information obtained while implementing the plan, and if the requirements of the Act and regulations have been satisfied.

While the regulated community is required to secure the services of professional consultants capable of developing and implementing plans and corrective action work which is in accordance with generally accepted engineering practices or principles of professional geology, there is no similar requirement for the Agency to employ individuals with engineering or geology backgrounds to review the required plans, budgets or reports. While those with non-engineering or non-geology degrees may be capable of learning and understanding the requirements of the Act or the regulations, they are not licensed engineers or geologists and have not had the education or training to become such. Further, the Agency project managers conducting the reviews who are not Licensed Professional Engineers or Geologists are practicing engineering or geology without a license and should not be allowed to rewrite plans that a professional engineer or geologist has certified.

The LUST Section Manager is a Licensed Professional Engineer and some of the Unit Managers are Licensed Professional Engineers or Geologists, however, they are not involved in the day-to-day review of the required plans, budgets, or reports. During discovery depositions (CW³M v. IEPA, No. 03-MR-0032, Circuit Court of Sangamon County), Mr. Harry Chappel, LUST Section Unit Manager, testified that he typically only reviews the letters written by project managers. (CW³M v. IEPA, Chappel Deposition, p. 11, December 2003) Mr. Chappel further testified that on occasion he may do in depth project reviews for purposes of oversight or to investigate a policy-related issue identified in a letter developed by a project manager. (CW³M v. IEPA, Chappel Deposition, p. 11, December 2003)

Given the minimal oversight by licensed professionals, it is clear that unqualified project managers would be required to practice engineering or geology without a license in order for the Agency to implement this Section. The project managers are further compromising generally accepted engineering practices or principles of professional geology by requiring modifications in plans or reducing allowable costs to fit the maximum rates proposed in Subpart H. If a Licensed Professional Engineer or Geologist incorporates provisions in a plan or budget which conform to generally accepted engineering practices or principles of professional geology and an unqualified project manager alters the proposal, the work cannot be done in accordance with the proposed 732 or 734 or generally accepted engineering practices or principles of professional geology.

Accordingly, this section should be re-written to reflect the capabilities of the Agency's project managers; references to reviewing plans, budgets or reports for adherence or compliance in accordance with generally accepted engineering practices or principles of professional geology should be stricken or, if left as written, the Agency should be required to employ only Licensed Professional Engineers or Geologists for review of plans, budgets and reports submitted in accordance with 734.

(b) A financial review shall consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed shall include, but not be limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review shall be to assure that costs associated with materials, activities, and services shall be reasonable, shall be consistent with the associated technical plan, shall be incurred in the performance of corrective action activities, shall not be used for corrective activities in excess of those necessary to meet the minimum requirements of the Act and regulations, and shall not exceed the maximum payment amounts set forth in Subpart H of this Part.

The proposed requirements of 734.510(b) set the stage for confliction with other requirements of 734. By requiring a detailed review of the costs associated with each element necessary to accomplish a plan, the Licensed Professional Engineer or Geologist is required to submit a detailed accounting of all costs necessary to accomplish the plan or meet the requirements of the Act or the regulations. As proposed in Subpart H, the Agency has developed lump sum unit rates for multiple activities. In developing several examples for comments regarding Subpart H, CW³M has concluded that many activities, especially for those in remote areas, that the required work cannot be completed for the allotted costs proposed in Subpart H. Therefore, detailed cost projections would be irrelevant. Further, a licensed professional cannot certify that the work could be done for the amounts listed in Subpart H when a detailed cost analysis shows otherwise. The Agency would be requiring line item estimates to be compared to lump sum maximum allowable costs; setting the stage for comparing apples to oranges. Additional discussions of the impossibility of meeting the technical requirements and the cost limitations set forth in Subpart H are contained in other parts of these comments.

732.601 & 734.605 Applications for Payments

(b)(10) Proof of payment of subcontractor costs for which handling charges are requested;

The Agency is reverting back to practices required prior to 1992 and subsequently abolished by requiring owners or operators to submit proof of payment. The Agency's current practice is to pay handling charges for invoices billed directly to the consultant and to invoices billed to the owner or operator. In some cases, the Agency presently requests copies of cancelled checks for invoices not billed directly to the owner or operator.

For accounting reasons, many subcontractors invoice (or type on the invoice) owners or operators to segregate sites when the owner or operator has multiple sites or the subcontractor works with multiple consultants as a means of project separation. CW^3M is always sent invoices from its subcontractors; however, the addressee listed on the invoice is occasionally the owner or operator. When the owner or operator is listed, as a manner of project distinguishment, the subcontractor still looks to CW^3M for payment of the invoice. Additionally, the incurrence of handling charges includes more than just payment of an invoice. Costs are also incurred to secure certificates of insurance, verify subcontractor invoices, secure required back-up or supporting documentation, request and secure revisions to the invoice and prepare the invoice for payment, document payments or prepare and secure lien waivers.

Mr. Doug Oakley stated during the March 15, 2004 hearing that the reason the Agency proposed 734.605(b)(10) was because the Agency receives calls from subcontractors wanting to know the status of reimbursement claims or subcontractors claim they haven't been paid. Requiring proof of payment will in no way alter the number of inquiries or the time spent by Agency personnel to respond to such inquiries. They would still have to dig through packages to locate copies of cancelled checks in order to respond. Besides, it is not the Agency's task to track payments to subcontractors. That task should be let up to the party responsible for payment.

Holding subcontractor invoices for submittal for payment until all cancelled checks are returned will cause delay in submittal of payment claims, which inadvertently increases the costs for handling a subcontractor's invoice. This requirement is unduly burdensome for owners, operators or their consultants; thousand of checks would be required to be managed on a monthly basis, increasing the costs for preparation and submittal of reimbursement claims. As many banks do not return checks and accounts are managed electronically, additional measures would be required to obtain the checks. Section 734.605(b)(10) should be stricken as a requirement for payment as it is unnecessary and unduly burdensome.

(b)(11) If the owner or operator requests costs for one or more quantitative analysis of samples required to be certified pursuant to Section 734.420 of this Part, a copy of the accredited laboratory certification required pursuant to that Section.

Pursuant to Section 734.420, analytical results are required to be accompanied by an accredited laboratory certification to the technical staff of the LUST Section. Duplicate submittal is unnecessary and unduly burdensome.

(j) All budgets, budget amendments, and applications for payment of corrective action costs shall be submitted no later that one year after the date the Agency issues a No Further Remediation Letter pursuant to Subpart G of this Part. For releases for which the Agency issued a No Further Remediation Letter prior to the effective date of this subsection (j), all budgets, budget amendments,

and applications for payment shall be submitted no later than one year after the effective date of this subsection (j).

While Section 734.605(j) may allow the Agency to archive its files sooner than they currently are able to do so, this submittal limitation may cause severe hardship for owners or operators or their beneficiaries.

As has been CW³M's experience on a few cases, Illinois Pollution Control Board appeals may be pending and settlement negotiations are in progress. There is no incentive for the Agency to expedite the process and final disposition of a case can exceed one year. In such a circumstance, the owner or operator would be prevented from submittal of a claim until the appeal is settled or reaches a decision by the Board.

Should an owner or operator submit a plan or budget, which is rejected by the Agency and deems an appeal is its best course of action, the time to reach settlement or a decision by the Board may extend beyond the timeframe for allowance of submittal for an application for payment (following approval of the budget).

For 731 sites (where no budget is in place), the Agency has historically utilized the general review and payment guidelines for 732 sites, except for the 120-day review clock. If the review process exceeds one year, as it often does, and some costs are denied or resubmittal is required, the owner or operator would not have the opportunity to do so with the time constraints of 734.605(j).

An owner or operator's incapacitation, illness, inaccessibility or even death can cause delays in submittal of final plans, budgets or requests for payment.

For these reasons and other unanticipated reasons, 734.605(j) should be stricken.

732.602 & 734.610 Review of Applications for Payment

(d) 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 (e) 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 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 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.

Section 734.610(d) should be strengthened to require the Agency to supply detailed and itemized information to meet the above. Currently, the Agency only provides a blanket statement that reads, "Deduction for costs which are unreasonable as submitted (Section 57.7(4) of the Act and 35 Ill. Adm. Code 732(hh))." This in no way provides a description of what costs were ineligible or why, why the Act would be violated if the costs were approved.

732.606 & 734.630 Ineligible Corrective Action Costs

732.606 (mm) & 734.630(ii) Handling charges for subcontractor costs when the contractor has not submitted proof of payment of the subcontractor costs;

As mentioned above, the Agency is reverting back to practices required prior to 1992 and subsequently abolished by requiring owners or operators to submit proof of payment. The Agency's current practice is to pay handling charges for invoices billed directly to the consultant and to invoices billed to the owner or operator. In some cases, the Agency presently requests copies of cancelled checks for invoices not billed directly to the owner or operator.

For accounting reasons, many subcontractors invoice (or type on the invoice) owners or operators to segregate sites when the owner or operator has multiple sites or the subcontractor works with multiple consultants as a means of project separation. CW^3M is always sent invoices from its subcontractors; however, the addressee listed on the invoice is occasionally the owner or operator. When the owner or operator is listed, as a manner of project distinguishment, the subcontractor still looks to CW^3M for payment of the invoice. Additionally, the incurrence of handling charges includes more than just payment of an invoice. Costs are also incurred to secure certificates of insurance, verify subcontractor invoices, secure required back-up or supporting documentation, request and secure revisions to the invoice and prepare the invoice for payment, document payments or prepare and secure lien waivers.

Holding subcontractor invoices for submittal for payment until all cancelled checks are returned will cause delay in submittal of payment claims, which inadvertently increases the costs for handling a subcontractor's invoice. This requirement is unduly burdensome for owners, operators or their consultants; thousand of checks would be required to be managed on a monthly basis, increasing the costs for preparation and submittal of reimbursement claims. As many banks do not return checks and accounts are managed electronically, additional measures would be required to obtain the

checks. Further, the Agency has made no allowance for payment for costs incurred to prepare reimbursement claims, except as part of lump sum reporting costs. They have added additional burdens without corresponding allowances for the costs incurred to meet those requirements. Doug Oakley's testimony regarding the proposed amendments to Part 732 that the Agency has imposed this requirement because subcontractors contact the Agency to determine payment status of their invoices (Oakley 2004a). Subcontractors often contact the Agency requesting status of payments to help spur the Agency's slow review, particularly when their payment is dependent upon the Agency's review of their costs and a "reasonable" determination has been made on the subcontractor's invoice. Prime contractors or consultants will often withhold some or all of subcontractor payments until the Agency's determination has been made prior to incurring a cost that cannot be recovered; some subcontractors guarantee the "reasonableness" of their work. Finally, it is not the Agency's task or their responsibility to ensure payment of all invoices incurred in the private sector. This responsibility should be left up to the owner, operator or prime contractor. Section 734.630(ii) should be stricken as a requirement for payment as it is unnecessary and burdensome.

> 732.606(rr) & 734.630(nn) Costs submitted more than one year after the date the Agency issues a No Further Remediation Letter pursuant to Subpart G of this Part;

While Section 734.630(nn) may allow the Agency to archive its files sooner than they currently are able to do so, this submittal limitation may cause severe hardship for owners or operators or their beneficiaries.

As has been CW³M's experience on a few cases, Illinois Pollution Control Board appeals may be pending and settlement negotiations are in progress. There is no incentive for the Agency to expedite the process and final disposition of a case can exceed one year. In such circumstances, the owner or operator would be prevented from submittal of a claim until the appeal is settled or reaches a decision by the Board.

Should an owner or operator submit a plan or budget, which is rejected by the Agency and deems an appeal is its best course of action, the time to reach settlement or a decision by the Board may extend beyond the timeframe for allowance of submittal for an application for payment (following approval of the budget).

For 731 sites (where no budget is in place), the Agency has historically utilized the general review and payment guidelines for 732 sites, except for the 120-day review clock. If the review process exceeds one year, as it often does, and some costs are denied or resubmittal is required, the owner or operator would not have the opportunity to do so with the time constraints of 734.605(j).

An owner or operator's incapacitation, illness, inaccessibility or even death can cause delays in submittal of final plans, budgets or requests for payment.

For these reasons and other unanticipated reasons, 734.630(nn) should be stricken.

732.606(yy) & 734.630(uu) The treatment or disposal of soil that does not exceed the applicable remediation objectives for the release, unless approved by the Agency in writing prior to the treatment or disposal;

CW³M recommends deletion of 734.63(uu) for the primary reason that it is impossible to know with 100% certainty that no soil was disposed that may have been clean. An understanding of field activities and equipment operation associated with excavation would reveal this as an impractical requirement.

While the Agency offered no specific testimony regarding this proposed requirement, we are assuming that their intent is to prevent abuse of the Fund. If the Agency has specific examples of how and where such an abuse has occurred, they should provide that information or should attempt other means of prevention. The Agency already has many tools at its disposal to prevent abuse or over-excavation of clean soils. Early action excavations are limited to the backfill material surrounding the tank, not to exceed 4 feet. Corrective action excavations are typically conducted under an approved corrective action plan, for which the extent of contamination has been pre-determined through extensive drilling and sampling activities. The results of which are used to determine the area to be excavated.

There is no practical means to field-implement this requirement to assure that absolutely no clean soil is removed or excavated. If one were excavating with a spoon and collected samples every foot of excavation, one could have more certainty that no soil clean soil was being removed for disposal. As this is an obviously inefficient and cost-prohibitive means to conduct large excavations, it is not feasible. The excavation equipment itself, such as trackhoes and backhoes, have large buckets with which to remove the soil. As discussed in detail in Subpart H, qualified and trained oversight technical personnel on site during an excavation will monitor the soils being removed. If the apparent extent of contamination is reached, the professional will evaluate continued excavation by use of field equipment or sampling. If lead, for example is the contaminant of concern, field instrumentation, such as a photo-ionization detector or visual/odor indications are unable to readily assess the presence of contamination. If Subpart H is adopted, there will be insufficient resources to allow proper oversight.

Further, even when the extent of contamination has been pre-determined, there are likely small areas along the perimeter where the plume lines have been assessed from one boring to the next that were not pre-evaluated (otherwise, drilling during plume delineation would be conducted on 1-foot intervals rather than 20-foot intervals). The cost to pre-assess and assess during an excavation would be cost-prohibitive as compared to a very small or inadvertent amount of soil removal during an excavation. For these reasons, Section 734.630(uu) should be eliminated.

732.606 (ccc) & 734.630(yy) Costs associated with sample collection or transportation required as a result of improperly collected, transported, or analyzed laboratory samples;

The Agency modified its originally proposed language for 734.630(yy). Initially, the Agency proposed to deem costs associated with sample collection, transportation or analyses of improperly collected, transported or analyzed samples as ineligible corrective action costs. CW³M contends that is unfair to require owner, operators or consultants to "eat" costs associated with re-collection and transportation of improperly analyzed samples but yet allowing the laboratory to charge for second analyses when the same laboratory may have caused the necessity to collect duplicate samples. CW³M recommends that 734.630(yy) either be stricken in its entirety or be revised back to its originally proposed format to avoid inequitable penalty for a laboratory error.

732.606 (ddd) & 734.630(aaa) Costs an owner or operator is required to pay to a governmental entity or other person in order to conduct corrective action, including but not limited to permit fees, institutional control fees, and property access fees;

The Agency itself assesses numerous fees to owners or operators to conduct corrective action activities and has historically found their own fees reasonable and hence reimbursed owners or operators for these costs. Example of such fees includes, but is not limited to Air Pollution Control permit and site fees associated with groundwater treatment units and soil vapor extraction systems, Water Pollution Control permit and fees for discharges from groundwater treatment systems, Bureau of Land fees for manifests, County Recorder fees for filing institutional controls and agreements, City or County fees for demolition or excavations, etc. These are necessary and required elements for corrective action work and should remain reasonable and reimbursable expenses.

It was not until approximately one year ago that the Agency began to re-think its position regarding payment of permit fees. Governor Blagojevich, in his attempts to generate revenues and to balance the State's budget, proposed assessment of or dramatic increases in State fees. One such fee was the permit fee for NPDES permits. Historically, there had been no such fee imposed on sites with NPDES permits. Effective July 1, 2003, an annual fee of $15,000 was assessed (category-dependent) for NPDES permits. Such permits are required for LUST sites discharging treated effluent to storm sewers. CW³M immediately contacted the Agency to determine if this fee would be reimbursable. The Agency's response at the time was that they would not reimburse such a fee, as it was "unreasonable", however, they later apparently decided to reimburse owners and operators of such fees (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Chappel Deposition, 31:21-32:10, December 2003). The owners / operators should not be penalized if the IEPA's permit fees were raised to unreasonable levels.

Mr. Gary King stated during the March 15, 2004 hearing that he didn't believe it was the Illinois State Legislature's intent to transfer funds from the UST Fund to another State fund. CW³M has found no evidence to support this as the legislative intent, therefore, that argument has no merit. In reality, it is more likely that the State Legislators were unaware that imposing this type of fee in some cases would merely transfer dollars from one fund to another. In either case, General Revenue dollars increase. As these fees have historically been deemed a corrective action expense, there is no reason for the Agency to deem them non-reimbursable and Section 734.630(aaa) should be stricken in its entirety. If the permit fee was deemed a corrective action expense in the past, it should continue to be deemed an eligible corrective expense, regardless of the amount. During the current legislative session, several bills are pending to address or eliminate the fees.

732.606(eee) & 734.630(bbb)Costs associated with the maintenance, repair, or replacement of leased or subcontracted equipment.

Common practice regarding maintenance and repair of equipment that is utilized by contractors on an hourly or daily basis is that those costs are inclusive in the rate. For example, repair of a backhoe utilized on an excavation is not a cost that should be eligible for reimbursement; the repair cost would be an indirect cost absorbed into the equipment's hourly rate.

Leased equipment, however, falls into a different category and should be dealt with accordingly. Groundwater treatment systems, soil vapor extraction systems, and air sparging systems are typically leased or purchased from the manufacturer by owners, operators or their consultants. The leases are long-term and do not include maintenance or repair that results from daily operation and the effects of prolonged exposure to contamination and the elements. Most systems have warranties to cover the major system components for a period of time. Use of these systems is analogous to car leasing or purchasing. Fueling the vehicle, wear and tear and damage caused by operation are not covered by the lease or warranty.

CW³M has extensive experience with the Agency regarding groundwater treatment systems. Initially, CW³M leased groundwater treatment systems to owners or operators on a monthly basis. The monthly fee was all-inclusive; it included a monthly equipment lease as well as a fee for all repairs necessary to maintain operation of that fee. The Agency approved the rates initially and, after appeals and settlement of several cases, requested that CW³M modify its billing to include one rate for equipment and one rate for maintenance. Further, the Agency has found reasonable and approved budgets for equipment rental and maintenance costs. These are legitimate corrective action costs associated with operating a treatment system and the Agency has offered no testimony as to why an item found reasonable for 10+ years should now be ineligible. January 2003 IEPA rate sheets clearly list operation and maintenance as an acceptable cost with an associated rate. Accordingly, 734.630(bbb) should be

modified to distinguish between these types of repair and maintenance costs to allow for those associated with long-term treatment system uses.

732.606(fff) & 734.630(ccc) Costs that exceed the maximum payment amounts set forth in Subpart H of this Part.

Section 734.630(ccc) should be re-written to allow for costs deemed reasonable by the Agency when extenuating circumstances or costs are encountered that are adequately justified.

732.614 & 734.665 Audits and Access to Records; Records Retention

The Agency has the authority to audit all data, reports, plans, documents and budgets submitted pursuant to Title XVI of the Act and this Part. *If the data, report, plan, document or budget audited by the Agency pursuant to this Section fails to conform to all applicable requirements of* Title XVI of the Act and this Part, *the Agency may take appropriate actions.* [415 ILCS 5/57.15]

a) Owners or operators that submit data, reports, plans documents, or budgets under this Part, and Licensed Professional Engineers and Licensed Professional Geologists that certify such data, reports, plans, documents, or budgets, shall maintain all books, records, documents, and other evidence directly pertinent to the data, reports, plans, documents, or budgets, including but not limited to all financial information and data used in the preparation or support of applications for payment. All books, records, documents, and other evidence shall be maintained in accordance with accepted business practices and appropriate accounting procedures and practices.

b) The Agency or any of its duly authorized representatives shall have access to the books, records, documents, and other evidence set forth in subsection (a) of this Section during normal business hours for the purpose of inspection, audit, and copying. Owners, operators, Licensed Professional Engineers, and Licensed Professional Geologists shall provide proper facilities for such access and inspection.

c) Owners, operators, Licensed Professional Engineers, and Licensed Professional Geologists shall maintain the books, records, documents, and other evidence set forth in subsection (a) of this Section and make them available to the Agency or its authorized representative until the latest of the following:

1) The expiration of 4 years after the date the Agency issues a No Further Remediation Letter issued pursuant to Subpart G of this Part;

2) For books, records, documents, or other evidence relating to an appeal, litigation, or other dispute or claim, the expiration of 3 years after the date of final disposition of the appeal, litigation, or other dispute or claim; or

3) The expiration of any other applicable record retention period.

Section 734.665 should be stricken in its entirety as the Agency's proposal has overstepped its bounds and statutory authority. Section 57.15 of the Act states in full: "The Agency has the authority to audit all data, reports, plans, documents and budgets submitted pursuant to this Title. If the data, report, plan or budget audited by the Agency pursuant to this Section fails to conform to all applicable requirements of this Title, the Agency may take appropriate actions. " (emphasis added) Title XVI only provides the Agency with the authority to audit submitted data reports plans, documents and budgets. If the Agency has questions about any of these things or if the cost information is not supported, IEPA can do as it has been doing – ask for more information or deny the costs.

Appropriate actions should not be misconstrued as an open allowance for illegal search and seizure. Title XVI only regulates owners or operators of underground storage tanks. It does not give the Agency authority to regulate Professional Engineers or Geologists. The Illinois Department of Professional Regulations regulates and promulgates rules for Licensed Professional Engineers and Geologists; therefore, the Agency has no regulatory authority to extend its authority to regulate Licensed Professional Engineers and Geologists. Mr. Doug Clay confirmed during the March 15, 2004 hearing (Transcripts, page 185) that the Agency is not in a position to enforce the Professional Engineers or the Professional Geologists Act.

It may be appropriate to require owners or operators of underground storage tanks to maintain certain types of records to support the documents submitted to the Agency. However, the Act does not give the Agency authority to audit consultants and proposed Section 734.665, places no controls or restrictions on the Agency for when and under what circumstances these records should be made available.

Audits of records of Licensed Professional Engineers or Geologists also violate client-privileged information. CW³M, as well as the majority of consultants maintains confidentiality agreements with its clients. Open, unrestricted audits violate such confidentiality. Section 1252.110(a)(6) of the Rules for Administration of the Professional Geologist Licensing Act Part 1252 prohibits the Licensed Professional Geologist from disclosing information concerning the lawful business affairs or technical processes of a client or employer.

As stated in a publication provided by the Agency and the Illinois Department of Commerce and Community Affairs titled, "How to Select an Environmental Consultant", "To prevent the unauthorized disclosure of the information given to the consultant or information generated by the consultant, include a confidentiality

provision in the professional services agreement". (IEPA, 1994) A copy of this guide is provided in Appendix F.

During the March 15, 2004 hearing, Mr. Doug Clay answered questions regarding the proposed audit. He indicated that financial records were not the targets of the audit; the Agency wants a means to secure supporting documentation for charges when there is a question of their authenticity. The simple answer for this question is for the Agency to request that supporting documentation be submitted.

The Agency has numerous legal avenues to obtain records in the event of fraud or violations and Section 734.665 is unnecessary and overreaches the Agency's authority. As was clearly demonstrated by Agency personnel during the March 15, 2004 hearing, there are personality conflicts between the Agency and many of the consultants present. Such an open-ended audit procedure invites miss-use or abuse by the Agency against consultants whom the Agency disagrees with or dislikes. If the Agency is going to require the production of such records, it should provide for the reimbursement of such costs. The Agency provides no mechanism to reimburse owners or operators for the cost of copies and/or facilities for inspection. Most service stations have no such facilities.

732.702 & 734.710 Contents of a No Further Remediation Letter

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

(d)(3) *No Further corrective action concerning the occurrence is necessary for the protection of human health, safety and the environment,* or, if the No Further Remediation Letter is issued pursuant to Section 734.350(e) of this Part, that the owner or operator has demonstrated to the Agency's satisfaction an inability to obtain access to an off-site property despite best efforts and therefore is not required to perform the corrective action requirements of this Part, but is not relieved of responsibility to clean up portions of the release that have migrated off-site. [415 ILCS 5/57.10(c)(1)-(3)]

Section 734.710(d)(3) contains contradictory language. If an owner or operator is not required to perform corrective action requirements of this Part as a result of inability to secure off-site access, despite best efforts, they should not be held responsible to clean up portions of the release that have migrated to inaccessible off-site properties.

If an owner or operator has made every reasonable and required effort to access an off-site property for purposes of investigation and/or remediation, the owner or operator should be relieved of clean-up responsibilities. If an off-site property owner denies access after being informed of the provisions of 734.350, that property owner should be held accountable for his or her own actions.

Section 732.70(d)(3) & 734.710(d)(3) should be re-written as follows:

(d)(3) *No Further corrective action concerning the occurrence is necessary for the protection of human health, safety and the environment*, or, if the No Further Remediation Letter is issued pursuant to Section 734.350(e) of this Part, that the owner or operator has demonstrated to the Agency's satisfaction an inability to obtain access to an off-site property despite best efforts and therefore is not required to perform the corrective action requirements of this Part. ~~but is not relieved of responsibility to clean up portions of the release that have migrated off-site.~~ [415 ILCS 5/57.10(c)(1)-(3)]

SUBPART H: MAXIMUM PAYMENT AMOUNTS

732.800 & 734.800 Applicability

a) This Subpart H divides all activities conducted pursuant to this Part into tasks and sets forth the maximum total amount an owner or operator can be paid from the Fund for all costs associated with each task. Payments to owners or operators shall not exceed the amounts set forth in this Subpart H.

b) The costs listed under a particular task identify only some of the costs associated with the task; they are not intended as an exclusive list of all costs associated with the task for purposes of payment from the Fund.

c) This Subpart H sets forth only the maximum amounts that may be paid from the Fund for eligible costs. Whether a particular cost is eligible for payment shall be determined under Subpart F of this Part.

In the Agency's attempt to streamline the reimbursement and budget review processes, they have created a system that is discriminatory to owners/operators across the state who are not located in close proximity to consulting or clean-up contractors, landfills, etc. The effort to simplify the process resulted in the Agency's creation of lump sum maximum values for activities conducted to meet the technical requirements of 732 and 734. The lump sum values are arbitrary, lack understanding or consideration of site variations and actual clean-up costs. Section 734.800(b) implies there are other costs or activities, which may be required to meet the technical requirements of this Part, however, there is no means established for payment of these costs or required activities. In general, the technical requirements are placed in conflict with the fiscal limitations. An owner/operator will not be able to meet the technical requirements of the Act given the lump sum amounts proposed. Further, the lump sum values proposed by the Agency will force owner/operators to leave sites unremediated, particularly those with groundwater contamination or those not located in close proximity to necessary services.

The Agency is proposing to eliminate budgeting based upon "time and materials" estimating. This is grossly inaccurate and discriminatory to a large percentage of owners/operators. Several examples are presented to illustrate this point. Further, the process of collecting and statistically analyzing the data used by the Agency to develop rates and lump sums is inaccurate and misleading. The Agency has relied on one individual to compile, manipulate and analyze cost data for development of its rate sheets. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, pp. 13-19 , December 2003) The discovery deposition of Brian P. Bauer on December 3, 2003 illustrates the manner in which the Agency developed its rate sheets to determine reasonableness, which is the foundation for the maximum costs presented in this Subpart. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, pp. 13-23, December 2003)

During the January 7, 2004 Board hearing for Illinois Ayers V. IEPA, PCB 03-214, Mr. Brian Bauer testified (transcript pp. 231 & 232) that no one outside of the Agency nor anyone with a statistical background has reviewed the methods by which the Agency compiles data and analyzes it for rate setting. Mr. Bauer further testified that he felt there was no reason or need for anyone else to look at his data because it was basic statistics and anybody could do it. (Illinois Ayers v. IEPA, PCB 03-214, transcript p. 232) Whether Mr. Bauer truly believed that the task was so simple that anyone could do it or whether arrogance intervened and he felt no one else could competently do this work is unclear. Significant flaws are present that undermine the entire process and remove all confidence that the Agency developed their proposed rate structure competently and in good faith, or whether the Agency intentionally created errors in order to derive an answer for which they were seeking justification. If the errors are simply mistakes made by the Agency serious questions arise about any number being proposed due to incompetence. For example, in attachment 12 of the Agency's pre-filed testimony for the March 15, 2004 hearing, a table is presented to justify the Agency's proposed rate of $4,800.00 lump sum maximum for 45-Day Report and early action consulting fees. How did they select the sites that were included in this table? Negative dollar amounts were inserted into the table as the cost for this work for the sites where the total number of hours were not provided. Simple understanding of mathematics indicates that the negative numbers have a dramatic effect on the calculated average. Was the Agency trying to legitimize a pre-determined rate of $4,800.00 or were the negative numbers mistakenly left in the table and the average calculated by the Agency in error? These types of question raise serious concerns over every rate proposed by the Agency.

Another major issue surrounding development of rates concerns the rationale for using averages. In a sworn affidavit by Brian Bauer dated April 15, 2003 in CW³M v. IEPA, Mr. Bauer states "The standard deviation of that sample is calculated, and a number representing one standard deviation above the sample average is assigned to a category in the rate sheet. That is the maximum rate or cost that will be approved for that particular category." In developing the $4,800.00 lump sum rate, the Agency only used the average; the net effect being that one-half of the costs will be deemed

unreasonable. Why did the Agency break away from its prior practice of using at a minimum the mean plus one standard deviation and instead use only the average? Was it yet again an attempt to justify a pre-derived number? The use of an average is in direct conflict with Mr. Doug Clay's testimony on March 15, 2004 when he testified that he believed that approximately 90% of consultants and contractor fees would come in at or below the Agency's proposed rate structure. Given the method of rate development using only averages, there is absolutely no way that 90% of the charges can be within the "reasonable" range. Further, IEPA may have used only costs that IEPA had previously approved to calculate the average. A copy of the affidavit is provided in Appendix A. Just evaluating the costs presented in the sampling of the table presented by the Agency in Attachment 12 indicates that approximately 60% of the sample pool would have costs above the Agency's proposed maximum rate.

The Bauer deposition (CW³M v. IEPA, Bauer Deposition, December 2003) reveals the following flaws in the Agency's development of rates

1) *Selection Criteria*

The Agency has no "real criteria" for selection of reimbursement claims or budget submittals from which to draw individual cost data. Agency personnel hand-select sites or packages to review rates. One would think that a selection process should have a standard set of criteria for each time the rates are reviewed. For example, every package submitted between January 1 and March 1 would be included in the sample pool. Agency personnel just hand-selected a few that they believe represent the various consultants in the market. This offers additional bias; a representative sampling cannot occur. If a given consultant conducts work on a large portion of LUST sites, representative sampling would not give equal weight to a package submitted by a consultant who does limited work with LUST sites.

The selection process was manipulated to try and obtain a cross-section of numerous consultants (CW³M v. IEPA, Bauer Deposition, p. 16, December 2003), but in doing so, the data was biased and was not representative.

In addition, only costs or rates in approved packages or budgets were incorporated into the database. (CW³M v. IEPA, Bauer Deposition, p. 22, December 2003) The setting of rates then becomes a self-fulfilling prophecy. When only approved rates are included in the pool of rates to be averaged, rates that exceeded the approved value were excluded and the rate is automatically lower than what the average would be if all rates submitted were evaluated.

2) *Unsupervised Collection of Data and Rate Development*

Mr. Bauer's deposition indicates that he went around collecting data from other project managers, LUST Fiscal, catalogs and hand-selected budget packages and developed the rates on his own initiative with no authority, directives or supervision. (CW³M v. IEPA, Bauer Deposition, pp. 17-23, December 2003) Mr. Bauer has no formal training in statistical analysis. (CW³M v. IEPA, Bauer Deposition, pp. 6-9, December 2003)

3) *Flawed Statistical Analysis*

The flaws in the analysis are compounded year after year as rates are re-evaluated, resulting in decreasing rates, when in reality most costs increase year after year. Proposed Part 732 & 734 requires that Licensed Professional Engineers and Geologist submit costs, which do not exceed costs presented in Subpart H. Under this scenario, the Agency will be unable to accumulate any new cost information or assess cost increases present in the market place.

CW³M ran a statistical analysis of one proposed rate using the Agency's protocol; please refer to Appendix C. Even when adding in a very small inflationary increase, the rate goes down from one year to the next and does not reflect actual costs or the reality of market.

The Agency acknowledged that over the past several years it has not taken into account inflation when evaluating new rates.

4) *Rates are Based on Incomplete Costs*

When developing the lump sum maximum rates, the Agency clearly left out many of the costs associated with each activity.

5) *Rates are Discriminatory to Remote Locations, Sites not in Close Proximity to Services*

The Agency's current rate structure does not take into account site-specific factors, particularly, the location of the site in proximity to services (consultant, drilling contractors, landfills, etc.) Up until the rates and the lump sum maximum costs associated with the proposed Section 734 were developed, the Agency allowed for site-specific factors to be a consideration in determinations of reasonableness or allowed owners or operators to submit additional information to support higher costs.

The deposition of Brian Bauer clearly states that site-specific factors, such as distance are not factored into the development of the Agency's rates (CW³M v. IEPA, Bauer Deposition, p. 4, December 2003), while at

the March 15, 2004 hearing Mr. Clay states that distances were considered (transcript p. 279-280), again leading to the question of whether Mr. Clay was, in fact, aware of the true methods in which the rates were calculated.

6) *Rates are Discriminatory to Consultants for Remote Locations, Sites not in Close Proximity to Services*

As mentioned above, the Agency's proposed rate structure does not take into account site-specific factors. Under the proposed rate structure, consultants would be prohibited from providing consulting services to UST owners or operators who were not in their immediate vicinity or close proximity. This is highly discriminatory and verges on price fixing within the marketplace. It also prevents owners or operators from choosing a trained professional who will best serve their needs. In many remote locations or smaller communities, there may be few to no professionals operating locally, thus owners or operators in these locations will have no services available, or be required to secure the services of a local consultant regardless of their experience or reputation.

The Agency's haste to draft new regulations to "simplify" budgeting and reimbursement claims is completely lacking any real world experience or knowledge of the effort and costs associated with work or the complexities or unique characteristics of each site. Numerous requirements simply cannot be accomplished given the short-sighted lump sums. The Agency's zeal to limit appeals for reimbursement claims has lead to a proposal that will severely reduce the number and extent of UST clean-ups across the State.

The failure to recognize and accommodate for such factors is highly discriminatory to sites located farther away from environmental services. The Agency has promoted environmental justice programs and efforts to target poverty-stricken areas of the State. "Team Illinois" identified Cairo, Illinois as one small community badly in need of assistance. (IEPA, 2004) CW^{3}M has conducted LUST corrective action work in Cairo, Illinois. Costs to conduct early action work, particularly backfill excavation and disposal was done at considerably higher costs than other sites and exceeded the maximum lump sum allowable costs of this Subpart due to the extreme distance to the closest Illinois landfill. In this case, the landfill distance is the driving factor for all costs associated with the excavation and disposal. Trucking and personnel costs increase in direct proportion to the distance.

The Illinois State Legislature increased the maximum amount allowable for each occurrence. Increased costs associated with remediation of LUST sites were the driving force for increasing the maximum amount. However, the Agency's proposal

further reduces the amounts payable, in direct conflict with the intention of the State Legislature.

The recently decided Board case Illinois Ayers v. IEPA, (PCB No. 03-214), the Board relied on the technical input from licensed professionals to help reach its final decision regarding the amount of and extent of site investigation work required to meet the minimum requirements of the Act. CW³M suggests that the Agency likewise rely on the knowledge and expertise of trained professionals who perform LUST compliance work on a daily basis as a means or determining needs and costs for each individual site. These professionals are more familiar with the site than IEPA personnel.

In CW3M v. IEPA, Agency personnel provided sworn affidavits to support the Defendant's Motion for Summary Judgement. (please see Appendix M) The sworn affidavits state that, "if maximum cost and rate sheet information is made available as a public document, it is possible that all proposed budgets and reimbursement requests would be submitted incorporating the maximum costs and rates. This could undercut any competition among the contractors, substitute the rate sheet figures in place of market-driven figures, and deplete the Underground Storage Tank Fund by greater amounts than the present situation in which contractors are required to simply submit budgets and reimbursement requests which are based on their documented costs." The proposed Subpart H is in direct conflict with this sworn statement. The Agency should reconsider its proposed Subpart H and instead develop a methodology for collection and analyses of costs and develop rates which could instead be published but not necessarily incorporated as regulation, thereby allowing them to be periodically updated without requiring Board action each time.

732.810 & 734.810 UST Removal or Abandonment Costs

Payment for costs associated with UST removal or abandonment of each UST shall not exceed the amounts set forth in this Section. Such costs shall include, but not be limited to, those associated with the excavation, removal, disposal, and abandonment of UST systems.

UST Volume	Maximum Total Amount per UST
110-999 gallons	$2,100.00
1,000-14,999 gallons	$3,150.00
15,000 or more gallons	$4,100.00

The maximum allowable costs presented in Section 734.810 should be stricken in their entirety as they grossly fail to compensate owners or operators for costs associated with the removal of underground storage tanks and fail to take into account the extreme variables, which may be present during tank removal activities.

Factors, such as location of the UST removal site from the OSFM licensed contractor, distance of the site from the OSFM Tank Specialist, weather (particularly humidity

and temperature), location of tank(s) at a facility, the tank and piping condition, extent and location of piping, groundwater depth, soil stability, number of tanks present at site, and type and thickness of overburden, were clearly not accounted for by the Agency when developing its maximum allowable rates. CW³M obtained a copy, from the Illinois Department of Transportation website, of the awarded bid tabs for every project in 2003 which contained bid items for environmental work, such as tank removal. A summary of the information is included in Appendix J. The awarded average rate for tank removal was $6,424.03 per tank. It should also be noted that IDOT projects are awarded through competitive bidding.

The location of the UST site in proximity to the removal contractor is important when the travel time is greater and mobilization costs are higher. When the site is located in a remote area of the State or the removal contractor has to travel a greater distance to the site, typically, the contractor will uncover the USTs the day before the scheduled removal and arrive early to the site on the day of the removal to begin venting operations. In this case, overnight stay is required for several individuals. The current number of OSFM Tank Specialists is less than it was a few years ago, requiring them to travel greater distances to tank removal sites. As the work cannot progress until their arrival and authorization, the removal contractor potentially has to wait.

The time necessary for uncovering the tanks is dependent upon the type and thickness of the overburden. For high and heavy traffic areas, the overburden will consist of reinforced concrete, which requires additional time for destruction and removal. If the water table is very shallow, the excavation may require continuous dewatering in order to access and remove the tanks. If the tanks recently held fresh product, ventilation operations will take longer to achieve the required LEL (Lower Explosive Limit). Several other factors can also complicate activities to achieving the required LEL. These include, but are not limited to, ambient air temperature (the warmer the temperature, the more volatiles are generated in the UST by fuel residues), higher humidity levels, and whether or not the tank was relined and the condition of the lining (fuel residues and vapors can become trapped between the tank and the liner).

The condition of the tank itself will also affect the removal operation. If the tank has corroded to the extent that it is taking on water (shallow groundwater conditions), continuous pumping activities will be required in order to lift the tank from the excavation. Older tanks may have fittings or lifting lugs that have become corroded requiring alternative measures be developed to safely remove the tank. Long or extended piping trenches will require tedious excavating to expose the piping in its bedding so that the OSFM Tank Specialist can observe the piping in situ and assess soil conditions to determine if the piping contributed to the release. As mentioned above, the piping overburden can, if reinforced concrete, take additional time and effort to remove.

If numerous tanks are located at a facility and all are not within the same bedding or pit, multiple excavations will have to be conducted to expose the tanks, increasing the time and associated costs. If tanks are located in close proximity to a building, active

tank, or other structure, special excavation precautions will be required to assure that the walls are stable and will not collapse causing damage to neighboring structures. Soil conditions and stability also play a significant role in the safety of an excavation. Severe contamination can erode soil stability properties and must be assessed and guarded against during excavation and tank removal operations. Benching and sloping activities may be necessary and can be applied where sufficient space is available. More aggressive means of slope stability, such as wall supports, cribs or piles, must be applied when there is insufficient space or soil stability cannot be achieved using sloping or benching measures.

The Agency's proposed rate per tank does not take into account the number of tanks being removed. An economy of scale factor cannot be applied if only one tank is removed. The necessary equipment utilized during tank removal activities is the same whether there is one tank to remove or multiple. Excavating equipment, site safety equipment, ventilating equipment, grounding systems, etc. will be necessary; the costs, on a daily basis, can be spread out over multiple tanks, however, when only one is being removed, all equipment costs must be attributed to a single tank.

Over the past 14 years, CW^{3}M has conducted work experiencing some or all of the factors listed above. The rates and total UST removal costs were found acceptable using time and materials formats or by providing the Agency with the site-specific factors, which affected the total costs. For the reasons mentioned above, and because the Agency did not factor any site-specific variables into it rate building, this Section should be stricken.

732.8215 & 734.815 Free Product or Groundwater Removal and Disposal

Payment for costs associated with the removal and disposal of free product or groundwater shall not exceed the amounts set forth in this Section. Such costs shall include, but not be limited to, those associated with the removal, transportation, and disposal of free product or groundwater, and the design, construction, installation, operation, maintenance, and closure of free product or groundwater removal systems.

a) Payment for costs associated with each round of free product or groundwater removal via hand bailing or a vacuum truck shall not exceed a total of $0.68 per gallon or $200.00, whichever is greater.

The Agency has attempted to oversimplify the costs associated with free product or groundwater removal and disposal. The costs for removal and disposal are highly variable based upon site-specific factors. The amount of water present or the product-to-water ratio dictates whether or not the material recovered can be reclaimed or if disposal is required. The condition of the product will also dictate whether or not it can be reclaimed or if it must be disposed of. Facilities capable of water/product separation, reclamation and/or disposal are scarce and are not immediately available to most UST owners or operators. Again, additional costs are associated with transport

for sites not located in close proximity to facilities permitted to handle the recovered material. Trucking costs are typically at least $85.00/hour for transport. Costs for recovery, separation or disposal that have been encountered by CW^{3}M have ranged from as low as $0.59/gallon to over $2.00/gallon. Transport costs are usually not included in these rates. These costs do not begin to cover technical or field personnel on site who are supervising, conducting, coordinating or collecting samples associated with free product or groundwater removal. Such personnel are mandatory to ensure that all regulations are being followed and proper field documentation is being generated/recorded and collected.

If adopted, UST owners or operators will be forced to minimize or not conduct free product removal activities or be stuck with costs that will not be eligible for reimbursement. The Agency's proposal will have a severe impact on tank owners or operators with limited resources if reimbursement cannot be obtained. The proposed maximum costs will ultimately lead to reduced protection of the environment and violations of the Act and this Part.

b) Payment for costs associated with the removal of free product or groundwater via a method other than hand bailing or vacuum truck shall be determined on a time and material basis and shall not exceed the amounts set forth in Section 734.850 of this Part. Such costs shall include, but not be limited to, those associated with the design, construction, installation, operation, maintenance, and closure of free product removal systems.

Section 734.815(b) acknowledges that free product or groundwater removal by means other than hand bailing or vacuum truck involves too many factors and variables for there to be lump sum maximum costs. The Agency's rationale for this determination should be applied to all other activities where site-specific or location-specific factors dictate costs associated with compliance of this Part.

732.820 & 734.820 Drilling, Well Installation, and Well Abandonment

Payment for costs associated with drilling, well installation, and well abandonment shall not exceed the amounts set forth in this Section, excluding drilling conducted as part of free product removal or an alternative technology. Payment for costs associated with drilling conducted as part of free product removal or an alternative technology shall be determined in accordance with Section 734.850 of this Part instead of this Section.

a) Payment for costs associated with each round of drilling shall not exceed the following amounts. Such costs shall include, but not be limited to, those associated with mobilization, drilling labor, decontamination, and drilling for the purposes of soil sampling or well installation.

Type of Drilling	Maximum Total Amount
Hollow-stem auger	greater of $23.00 per foot or $1,500.00
Direct-push platform	greater of $18.00 per foot or $1,200.00

b) Payment for costs associated with the installation of monitoring wells, excluding drilling, shall not exceed the following amounts. Such costs shall include, but not be limited to, those associated with well construction and development.

Type of Borehole	Maximum Total Amount
Hollow-stem auger	greater of $16.50/foot (well length)
Direct-push platform	greater of $12.50/foot (well length)

An evaluation of the above proposed costs for drilling and well installation as compared to the costs presently and previously approved by the Agency reveals significant reductions in allowable costs, contrary to Mr. Clay's March 15, 2004 testimony. Drilling an installation of a 15' monitoring well under the proposed maximum costs ($592.50) is $75.00 less than the amount IEPA approved in 2001. In addition, the Agency has for several years made a modest allowance for mobilization per each round or day of drilling in the amount of $260.00. While this figure was already inadequate for remote sites or sites located a significant distance from the drilling contractor or consultant, at least the Agency recognized that there are separate costs associated with mobilization. Drilling contractors must mobilize a drilling rig, support truck (equipped with decontamination equipment and supplies) and the drilling personnel. On a per hour basis, this was already insufficient to mobilize much farther than 30-50 miles from the driller's home base. In addition, if an approved drilling event consists of a large number of borings and/or monitoring wells, which cannot be completed in one day or more, there is no allowance for overnight stay and additional personnel costs.

c) Payment for costs associated with the abandonment of monitoring wells shall not exceed $1.50 *(modified to $10.00)* per foot of well length.

The proposed allowance of $10.00 per foot of well length for well abandonment is wholly inadequate for the true costs associated with the activity. Using a 15' well as an example, the drilling contractor would only be provided $150.00 per well. The driller cannot even afford to mobilize to a site for $150.00, much less incur the labor, equipment and material supplies to properly abandon a well. The driller will be required to mobilize the rig, support truck and personnel and remove from the site the well materials for disposal. The Agency had been approving, for 731 sites reimbursement claims, and for budgets costs for abandoning 15' wells, amounts of $300.00 to $350.00 per well plus allowances for mobilization. These rates have been evaluated by the Agency and deemed reasonable.

The proposed rates will result in owners or operators leaving groundwater monitoring wells in place and not properly abandoning them.

732.825 & 734.825 Soil Removal and Disposal

Payment for costs associated with soil removal, transportation and disposal shall not exceed the amounts set forth in this Section. Such costs shall include, but not be limited to, those associated with the removal, transportation, and disposal of contaminated soil exceeding the applicable remediation objectives or visibly contaminated fill removed pursuant to Section 734.210(f) of this Part, and the purchase, transportation, and placement of material used to backfill the resulting excavation.

a) Payment of costs associated with the removal, transportation, and disposal of contaminated soil exceeding the applicable remediation objectives, visibly contaminated fill removed pursuant to Section 732.210(f) of this Part, and concrete, asphalt, or paving overlying such soil or fill shall not exceed a total of $57.00 per cubic yard.

The proposed maximum allowable payment for costs associated with excavation, transportation and disposal of soil or fill material should be stricken entirely. To place a maximum lump sum amount on this type of activity shows extreme lack of knowledge for what it takes to complete these tasks.

The Agency has since at least 1997 utilized a factor of $55.00 per cubic yard as a guidance figure for determining reasonableness, while making allowances for site-specific conditions or locations, which can drastically alter the costs. During the past two to three years, LUST Section Project Managers have been attempting to enforce the $55.00 per cubic yard rate to all sites, regardless of site-specific conditions or locations. Only following recent landfill tipping fee rate increases, did the Agency adjust the lump sum rate to $57.00 per cubic yard. CW^{3}M obtained a copy, from the Illinois Department of Transportation website, of the awarded bid tabs for every project in 2003 which contained bid items for environmental work, such as excavation and disposal. A summary of the information is included in Appendix J. It should also be noted that the IDOT work is competitively bid. The awarded average rate for excavation and disposal, per cubic yard, was $99.75, and the standard deviation was more than the average. It should also be pointed out that all available information from IDOT was used, 36 entries in all, while the Agency only used 25 selected from sometime during the past three or four years.

Appendix E contains an excerpt from a 1988 publication from the United States EPA, which states that landfill disposal of gasoline-contaminated soils, including transportation, ranged from $125 to $200 per cubic yard. Excavation, transportation and disposal costs have increased significantly since 1988.

The Agency has failed to take into account cost increase and inflationary factors over the past 9 years but as soon as landfill disposal fees were increased, the Agency suddenly made an allowance for those costs. Mr. Harry Chappel, LUST Section Unit

Manager, testified the rates were increased to account for an increase in landfill disposal fees. (CW³M v. IEPA, Chappel Deposition, p. 31, December 2003)

The discovery deposition of Brian P. Bauer on December 3, 2003 illustrates that the Agency developed its rate for excavation, transportation and disposal without taking into account site-specific factors such as the distance between a site and a landfill or complex excavations. (CW³M v. IEPA, Bauer Deposition, p. 44, December 2003) Failure to account for or make adjustments for site location is a gross oversight by the Agency when the distance to a landfill is the driving factor when calculating the cost of an excavation and disposal. As Agency personnel spend little to no time in the field and have no background in business costs, they lack the necessary experience and training to adequately pre-define costs. Trucking, equipment and personnel hours are all completely dependent upon the distance. The number of available trucks can also impact the total cost of excavation, transportation and disposal. During peak seasons for road construction and grain hauling, available trucks are few and are at a premium. For some sites, where space is limited or restricted, the size and number of trucks may have to be minimized because there is insufficient room for them to maneuver, turn around, dump or fill. For sites with space restrictions, if trucks are not reduced to an appropriate number to match site accommodations, additional costs can be incurred for traffic control, blocking streets or waiting for site access. On busy streets or at busy intersections, site activities require traffic assistance to protect the safety of other motorists, pedestrians, on-site personnel and trucks. When site space limitations are present, these safety factors can become worse. The on-site professional makes adjustments or modification, as necessary, to safely and efficiently manage the job. CW³M has prepared several examples to illustrate the impact of the distance factor, which show that for a large majority of the sites in Illinois, the maximum allowable rate proposed by the Agency is unattainable.

Site-specific conditions or complexities should also be accommodated for when evaluating reasonable rates for excavation, transportation and disposal. Soil conditions and excavation wall stability can affect the efficiency of an excavation. Should soil properties be present which create wall collapse, sloughing or unsafe conditions, measures must be employed to protect personnel, equipment and surrounding structures. These efforts can disrupt an excavation or at a minimum, increase the costs associated with the excavation by requiring benching, sloping or retaining walls. The Agency has failed to account for these types of field conditions.

Mr. Clay stated during discussions of the landfill rates at the March 15, 2004 hearing that the Agency did consider a reasonable distance in calculating their rates (Transcript, page 279). However, he was unsure what figure was utilized. This is contradictory to deposition testimony offered by Brian Bauer (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 44:4, December 2003) who was person who prepared the rates.

In previously conducted early action and corrective action budgets, the Agency has approved mobilization and demobilization charges for each piece of equipment brought

to a site which is necessary in order to conduct the work. While the rate approved by the Agency was insufficient for remote sites, at least they acknowledged that contractors incur some costs in order to move equipment. Under the newly proposed lump sum rate, the costs for mobilization and demobilization have been completely ignored.

The rates have not been adjusted in nine years to account for inflation. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 39:3, December 2003) According to the Gross Domestic Product Implicit Price Deflator for Gross National Product, between 1996 and 2003 inflation should have raised pricing by over 11%. Not only has the Agency failed to account for site-specific factors, they have failed to adjust their rate (except for landfill disposal fees) in nine years. There has been no allowance for inflation, personnel cost increases and raises, higher fuel costs (which dramatically affect trucking and equipment rates), higher vehicle/truck and equipment purchase and repair costs, higher insurance costs (particularly following 9/11/01), higher license and operating/permit fees imposed by the State, etc.

In lieu of lump sum maximum rates, the Agency should review budget on a time and materials basis and rely on estimates provided by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

(a)(1) Except as provided in subsection (a)(2) of this Section, the volume of soil removed and disposed shall be determined by the following equation using the dimension of the resulting excavation: (Excavation Length X Excavation Width x Excavation Depth) x 1.05. A conversion factor of 1.5 tons per cubic yard shall be used to convert tons to cubic yards.

The Agency's proposed conversion factor of 1.5 tons per cubic yard is nothing more than an attempt to overturn the Pollution Control Board's final decision regarding soil density as was promulgated as amendments to 732 in April 2002. Considerable testimony was filed with regards to appropriate conversion factors and soil density. The Board noted in 732.Appendix C the following:

> *Site specific information may be used to determine the weight of backfill material if site conditions such as backfill material, soil moisture content, and soil conditions differ significantly from the default values.*
>
> *BOARD NOTE: The weight of backfill material is calculated by using the default bulk density values listed in TACO regulation at 35 Ill. Adm. Code 742, Appendix C, Table B. The weight of backfill material to be removed is based on a dry bulk density value of 1.8 g/cm³ for sand and a moisture content of 10 percent which equals 1.98 g/cm³. The Board has rounded the removed backfill density to 2.0 g/cm³. The weight of backfill material to be replaced is based on a dry bulk density value of 2.0 g/cm³ for gravel.*

The Agency is proposing to eliminate the above language, which when converted equates to approximately 1.68 tons per cubic yard, and impose an arbitrary conversion factor of 1.5 tons per cubic yard. The Agency is attempting to ignore values listed in TACO regulation at 35 Ill. Adm. Code 742, Appendix C, Table B and impose a conversion factor with no scientific basis.

Mr. Harry Chappel, LUST Section Unit Manager, testified that the Agency recently decided to just use one-and-a-half for all soil types. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Chappel Deposition, 46:2, December 2003) Mr. Chappel commented that the Agency believed that the 1.5 conversion factor was the average of most of the soils in Illinois, however, there was no detailed evaluation conducted for the Agency to justify ignoring 732.Appendix C. The Agency has been operating in violation of 732.Appendix C for some time by simply imposing its own rule and disregarding 732.Appendix C which was developed utilizing scientific data and testimony derived during hearings for the April 2002 amendments to 732.

After conducting hundreds of soil excavations, CW³M has gained considerable experience in soil properties. The most common soils found in central and southern Illinois consist of glacial till or stiff glacial clays. These materials have weights of 1.70 and 2.22 g/cm³ (Peck, 1974). Arbitrarily assigning 1.5 tons per cubic yard is inaccurate and has no scientific basis.

The conversion rate approved by the Board, 2.0 g/cm³, should be left as is currently and modified to in this Part and the Agency should be forced to comply with its own regulations.

b) Payment for costs associated with the purchase, transportation, and placement of material used to backfill the excavation resulting from the removal and disposal of soil shall not exceed a total of $20.00 per cubic yard.

The proposed maximum allowable payment for costs associated with the purchase, transportation and placement of material used to backfill the excavation should be stricken entirely. To place a maximum lump sum amount on this type of activity shows extreme lack of knowledge for what it takes to complete these tasks.

The Agency has since at least 1995 utilized a factor of $20.00 per cubic yard as a guidance figure for determining reasonableness, while making allowances for site-specific conditions or locations, which can drastically alter the costs. During the past two to three years, LUST Section Project Managers have been attempting to enforce the $20.00 per cubic yard rate to all sites, regardless of site-specific conditions or locations. The Agency has not increased this rate in nine years and has failed to take into account cost increase and inflationary factors over the past 9 years.

In previously conducted early action and corrective action budgets, the Agency has approved mobilization charges for each piece of equipment brought to a site which is

necessary in order to conduct the work. While the rate approved by the Agency was insufficient for remote sites, at least they acknowledged that contractors incur some costs in order to move equipment. Under the newly proposed lump sum rate, the costs for mobilization have been completely ignored.

The discovery deposition of Brian P. Bauer on December 3, 2003 illustrates that the Agency developed its rate for excavation, transportation and disposal without taking into account site-specific factors such as the distance between a site and a landfill or complex excavations. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 44:4, December 2003) It is likely that the Agency did not take into account site-specific factors when developing its rates for purchase, transportation and placement of backfill material. Failure to account for or make adjustments for site location is a gross oversight by the Agency when the distance to a material supplier is the driving factor when calculating the cost of backfilling. As Agency personnel spend little to no time in the field and have no background in business costs, they lack the necessary experience and training to adequately pre-define costs. Trucking, equipment and personnel hours are all completely dependent upon the distance. The number of available trucks can also impact the total cost of transportation and backfill. During peak seasons for road construction and grain hauling, available trucks are few and are at a premium.

The rates have not been adjusted in nine years to account for inflation. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 39:3, December 2003) According to the Gross Domestic Product Implicit Price Deflator for Gross National Product, between 1996 and 2003 inflation should have raised pricing by over 11%. Not only has the Agency failed to account for site-specific factors, they have failed to adjust their backfill rate in nine years. There has been no allowance for inflation, personnel cost increases and raises, higher fuel costs (which dramatically affect trucking and equipment rates), higher vehicle/truck and equipment purchase and repair costs, higher insurance costs (particularly following 9/11/01), higher license and operating/permit fees imposed by the State, etc.

Appendix E contains an excerpt from a 1988 publication from the United States EPA, which states that backfill material cost ranged from $10 to $20 per cubic yard. Grading the backfill added $2.50 to $3.50 per cubic yard to the overall cost. Equipment and transportation costs have increased significantly since 1988.

In lieu of lump sum maximum rates, the Agency should review budgets on a time and materials basis and rely on estimates provided by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

(b)(1) Except as provided in subsection (b)(2) of this Section, the volume of backfill material shall be determined by the following equation using the dimensions of the backfilled excavation: (Excavation Length x Excavation

Width x Excavation Depth) x 1.05. A conversion factor of 1.5 tons per cubic yard shall be used to convert tons to cubic yards.

The Agency's proposed conversion factor of 1.5 tons per cubic yard is nothing more than an attempt to overturn the Pollution Control Board's final decision regarding soil density as was promulgated as amendments to 732 in April 2002. Considerable testimony was filed with regards to appropriate conversion factors and soil density. The Board noted in 732.Appendix C the following:

> ***Site specific information may be used to determine the weight of backfill material if site conditions such as backfill material, soil moisture content, and soil conditions differ significantly from the default values.***
>
> ***BOARD NOTE: The weight of backfill material is calculated by using the default bulk density values listed in TACO regulation at 35 Ill. Adm. Code 742, Appendix C, Table B. The weight of backfill material to be removed is based on a dry bulk density value of 1.8 g/cm^3 for sand and a moisture content of 10 percent which equals 1.98 g/cm^3. The Board has rounded the removed backfill density to 2.0 g/cm^3. The weight of backfill material to be replaced is based on a dry bulk density value of 2.0 g/cm^3 for gravel.***

The Agency is proposing to eliminate the above language, which when converted equates to approximately 1.68 tons per cubic yard, and impose a conversion factor of 1.5 tons per cubic yard. The Agency is attempting to ignore values listed in TACO regulation at 35 Ill. Adm. Code 742, Appendix C, Table B and impose a conversion factor with no scientific basis.

Mr. Harry Chappel, LUST Section Unit Manager, testified that the Agency recently decided to just use one-and-a-half for all soil types. (CW^{3}M Company, Inc. v. Illinois Environmental Protection Agency, Chappel Deposition, 46:2, December 2003) Mr. Chappel commented that the Agency believed that the 1.5 conversion factor was the average of most of the soils in Illinois, however, there was no detailed evaluation conducted for the Agency to justify ignoring 732.Appendix C. The Agency has been operating in violation of 732.Appendix C for some time by simply imposing their own rule and disregarding 732.Appendix C which was developed utilizing scientific data and testimony derived during hearings for the April 2002 amendments to 732.

The conversion rate approved by the Board, 2.0 g/cm^3, should be left as is currently and modified to in this Part and the Agency should be forced to comply with its own regulations.

c) Payment for costs associated with the removal and subsequent return of soil that does not exceed the applicable remediation objectives but whose removal is required in order to conduct corrective action shall not exceed a

total of $6.50 per cubic yard. The volume of soil removed and returned shall be determined by the following equation using the dimensions of the excavation resulting from the removal of the soil: (Excavation Length x Excavation Width x Excavation Depth). A conversion factor of 1.5 tons per cubic yard shall be used to convert tons to cubic yards.

The excavation and removal of soil that is not to be disposed of but is required to be removed to access contaminated soil is a process with limited usefulness and applicability. The process is not exact and can be quite tedious when attempting to segregate contaminated material from clean material, especially when trying to apply a clean up objective rather than a visual or odor indication of contamination. Large buckets on excavating equipment are not designed to "nit pick" through soil for segregation.

The type of excavation and the size or layout of the property being excavated will also have an impact on the feasibility and associated costs for excavation, removal and placement. If a trench is being excavated and the removed soil can simply be placed on one side of the trench and the opposite side is open and available for truck or other equipment activity, placement can be completed relatively inexpensively. However, if the excavating equipment has to walk all the way across a large site to place soil so it will not disrupt the excavation and movement of trucks and other equipment, or if trucks are loaded to move soil to another location on the property out of the way, considerably more costs will be incurred. The exercise of excavating to segregate clean from contaminated soil is tedious and time consuming in and of itself, requiring more effort than is allowed under the Agency's proposed $6.50 per cubic yard rate. The material will also be required to be tested as is it removed and stockpiled. The contractor will have to wait for analytical results to verify contamination levels in the removed soil before it can be moved again and placed back into the excavation.

For the reasons listed above, Section 734.825(c) should be stricken as written; the work, when deemed technically feasible or able to be conducted given site constraints, should be conducted on a time and material basis. The cost estimate should be developed and prepared by a Licensed Professional Engineer or Geologist with the necessary experience and credentials to accurately assess the costs.

732.830 & 734.830 Drum Disposal

Payment for costs associated with the purchase, transportation, and disposal of 55-gallon drums containing waste generated as a result of corrective action (e.g., boring cuttings, water bailed for well development or sampling, hand-bailed free product) shall not exceed the following amounts or a total of $500.00, whichever is greater.

Drum Contents	Maximum Total Amount per Drum
Solid waste	$250.00
Liquid waste	$150.00

The maximum proposed costs for purchase, transportation, and disposal of 55-gallon drums of waste are reasonable for sites located in close proximity to a disposal facility and when numerous drums are being disposed of at one time. However, for sites located in remote areas of the State or where facilities to transport and dispose of the materials are not in close proximity, the maximum lump sum proposed amount is insufficient. When the proposed cost includes the drum itself, transportation and disposal, it will be inadequate for many sites. The drum itself, if purchased individually and is an IDOT-approved drum (required for transportation), will cost approximately $65.00. If the site is located 2 hours from the disposal facility, approximately 4.5-5 hours of truck time will be required to load, secure and transport the waste. At $70.00 per hour for a tandem axle dump truck, licensed for special waste hauling, $350.00 will be incurred for transportation. Most landfills have higher rates for drums than they would for soil on a per yard basis due to the special handling required. The actual disposal would cost $200.00 (Allied Waste March 2004). In order to load the drum into a truck, a backhoe or other equipment and personnel will be required. An hour of backhoe time, at $85.00 per hour with operator, plus mobilization, at the Agency's historic approval rate of $200.00, adds $250.00 to the cost. The alternative to utilizing a backhoe would be to secure trucking from the landfill utilizing a truck with a lifting mechanism especially designed for drums, however, most landfills, especially in southern Illinois, are not equipped with such equipment.

Given this site location and variables, cost to dispose of one drum could exceed $865.00. Obviously, the cost per drum would be significantly less if a large number were being loaded, transported, and disposed of, however, this scenario is for a single drum, which could be the scenario for sites with minimal drilling or sampling activities. Liquid disposal costs could experience the same degree of fluctuation or range of costs dependent upon the location of the site.

For the reasons listed above, Section 734.830 should be stricken as written; the work, when deemed technically feasible or able to be conducted given site constraints, should be conducted on a time and material basis. The cost estimate should be developed and prepared by a Licensed Professional Engineer or Geologist with the necessary experience and credentials to accurately assess the costs.

732.840 & 734.840 Replacement of Concrete, Asphalt, or Paving; Destruction or Dismantling and Reassembly of Above Grade Structures

a) Payment for costs associated with the replacement of concrete, asphalt, or paving shall not exceed the following amounts:

Depth of Replacement Material	Maximum Total Amount per Square Foot
Two inches of asphalt or paving	$1.51

Three inches of asphalt or paving	$1.70
Four inches of concrete, asphalt or paving	$2.18

For depths other than those listed above, the Agency shall determine reasonable maximum payment amounts on a site-specific basis.

The rates provided, taken from the National Construction Estimator, are taken out of context, and are not used correctly. Four inches of concrete or asphalt paving is inadequate for a commercial facility. A more realistic rate, $6.01 per square foot, calculated from the 2004 Edition of the National Construction Estimator, for commercial construction, is presented in Appendix K.

For the reasons listed above, Section 734.830 should be stricken as written; the work, when deemed technically feasible or able to be conducted given site constraints, should be conducted on a time and material basis. The cost estimate should be developed and prepared by a Licensed Professional Engineer or Geologist with the necessary experience and credentials to accurately assess the costs.

b) Payment for costs associated with the destruction or the dismantling and reassembly of above grade structures shall not exceed the time and material amounts set forth in Section 734.850 of this Part. The total cost for the destruction or the dismantling and reassembly of above grade structures shall not exceed $10,000 per site.

The Agency's basis for the $10,000 maximum allowable amount per site for dismantling and reassembly of above grade structures is out-dated and not based upon any real evaluation of costs and lacks support. The Agency has used the $10,000 figure since the early 1990's as a gauge to determine whether or not a structure could be removed. If a building, for example, were valued at less than $10,000, the Agency would allow for its demolition as part of corrective action costs. Historically, once determined eligible for destruction, the Agency would pay for its demolition, removal and disposal on a time and materials basis. In more recent years, for budget approvals, the Agency has translated the structure's worth into a maximum allowable cost for its destruction. Accordingly, there is no real basis for the maximum amount payable for $10,000 per site.

Section 734.840(b) should therefore be re-written to allow for the destruction of above grade structures on a time and material basis, which takes into account the size, building material composition and condition of the structure and the distance required to travel to a permitted disposal facility. The composition of the structure would include evaluating wall and floor materials, a determination of the presence of asbestos-containing material and the weight or density of the material to be disposed of. Special segregation, notification, handling and disposal of asbestos-containing materials are a requirement that cannot be ignored. Varying compositions will have

varying disposal costs as well. The Licensed Professional Engineer or Geologist with experience in evaluation and cost estimating is much better equipped to develop a reasonable projected cost rather than reliance upon an out-dated and improperly used estimate as developed by the Agency. The Agency has attempted to streamline or itemized the costs associated with structure demolition using figures not originally developed for such a purpose.

732.845 & 734.845 Professional Consulting Services

Payment for costs associated with professional consulting services shall not exceed the amounts set forth in this Section. Such costs shall include, but not be limited to, those associated with project planning and oversight; field work, field oversight; travel; per diem; mileage; transportation; and the preparation, review, certification, and submission of all plans, budgets, reports, applications for payment, and other documentation.

a) Early Action and Free Product Removal. Payment of costs for professional consulting services associated with early action and free product removal activities conducted pursuant to Subpart B of this Part shall not exceed the following amounts

1) Payment for costs associated with the preparation for the abandonment of USTs shall not exceed a total of $960.00

In the Agency's attempt to simplify the methods to determine cost reasonableness, they have overlooked the complexities of some sites and the special requirements necessary to complete the work in accordance with regulations and safety requirements. The Agency has not offered how it developed this amount, the number of sites or extremes found at sites, or any other supporting documentation for the Board or the regulatory community to judge the reasonableness of their proposed rate.

For most sites, costs to prepare for UST abandonment or removal should not exceed the proposed amount of $960.00. However, some sites require considerably more effort, plans and designs prior to conducting the work. In April 2001, CW^{3}M conducted an extremely complicated UST removal. (Smoot 99-2755) What was once a very large parcel of land with a gasoline station in the front and a bulk plant operation in back with all USTs servicing both operations located between the two facilities, was divided during a real estate transaction. When dividing the property, the property line was adjusted in and around the USTs segregating those which serviced each facility. While this sounds simple enough, the complication arises as the tanks were not sorted or distributed by facility. Almost every other tank serviced the opposite facility.

CW^{3}M worked with the OSFM to develop and design a removal process that would allow the tanks for the bulk plant to be safely removed while protecting the other tanks, which were active at the station. Detailed engineering drawings and plans were required by the OSFM. To protect the active tanks, one at a time was drained, piping

disconnected and pile was driven around its backfill/bedding perimeter. Once the adjoining bulk plant tank was uncovered, removed, contaminated backfill removed and replaced, the product was restored to the active tank and its system was reassembled for operation. This process continued for each tank until all were completed. A total of seven 12,000-gallon tanks were removed. The OSFM Tank Specialist on site deemed it the most complicated UST removal ever witnessed by their office.

While this type of site and its complexities are not the norm, this situation demonstrates that inflexible maximum lump sum amounts cannot work for every site in Illinois. Therefore, Section 734.845 should be re-written or stricken to allow for circumstances or site-specific cases to be treated fairly and equitably. Owners or operators of sites which do not fit a standard scenario should not be punished or penalized because their site experiences circumstances do not fit the Agency's cookie cutter price-fixing amounts.

2) Payment for costs associated with early action field work and field oversight shall not exceed a total of $500.00 per half-day. The number of half-days shall not exceed the following:

A) If one of more USTs are removed, one half-day plus up to one half-day for each 250 yards, or fraction thereof, of visibly contaminated fill material removed and disposed in accordance with 734.210(f);

Section 734.845(2)(A) should be stricken in its entirety. There is no demonstrated basis for limiting field oversight for professional consulting services to such an outrageous proposed maximum rate. The proposed rate clearly illustrates the Agency's lack of understanding of field activities associated with UST removals and excavation work. The proposed rate does not account for all site variables that dictate the amount of field oversight necessary to safely complete the work while maintaining compliance with current UST regulations (Part 732, proposed Part 734 and 41 Ill. Adm. Code Parts 170 and 172).

To safely and efficiently remove underground storage tanks, the contractor and/or consultant must mobilize all equipment and personnel the day preceding the UST(s) removal. The contractor will need to re-assess the USTs prior to uncovering to determine if any additional liquids have accumulated in the tank(s), as is often the case for leaking tanks particularly at a site with a high water table. The liquids should be removed just prior to venting operations to avoid additional accumulation. Most UST removals are scheduled for the morning or for all day (or multiple days), dependent upon the number of tanks present. The contractor is required to have the site and tanks ready, exposed and ventilating upon the arrival of the OSFM Tank Specialist. The time of arrival of the OSFM Tank Specialist is variable dependent upon how far they must travel to reach the site. Typically, the site is ready early in the morning to be prepared for the OSFM Tank Specialist, as their exact arrival time is not

predetermined. Accordingly, most preparation work is completed on the day prior to the scheduled removal(s).

Several factors affect the cost of mobilization of equipment and personnel to a site for UST removal work. The distance to the site is a primary factor. If the contractor and/or consultant must travel a significant distance, a full day is required to mobilize and ready the site for the next day's removal work. The length of time required for UST removal is also highly variable; major factors contributing to the time required include number of tanks, weather (particularly humidity and temperature), location of tank(s) at facility, tank and piping condition, extent and location of piping, groundwater depth, soil stability, and type and thickness of overburden. These factors were clearly not accounted for by the Agency when developing its maximum allowable oversight rates.

When the site is located in a remote area of the State or the removal contractor has to travel a greater distance to the site, typically, as mentioned above, the contractor will uncover the USTs the day before the scheduled removal and arrive early to the site on the day of the removal to begin venting operations. In this case, overnight stay is required for several individuals.

The time necessary for uncovering the tanks is dependent upon the type and thickness of the overburden. For high and heavy traffic areas, the overburden will consist of reinforced concrete, which requires additional time for destruction and removal. If the water table is very shallow, the excavation may require continuous dewatering in order to access and remove the tanks. If the tanks recently held fresh product, ventilation operations will take longer to achieve the required LEL (Lower Explosive Limit). Several other factors can also complicate activities to achieving the required LEL. These include, but are not limited to, ambient air temperature (the warmer the temperature, the more volatiles are generated in the UST by fuel residues), higher humidity levels, and whether or not the tank was relined and the condition of the lining (fuel residues and vapors can become trapped between the tank and the liner).

The condition of the tank itself will also affect the amount of time to remove it. If the tank has corroded to the extent that it is taking on water (shallow groundwater conditions), continuous pumping activities will be required in order to lift the tank from the excavation. Older tanks may have fittings or lifting lugs that have become corroded requiring alternative measures be developed to safely remove the tank. Long or extended piping trenches will require tedious excavating to expose the piping in its bedding so that the OSFM Tank Specialist can observe the piping in situ and assess soil conditions to determine if the piping contributed to the release. As mentioned above, the piping overburden can, if reinforced concrete, take additional time and effort to remove.

If numerous tanks are located at a facility and all are not within the same bedding or pit, multiple excavations will have to be conducted to expose the tanks, increasing the time and associated costs. If tanks are located in close proximity to a building or other

structure, special excavation precautions will be required to assure that the walls are stable and will not collapse causing damage to neighboring structures. Soil conditions and stability also play a significant role in the safety of an excavation. Severe contamination can erode soil stability properties and must be assessed and guarded against during excavation and tank removal operations. Benching and sloping activities may be necessary and can be applied where sufficient space is available. More aggressive means of slope stability, such as wall supports, cribs or piles, must be applied when there is insufficient space or soil stability cannot be achieved using sloping or benching measures.

Should the removal(s) take an entire day, as they often do, initiation of removal of contaminated fill may or may not occur. Site constraints typically dictate whether the excavation can begin. For sites with limited space, there is often no sufficient room for UST removals, much less room for trucks to access the excavation. For smaller sites, much of the available space is utilized to store the removed overburden (soil, paving or concrete) until it removal from the site, house the removal equipment (air compressors, service trucks, etc.), and space for setting the UST on the surface for cutting and cleaning activities. The required exclusion zone generally prohibits trucks from entering the site until all tanks are removed, cleaned, and inspected. Under these types of conditions, excavation, transportation and disposal may not be able to begin on the day of the tank removals. CW³M has often begun transportation and disposal activities at sites once the removal is over; however, limited quantities of soil can be moved when the activities start later in the day. The scheduling of trucking is difficult until the tanks are at least all vented, at which point it may be too late in the day to secure the trucks.

Given the descriptions above, a minimum of two full days can be necessary to safely remove USTs. Additional days are necessary when there is large number of tanks. The Agency's proposed maximum rate for the excavation and disposal volume of 250 cubic yards also shows a lack of understanding for site variables and the oversight necessary to ensure the work proceeds in accordance with all regulations and professionalism and to ensure samples are collected from required locations and handled properly. The professional must be on site also to make immediate field decisions for circumstances which arise that don't conform to the norm or when certain regulatory requirements cannot be met. For example, a site with an extremely high water table may flood the excavation once the water table is accessed. Once flooded or if a floor is too saturated for proper sampling, the professional will assess the situation and make sure all necessary documentation is collected to present to the Agency to demonstrate the site-specific conditions which prevented the sampling. For this and other reasons, CW³M contends that a professional must be on site at all times when work is in progress. Under the Agency's proposed rate system, the UST program will move back to the Dark Ages and backhoe operators will be collecting samples. It is not their on-site function and they typically lack the education, training, experience and regulatory backgrounds necessary to oversee a job site.

The Agency's proposed rate for oversight does not take into account the number of tanks being removed. An economy of scale factor cannot be applied if only one tank is removed. The necessary equipment utilized during tank removal activities is the same whether there is one tank to remove or multiple. Excavating equipment, site safety equipment, ventilating equipment, grounding systems, etc. will be necessary; the costs, on a daily basis, can be spread out over multiple tanks, however, when only one tank is being removed, all equipment costs must be attributed to a single tank.

For a remote site, the professional is not even afforded sufficient time to drive to the site, much less perform their required work. Twelve to 16-hour days are not uncommon in the field.

With regards to the allowance of one half-day oversight for 250 cubic yards of soil removal, the Agency has not taken into account site-specific factors, which dictate the amount of soil that can reasonably removed in a day.

Site-specific conditions or complexities should also be accommodated for when evaluating reasonable rates for excavation, transportation and disposal. Soil conditions and excavation wall stability can affect the efficiency of an excavation. Should soil properties be present which create wall collapse, sloughing or unsafe conditions, measures must be employed to protect personnel, equipment and surrounding structures. These efforts can disrupt an excavation or at a minimum, increase the costs associated with the excavation by requiring benching, sloping or retaining walls. An OSHA excavation competent person needs to be present to evaluate the excavation. The Agency's proposed professional rates fail to account for these types of field conditions.

The rates have not been adjusted in nine years to account for inflation. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 39:3, December 2003) Not only has the Agency failed to account for site-specific factors, they have failed to adjust the proposed professional rates (except for landfill disposal fees) in nine years. There has been no allowance for inflation, personnel cost increases and raises, higher fuel costs (which dramatically affect trucking and equipment rates), higher vehicle/truck and equipment purchase and repair costs, higher insurance costs (particularly following 9/11/01), higher license and operating/permit fees imposed by the State, etc.

The proposed rate apparently includes mileage, transportation and costs associated with overtime rates and overnight stays and the Agency has failed to make accommodations for these costs as well. Overtime rates are applicable for nonexempt employees as required by the Department of Labor.

Over the past 14 years, CW³M has conducted work experiencing some or all of the factors listed above. The rates and total UST removal costs were found acceptable using time and materials formats or by providing the Agency with the site-specific factors, which affected the total costs. For the reasons mentioned above and because

there is no justification for the Agency's proposed rate, and because the Agency did not factor any site-specific variables into it rate building, this Section should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and relying on estimates provided by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

B) If one of more USTs remain in place, one half-day for every four soil borings, or fraction thereof, drilled pursuant 734.210(h)(2);

While one-half day is sufficient for on-site work to drill four soil borings, the maximum rate clearly does not account for mobilization to the site, travel expenses, and the oversight of UST abandonment work.

The proposed rate does not account for all site variables that dictate the amount of field oversight necessary to safely and properly complete the work while maintaining compliance with current UST regulations (Part 732, proposed Part 734 and 41 Ill. Adm. Code Parts 170 and 172).

The proposed rate does not accommodate for the distance required to travel to the site, the number of tanks being abandoned, the condition of the tanks being abandoned, the location and travel time for the OSFM Tank Specialist and any cleaning of liquid/sludge removal work that is required for abandonment in place. The OSFM requires that a licensed contractor perform UST abandonment and on-site personnel must possess the required licensing to supervise the work.

As site-specific variables have not been evaluated or included in the Agency's proposed maximum oversight rate and because there is no justification for the Agency's proposed rate, Section 734.845(B) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

C) One half-day if a UST line release is repaired.

While one-half day may be sufficient for on-site work to oversee a line release for some sites, the maximum rate clearly does not account for mobilization to the site, travel expenses or the amount of work associated with the repair, such as the length of the piping run and the number of repairs required to restore operation.

The proposed rate does not account for all site variables that dictate the amount of field oversight necessary to safely and properly complete the work while maintaining compliance with current UST regulations (Part 732, proposed Part 734 and 41 Ill.

Adm. Code Parts 170 and 172). Section 734.845(C) does not factor the length of piping to be assessed, sampled and repaired or what type of overburden is present above the lines. Significant amount of time may be necessary to saw cut, excavate and expose a line release, particularly when the exact location is unknown.

The proposed rate does not accommodate for the distance required to travel to the site or the location and travel time for the OSFM Tank Specialist. The OSFM requires that a licensed contractor perform UST line repairs and on-site personnel must possess the required licensing to supervise the work.

As site-specific variables have not been evaluated or included in the Agency's proposed maximum oversight rate and because there is no justification for the Agency's proposed rate, Section 734.845(C) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

3) Payment for costs associated with the preparation and submission of 20-day and 45-day reports, including, but not limited to, field work not covered by subsection (a)(2) of this Section, shall not exceed a total of $4,800.00.

The maximum proposed rate of $4,800.00 for preparation and submission of 20-day and 45-day reports, including fieldwork will be insufficient for many sites. The Agency indicated that it utilized the Consulting Engineers Council of Illinois recommendations to create the rate proposed. (CECI, 2003) The Agency then tried to justify this rate by providing Attachment 12 of the Pre-filed Testimony for the March 15, 2004 hearing. Appendix L of this document provides an in-depth analysis of how the Agency utilized the CECI's recommendation. The rate of $4,800 was based on the number of hours CECI had indicated, however, the Agency failed to add the other site specific and incidental charges associated with completing the required work. The Agency did not provide for inspection what sites were selected for evaluation to determine this rate, therefore, it lacks support to be a catch all rate for early action reporting and field work. While the Agency provided a table illustrating its justification for the rate of $4,800.00, the table itself represents the Agency's flawed approach to rate setting. The Agency utilized negative numbers to calculate an average rate.

As with other proposed rates in this Part, the Agency fails to recognize the individuality of sites and accommodate for costs that may be incurred to meet the technical requirements of this Part. The following examples are situations CW^{3}M has encountered when conducting early action work that can affect the total cost for compliance. Should the early action period be extended to allow for sufficient time to schedule and conduct UST removals, excavation and disposal, sampling with time to obtain all necessary/required supporting documentation, a second or addendum to the 45-day report will be prepared and submitted to the Agency. It will contain updated

information, documentation of UST removals, excavation, disposal, backfilling, liquid disposal, groundwater conditions and excavation sample results. Under the proposed lump sum rate, there is an insufficient amount of data available to provide the additional information.

To properly prepare the 45-day report and assess the UST site, a site visit is necessary. During such visit, the site, utilities and tanks will be mapped, the USTs will be inspected to determine if there is product or liquid requiring immediate removal, the area surrounding the site will be assessed for potential impacts, use of surrounding property and to determine any site constraints that may hinder or cause difficulty during UST removals or excavation. Sampling activities may also be conducted during this site visit. When a site is not located in immediate proximity to the professional, they will be required to travel to and from the site, in addition to performing the on-site work. For very remote sites, such as Cairo, Illinois, the professionals could easily have a 12-hour day to travel to and from the site and complete the necessary work. This one activity could consume one-quarter to one-third of the available maximum lump sum amount to complete, leaving very little to complete the required reports and any necessary additional visits.

On some occasions, CW³M has conducted work at sites where the property is not owned by the UST owner or operator. On-site access agreements are then required. Additional coordination efforts must take place to inform the property owner and conduct the work in a manner that does not reasonably interfere with the owner's use of the property. CW³M has also encountered sites where the tanks are partially located on adjoining or off-site properties. In this type of situation, access agreements must be secured from this property owner prior to proceeding with the work. Additional efforts are necessary to coordinate activities with the landowner and provide them with reports documenting the work completed.

As site-specific variables have not been evaluated or included in the Agency's proposed maximum oversight rate and because there is no justification for the Agency's proposed rate, Section 734.845(3) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

5) Payment for costs associated with the field work and field oversight for free product removal shall not exceed a total of $500.00 per half-day. The Agency shall determine the reasonable number of half-days on a site-specific basis.

That the Agency proposes to determine the number of half-days necessary for free product removal field work and oversight in and of itself implies that site-specific factors may be present which will dictate the time needed to complete the work.

The Agency has attempted to oversimplify the costs associated with free product or groundwater removal and disposal. Facilities capable of water/product separation, reclamation and/or disposal are scarce and are not immediately available to most UST owners or operators. Oversight time may be extended if the liquids cannot be transported to a permitted facility located in close proximity to the site. The method of free product recovery and the type of subsurface material will affect the rate at which free product is recovered for removal from the site. For example, large diameter wells or sumps located in a recovery trench will produce recoverable free product more quickly than a standard size monitoring well. The rate of recovery in a well or sump is dictated by the type of geology present at the site or the type of materials utilized in a recovery trench. Sites with very sandy material will take less time to recover after pumping than sites with materials of a lower hydraulic conductivity. The professional will be required to monitor and assist in the removal activities. Additional time is incurred when recovery is slower.

Also, the professional will be required to make arrangements, contact various licensed disposal and transportation contractors, complete authorization activities, potentially pre-sample the liquids and schedule the work. The professional will be required to travel to and from the site to oversee the work. For a remote site, the professional is not even afforded sufficient time to drive to the site, much less perform their required work.

If the proposed rates are adopted by the Board, UST owners or operators will be forced to minimize or not conduct free product removal activities or be stuck with costs that will not be eligible for reimbursement, even though the costs are clearly eligible corrective action costs for which the Fund was designed to reimburse owners and operators. The Agency's proposal will have a severe impact on tank owners or operators with limited resources if reimbursement cannot be obtained. The proposed maximum costs will ultimately lead to reduced protection of the environment and violations of the Act and this Part.

As site-specific variables have not been evaluated or included in the Agency's proposed maximum oversight rate and because there is no justification for the Agency's proposed rate, Section 734.845(5) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

7) Payment for costs associated with the preparation and submission of reports submitted pursuant to Section 734.210(h)(3) of this Part shall not exceed a total of $500.00.

Section 734.210(h)(3) requires submittal of a report 30 days following completion of early action activities demonstrating compliance with the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742. The report requires a characterization

of the site and assembly of supporting documentation including analytical results, maps, and comparison of on-site data to the Tier 1 remediation objectives. The preparation, assembly, review, certification and submittal of this report for a meager $500.00 is absurd and lacks any real evaluation of the effort necessary to create the report or any site-specific factors that affect the total cost. The number of samples being evaluated and reported and drafted on maps will dictate the time required for the professional to complete the task.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(a)(7) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

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b) Site Evaluation and Classification. Payment of costs for professional consulting services associated with site evaluation and classification activities conducted pursuant to Subpart C of this Part shall not exceed the following amounts:

1) For site evaluation and classifications conducted pursuant to Section 732.307 of this Part, payment for costs associated with the preparation and submission of site classification plans, site classification preparation, field work, field oversight, and the preparation and submission of the site classification completion report shall not exceed a total of $9,870.00.

The Agency's attempt to simplify and quantify a lump sum rate for site classification activities fails to recognize two key factors: the extent of field work to be conducted in the field (i.e., number of borings and/or monitoring wells) and the distance to the site for the professional. If monitoring wells are installed, a minimum of two trips is required. The first trip includes the drilling and well installation. During the first trip, the well(s) will be developed, if production occurs during the timeframe personnel are on site. The second trip is needed to measure the static depth to groundwater, conduct a slug test, purge and sample the well(s) and survey the surface elevation of each well. If the well(s) do not produce during the day of drilling, a third trip may be required to develop the wells prior to conducting sampling and slug testing activities as development must occur prior to well sampling and slug testing and development cannot occur on the same day as slug testing because it can result in inaccurate field data. Both primary trips require two professional staff be on site to conduct the work properly and in accordance with OSHA requirements (29 CFR Part 1910). If the well configuration does not result in groundwater elevations of one monitoring well upgradient and three downgradient, additional drilling could be required, creating the need for additional field time for the professional.

While most of the site classification criteria is fairly standardized, site-specific factors can cause higher costs to be legitimately incurred. In addition to the field work mentioned above, if the professionals are required to travel a significant distance to reach the site, additional time will be spent traveling and mobilizing to the site and may even require an overnight stay, depending on the extent of work to be completed. Travel expenses themselves will be higher. The proposed rate of $9,870.00 is significantly less than the previous standard amount allotted by the IEPA of $13,400.00, which could be adjusted if additional field work was necessary.

The Agency failed to provide the back-up or supporting documentation for its table presented in Attachment 13 of the March 15, hearing Pre-filed Testimony. Without such documentation, the selection criteria, data entry and evaluation cannot be adequately assessed. CW³M questions why the Agency used merely an average rather than an average plus one standard deviation as it did with some other rates, automatically determining that 50% of the sites will fall out of the range of reasonable. Also, from what timeframe was the work conducted? How did the Agency select these sites?

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 732.845(b)(1) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

c) Low Priority Corrective Action. Payment of costs for professional consulting services associated with low priority corrective action activities conducted pursuant to Subpart D of this Part shall not exceed the following amounts:

2) Payment of costs associated with low priority groundwater monitoring field work and field oversight shall not exceed a total of $500.00 per half-day, up to a maximum of seven half-days.

The Agency failed to provide the back-up or supporting documentation for how it determined that 5 hours for only one person is sufficient for low priority monitoring of all sites in Illinois. The Agency's lump sum rate fails to recognize two key factors: the extent of field work to be conducted in the field (i.e., number of wells to be measured, purged and sampled) and the distance to the site for the professional. The lump sum rate also fails to accommodate circumstances that may be encountered during the three-year monitoring period, such as insufficient groundwater for sampling (which could require a return trip to attempt to retrieve a sample) or sample verification for exceedences (as is often requested by Agency project managers). This rate, as well as the reporting rates are less than the rates previously allotted by the Agency to conduct low priority corrective action.

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d) Site Investigation: payment of costs for professional consulting services associated with site investigation activities conducted pursuant to Subpart C of this Part shall not exceed the following amounts:

1) Payment for costs associated with Stage 1 site investigation preparation shall not exceed a total of $1,600.00.

The Agency's attempt to simplify and quantify a lump sum rate for Stage 1 investigation preparation activities fails to recognize site-specific factors of the first round of investigation. The extent of field work to be conducted in Stage 1 (i.e., number of borings and/or monitoring wells) will be dictated by the number of USTs that were located at the site, the number of tank beds which housed the USTs and the number of samples collected during early action (from UST excavations and from along product lines). The costs to prepare drilling and field plans and to conduct other preparations will be dictated by the extent of drilling necessary to meet the requirements of 734.315.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(1) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

2) Payment for costs associated with Stage 1 field work and field oversight shall not exceed $500.00 per half-day. The number of half-days shall not exceed the following:

A) On half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 1 site investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed shall be included in subsection (b)(2)(B) of this Section instead of this subsection (b)(2)(A); and

B) One half-day for each monitoring well installed as part of the Stage 1 site investigation.

The Agency's attempt to simplify and quantify a lump sum rate for Stage 1 investigation preparation activities fails to recognize two key factors: the extent of field work to be conducted in Stage 1 (i.e., number of borings and/or monitoring wells) and the distance to the site for the professional. If monitoring wells are installed, a

minimum of two trips is required. The first trip includes the drilling and well installation. During the first trip, the well(s) will be developed, if production occurs during the timeframe personnel are on site. The second trip is needed to measure the static depth to groundwater, conduct a slug test, purge and sample the well(s) and survey the surface elevation of each well. If the well(s) do not produce during the day of drilling, a third trip may be required to develop the wells prior to conducting sampling and slug testing activities as development must occur prior to well sampling and slug testing and development cannot occur on the same day as slug testing because it can result in inaccurate field data. Both primary trips require two professional staff be on site to conduct the work properly and in accordance with OSHA requirements (29 CFR Part 1910).

The cost per boring or well is less when there are numerous wells or borings and higher when there are only one or a few. The smaller number of borings or wells to be drilled loses the economy of scale battle. The oversight time, especially when significant travel time is require, along with field equipment and supplies, is significantly higher per unit, as there are fewer units for which to spread out the costs. These factors have not been accounted for in the lump sum half-day rate scheme proposed by the Agency.

If the professionals are required to travel a significant distance to reach the site, additional time will be spent traveling and mobilizing to the site and may even require an overnight stay, depending on the extent of work to be completed. Travel expenses themselves will be higher. CW^{3}M has several sites in the Cairo, Illinois area. Travel to these sites is four hours one way. To conduct work at a site, assuming a workload that would require eight hours, a sixteen-hour day would be necessary to complete the first visit of the Stage 1 investigation.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(2)(A) and 734.845(b)(2)(B) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

3) Payment for costs associated with the preparation and submission of Stage 2 site investigation plans shall not exceed a total of $3,200.00.

The Agency's attempt to simplify and quantify a lump sum rate for Stage 2 investigation plans fails to recognize two key factors: the extent of field work which was conducted during Stage 1 and the amount proposed to be conducted during Stage 2, or potentially conducted (i.e., number of borings and/or monitoring wells). In order to prepare a plan to conduct the second stage of the investigation, the plan should

include the results of the Stage 1 investigation. The extensiveness of the Stage 1 investigation will determine the cost of the preparation of the Stage 2 investigation plan.

The extent of field work conducted in Stage 1 (i.e., number of borings and/or monitoring wells) was dictated by the number of USTs that were located at the site, the number of tank beds which housed the USTs and the number of samples collected during early action (from UST excavations and from along product lines). Therefore, the costs to prepare boring logs, Well Completion Reports, review/assess analytical results and assemble and summarize the results in a report to the Agency will correlate directly to the amount of work conducted and proposed to be conducted. For example, it will require more personnel hours to prepare fifteen boring logs than it to prepare four borings logs, etc.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(3) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

4) Payment for costs associated with Stage 2 field work and field oversight shall not exceed $500.00 per half-day. The number of half-days shall not exceed the following.

   A) One half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 2 site investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed shall be included in subsection (b)(3)(B) of this Section instead of this subsection (b)(3)(A); and

   B) One half-day for each monitoring well installed as part of the Stage 2 site investigation

The Agency's attempt to simplify and quantify a lump sum rate for Stage 2 investigation activities fails to recognize three key factors: the extent of field work to be conducted, or potentially conducted, in Stage 2 (i.e., number of borings and/or monitoring wells), and the distance to the site for the professional. If monitoring wells are installed, a minimum of two trips is required. The first trip includes the drilling and well installation. During the first trip, the well(s) will be developed, if production occurs during the timeframe personnel are on site. The second trip is needed to measure the static depth to groundwater, conduct a slug test, purge and sample the well(s) and survey the surface elevation of each well. If the well(s) do not produce

during the day of drilling, a third trip may be required to develop the wells prior to conducting sampling and slug testing activities as development must occur prior to well sampling and slug testing and development cannot occur on the same day as slug testing because it can result in inaccurate field data. Both primary trips require two professional staff be on site to conduct the work properly and in accordance with OSHA requirements (29 CFR Part 1910).

The cost per boring or well is less when there are numerous wells or borings and higher when there are only one or a few. The smaller number of borings or wells to be drilled loses the economy of scale battle. The oversight time, especially when significant travel time is required, along with field equipment and supplies, is significantly higher per unit, as there are fewer units for which to spread out the costs. These factors have not been accounted for in the lump sum half-day rate scheme proposed by the Agency.

If the professionals are required to travel a significant distance to reach the site, additional time will be spent traveling and mobilizing to the site and may even require an overnight stay, depending on the extent of work to be completed. Travel expenses themselves will be higher. CW^3M has several sites in the Cairo, Illinois area. Travel to these sites is four hours one way. To conduct work at a site, assuming a workload that would require eight hours, a sixteen-hour day would be necessary to complete the first visit of the Stage 2 investigation.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(4)(A) 734.845(b)(4)(B) and should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

5) Payment for costs associated with the preparation and submission of Stage 3 site investigation plans shall not exceed a total of $3,200.00

The Agency's attempt to simplify and quantify a lump sum rate for Stage 3 investigation plans fails to recognize three key factors: the extent of field work which was conducted during Stage 2, the amount proposed to be conducted during Stage 3, or potentially conducted (i.e., number of borings and/or monitoring wells) and the extent or number of potentially affected off-site properties. In order to prepare a plan to conduct the third stage of the investigation, the plan should include the results of the Stage 2 investigation. The extensiveness of the Stage 2 investigation will determine the cost of the preparation of the Stage 3 investigation plan.

The extent of field work conducted in Stages 2 and 3 (i.e., number of borings and/or monitoring wells) was dictated by the findings of Stage 1 and 2, respectively. Therefore, the costs to prepare boring logs, Well Completion Reports, review/assess analytical results and assemble and summarize the results in a report to the Agency will correlate directly to the amount of work conducted and proposed to be conducted. For example, it will require more personnel hours to prepare fifteen boring logs than it to prepare four borings logs, etc.

The factors, which affect the cost of conducting additional off-site investigations, include the number of potentially affected properties, the number of owners of such properties, the number of requests, which will be required to secure access or a denial of access, and the amount of time spent negotiating access and access agreements. Additional off-site investigations would be required if the results of the first round of off-site investigations did not define the extent of contamination and additional drilling would be necessary to define the plume off-site. The current use of the property may prompt owners to request special considerations as conditions of access.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(5) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

6) Payment for costs associated with Stage 3 field work and field oversight shall no exceed $500.00 per half-day. The number of half-days shall not exceed the following:

A) One half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 3 investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed shall be included in subsection (b)(6)(B) of this Section instead of this subsection (b)(6)(A); and

B) One half-day for each monitoring well installed as part of the Stage 3 site investigation.

The Agency's attempt to simplify and quantify a lump sum rate for Stage 3 investigation activities fails to recognize three key factors: the extent of field work to be conducted, or potentially conducted, in Stage 3 (i.e., number of borings and/or monitoring wells) the extent or number of potentially affected off-site properties, and the distance to the site for the professional. If monitoring wells are installed, a minimum of two trips is required. The first trip includes the drilling and well installation. During the first trip, the well(s) will be developed, if production occurs

during the timeframe personnel are on site. The second trip is needed to measure the static depth to groundwater, conduct a slug test, purge and sample the well(s) and survey the surface elevation of each well. If the well(s) do not produce during the day of drilling, a third trip may be required to develop the wells prior to conducting sampling and slug testing activities as development must occur prior to well sampling and slug testing and development cannot occur on the same day as slug testing because it can result in accurate field data. The amount of time necessary to conduct pumping or slug tests is highly variable and totally dependent on the hydraulic conductivity of the unit(s) being tested. Given the costs constraints proposed by the Agency, the professional cannot accurately conduct the test and be provided full compensation. Both primary trips require two professional staff be on site to conduct the work properly and in accordance with OSHA requirements (29 CFR Part 1910).

The cost per boring or well is less when there are numerous wells or borings and higher when there are only one or a few. The smaller number of borings or wells to be drilled loses the economy of scale battle. The oversight time, especially when significant travel time is require, along with field equipment and supplies, is significantly higher per unit, as there are fewer units for which to spread out the costs. These factors have not been accounted for in the lump sum half-day rate scheme proposed by the Agency.

The factors, which affect the cost of preparing for and conducting off-site investigations, include the number of potentially affected properties and the number of owners of such properties. The current use of the property may prompt owners to request special considerations as conditions of access. The professional will be required to make arrangements if advance with the off-site property owners and potentially alternate drilling dates or times to accommodate the use of the property so as to minimize disruption to use of the property.

If the professionals are required to travel a significant distance to reach the site, additional time will be spent traveling and mobilizing to the site and may even require an overnight stay, depending on the extent of work to be completed. Travel expenses themselves will be higher. CW^3M has several sites in the Cairo, Illinois area. Travel to these sites is four hours one way. To conduct work at a site, assuming a workload that would require eight hours, a sixteen-hour day would be necessary to complete the first visit of the Stage 3 investigation.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(b)(6)(A) and 734.845(b)(6)(B) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

7) Payment for costs associated with the preparation and submission of investigation completion reports shall not exceed a total of $1,600.00.

The Agency's arbitrary proposed cost for preparation and submission of investigation completion reports lacks accountability for site-specific variables, which dictate the amount of time necessary to conduct this task. As mentioned above with regards to costs associated with plan development, the amount of or extent of investigation work conducted will drive the costs to prepare completion reports. The amount of analytical data that must be evaluated and reported, the number of boring logs and Well Completion Reports, the amount of drafting to illustrate boring and monitoring well locations, etc. are all components of the site investigation completion report and will be variable from site to site.

Once aspect of the site investigation process that the Agency failed to acknowledge is providing reports to off-site property owners if off-site investigations are conducted. Each property owner is entitled to a detailed report documenting the findings. CW^{3}M has conducted off-site investigations that have included numerous properties, up to eight or ten. To evaluate and report a significant amount of data and include reports to property owners, can drastically affect the costs.

For these reasons and because there is no justification for the Agency's proposed rate, Section 734.845(b)(7) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations

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e) Corrective Action. Payment of costs for professional consulting services associated with corrective action conducted pursuant to Subpart C of this Part shall not exceed the following amounts:

1) For conventional technology, payment for costs associated with the preparation and submission of corrective action plans shall not exceed a total of $5,120.00. For alternative technologies, payment for costs shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 734.850 of this Part.

Development of corrective action plans for conventional technologies sounds simplistic, however, site variables and complexities can affect the amount of time necessary to develop a plan suitable to a site. If contamination at a site is contained and is minimal, developing a plan can be fairly simple. However, if contamination is widespread, contamination or indicator parameters are heterogeneous, off-site properties have been impacted, specific migratory pathways have complicated the

spread of contamination, etc. and development of corrective action plans may be more design and labor-intensive. Prior to developing the corrective action plan, the professional shall be required to evaluate the site against the available remediation methods while taking into account the current and future uses of the property and selecting the most feasible option that is compatible with the owner's or operator's plans for the facility. If off-site contamination is present, the professional will be required to make the same evaluation for each affected off-site property. Based upon the property owner's wishes or demands, the types of selected remediation may vary for each property.

CW^3M has considerable experience developing corrective action plans. Another factor that drives costs for plan development is the Agency's project manager assigned to the site. When project managers inflect their own personal wishes or their own "rules" onto a project, the consultant can experience considerable additional costs to develop plans. CW^3M recently experienced such a situation. Long after the project manager had approved the site investigation and deemed the plume defined, he rejected a corrective action plan and required additional investigation. In this type of scenario, the only alternatives are to appeal the denial or conduct the work, write another plan and not be compensated for the work. With an arbitrary lump sum maximum rate for corrective action plan development, the IEPA project manager cannot even authorize additional funds when they feel it is justified and the expenses were incurred at their direction or because of their own errors.

Section 732.845 also completely ignored the costs to conduct a site investigation to determine the extent of contamination for a high priority site, similar to the costs proposed for 734 sites. Common practice has been to complete the investigation following the classification of the site, including the off-site investigation, if needed, and include all costs associated with the investigation and site assessment report(s) within the budget for the corrective action plan. Under the proposed changes to 732, this entire step in the process has been omitted. During the March 15, 2004 hearing, questions were raised regarding this issue. Mr. Doug Clay suggested opting in to 734 at this juncture. However, the owner or operator should be afforded the opportunity to continue under 732 if they so choose and should be afforded the proper regulatory provisions to do so; if not why amend 732 at all.

The Agency's proposed maximum rate does not allow for variations in the level of work required to prepare a plan that addressees all of the potential site-specific requirements. For these reasons and because there is no justification for the Agency's proposed rate, Section 734.845(c) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and the Agency should rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations

2) Payment for costs associated with corrective action field work and field oversight shall not exceed the following amounts:

A) For conventional technology, a total of $500.00 per half-day, not to exceed one half-day for each 250 cubic yards, or fraction thereof, of soil removed and disposed.

The Agency's proposed maximum rate for the excavation and disposal volume of 250 cubic yards also shows a lack of understanding for site variables and the oversight necessary to ensure the work proceeds in accordance with all regulations, the approved corrective action plan, and to ensure samples are collected from required locations and handled properly. The professional on site also is required to make immediate field decisions for circumstances which arise that don't conform to the norm or when certain regulatory requirements cannot be met. For example, a site with an extremely high water table may flood the excavation once the water table is accessed. Once flooded or if a floor is too saturated for proper sampling, the professional will assess the situation and make sure all necessary documentation is collected to present to the Agency to demonstrate the site-specific conditions which prevented the sampling. The professional may develop a field plan for handling or removal of recovered groundwater. For this and other reasons, CW³M contends that a professional must be on site at all times when work is in progress.

The Agency's proposed rate for oversight does not take into account the size of the excavation. An economy of scale factor for on-site equipment (such as site safety, barricades, fencing, etc.) cannot be benefited from for a small excavation. The equipment is required to safely perform the work, however, there has been no allowance for it at the site.

The professional will be required to make arrangements, contact various licensed disposal facilities, trucking companies, materials suppliers, complete disposal applications for disposal authorization, and potentially pre-sample the materials to be disposed of for waste characterization analysis. The professional will be required to travel to and from the site to oversee the work. For a remote site, the professional is not even afforded sufficient time to drive to the site, much less perform their required work.

With regards to the allowance of one half-day oversight for 250 cubic yards of soil removal, the Agency has not taken into account site-specific factors, which dictate the amount of soil that can reasonably removed in a day.

The discovery deposition of Brian P. Bauer on December 3, 2003 illustrates that the Agency developed its rate for excavation, transportation and disposal without taking into account site-specific factors such as the distance between a site and a landfill or complex excavations. (CW³M v. IEPA, Bauer Deposition, p. 44, December 2003) As discussed above, the time it takes for trucks to go to and from the landfill can impact

the time it takes to excavate a tank and surrounding material, which impacts how long the professional must be onsite.

Site-specific conditions or complexities should also be accommodated for when evaluating reasonable rates for excavation, transportation and disposal. Soil conditions and excavation wall stability can affect the efficiency of an excavation. Should soil properties be present which create wall collapse, sloughing or unsafe conditions, measures must be employed to protect personnel, equipment and surrounding structures. These efforts can disrupt an excavation or at a minimum, increase the costs associated with the excavation by requiring benching, sloping or retaining walls. A trained professional is required to assess these types of situations and develop field implementation plans to remedy the problem and safely complete the corrective action work. The Agency has failed to account for these types of field conditions.

The rates have not been adjusted in nine years to account for inflation. (CW³M Company, Inc. v. Illinois Environmental Protection Agency, Bauer Deposition, 39:3, December 2003) Not only has the Agency failed to account for site-specific factors, they have failed to adjust their rate (except for landfill disposal fees) in nine years. There has been no allowance for inflation, personnel cost increases and raises, higher fuel costs (which dramatically affect trucking and equipment rates), higher vehicle/truck and equipment purchase and repair costs, higher insurance costs (particularly following 9/11/01), higher license and operating/permit fees imposed by the State, etc.

If recovery trenches are excavated, the only method for billing is the cubic yard rate proposed by the Agency 734.825(a). However, excavation, transportation and disposal are only ancillary factors in trench excavations. Because excavation, transportation and disposal are components of the trench installation, it is unclear whether or not trench installation/recovery system installation is considered a conventional or alternative technology. Recent conversations and decisions by the Agency indicate they view the costs to excavate and install a recovery trench should be the same as conventional costs to conduct excavation and disposal activities. Given the current regulations and corrective action plan development procedures, trench or recovery system installation is not an alternative technology. Section 734.815 requires that the costs associated with free product or groundwater "systems" be submitted for approval on a time and materials basis, however, the installation of the recovery system, not the treatment "system", is not addressed and is left out. The recovery trench is a more carefully controlled excavation, which is measured to more precise dimensions and walls controlled for installation of large-diameter recovery sumps. Sloughing and wall cave-ins are carefully controlled, often with trench boxes, for safety as well as to control the type of backfill material surrounding the sumps, which is typically septic gravel (2" washed rock or higher). The recovery sumps must be installed level, which required control of the floor's surface. The floor surface and sumps are surveyed during construction to ensure grade and slope for recovery. These steps are typically not necessary if soil is being excavated for strictly disposal. If recovery systems are

installed, recovery transfer lines and discharge lines are usually installed following the excavation, but prior to final fill and grade work for restoration to avoid multiple disruptions and movement of materials. Personnel oversight for this type of work clearly cannot be included in the 250 cubic yard per day rate.

The proposed rate apparently includes mileage, transportation and costs associated with overnight stays and has not made accommodations for these cost either.

Over the past 14 years, CW³M has conducted work experiencing some or all of the factors listed above. The rates for oversight have been acceptable using time and materials formats or by providing the Agency with the site-specific factors, which affected the total costs.

The Agency's proposed maximum field oversight rate does not allow the professional to adequately or responsibly oversee the work required to meet the specifications required in the corrective action plan. The proposed rate does not address any potential site-specific requirements, including the details of the corrective action plan or the site's location. For these reasons and because there is no justification for the Agency's proposed rate, Section 734.845(c)(2)(A) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and relying on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations

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3) Payment for costs associated with the development of remediation objectives other than Tier 1 remediation objectives pursuant to 35 Ill. Adm. Code 742 shall not exceed a total of $800.00.

The proposed rate does not address any potential site-specific requirements and the Agency also did not allow for costs of field activities associated with data collection needed for development of alternative remediation objectives. For these reasons, Section 732.845(3) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and relying on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

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3) Payment for costs associated with Environmental Land Use Controls and highway Authority Agreements used as institutional controls pursuant to 35 Ill. Adm. Code 742 shall not exceed $800.00 per Environmental Land Use Control or Highway Authority Agreement.

The costs incurred to develop and secure Highway Authority Agreements with the Illinois Department of Transportation are relatively low and predictable as the process is defined and requires little negotiation or modifications. However, securing Highway

Authority Agreements with other entities, such as villages, cities, or counties is less predictable, particularly when the entity has no prior experience entering into such an agreement. Considerably more time is spent explaining the process and negotiating the Agreement to the satisfaction of both parties. Development of Environmental Land Use Controls is even more unpredictable as the agreements are often with private property owners or individuals with no knowledge of the process or the legal requirements.

The Agency's proposed maximum rate does not allow the professional to adequately or responsibly prepare the documents and conduct the work required to meet the specifications required for each type of agreement. The proposed rate does not address any potential site-specific requirements and there is no justification for the Agency's proposed rate. For these reasons, Section 734.845(3) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and relying on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

f) Development of Tier 2 or Tier 3 Remediation Objectives. Payment of costs for professional consulting services associated with the development of Tier 2 or Tier 3 remediation objectives in accordance with 35 Ill. Adm. Code 742 shall not exceed the following amounts

1) Payment for costs associated with field work and field oversight for the development of remediation objectives shall not exceed $500.00 per half-day. The number of half-days shall not exceed the following:

A) One half-day for every four soil borings, or fraction thereof, drilled solely for the purpose of developing remediation objectives. Borings in which monitoring wells are installed shall be included in subsection (d)(1)(B) of this Section instead of this subsection (d)(1)(A); and

B) One half-day for each monitoring well, installed solely for the purpose of developing remediation objectives.

As with the maximum lump sum costs proposed by the Agency in Section 734.845 (b), the Agency's attempt to simplify rate structure for drilling and sampling activities fails to recognize key factors: the extent of field work to be conducted (i.e., number of borings and/or monitoring wells) and the distance to the site for the professional. If monitoring wells are installed, a minimum of two trips is required. The first trip includes the drilling and well installation. During the first trip, the well(s) will be

developed, if production occurs during the timeframe personnel are on site. The second trip is needed to measure the static depth to groundwater and to conduct a slug test or a pump test. If the well(s) do not produce during the day of drilling, a third trip may be required to develop the wells prior to conducting hydraulic conductivity testing activities as development must occur prior to testing and development cannot occur on the same day as testing because it can result in accurate field data. The amount of time necessary to conduct pumping or slug tests is highly variable and totally dependent on the hydraulic conductivity of the unit(s) being tested. Given the costs constraints proposed by the Agency, the professional cannot accurately conduct the test and be provided full compensation. Both primary trips require two professional staff be on site to conduct the work properly and in accordance with OSHA requirements (29 CFR Part 1910).

The cost per boring or well is less when there are numerous wells or borings and higher when there are only one or a few. The smaller number of borings or wells to be drilled loses the economy of scale battle. The oversight time, especially when significant travel time is required, along with field equipment and supplies, is significantly higher per unit, as there are fewer units for which to spread out the costs. These factors have not been accounted for in the lump sum half-day rate scheme proposed by the Agency.

If the professionals are required to travel a significant distance to reach the site, additional time will be spent traveling and mobilizing to the site and may even require an overnight stay, depending on the extent of work to be completed. Travel expenses themselves will be higher. CW^3M has several sites in the Cairo, Illinois area. Travel to these sites is four hours one way. To conduct work at a site, assuming a workload that would require eight hours, a sixteen-hour day would be necessary to complete the first visit.

As site-specific variables have not been evaluated or included in the Agency's proposed report rate and because there is no justification for the Agency's proposed rate, Section 734.845(d) should be stricken and reasonable costs should be determined on a time and material basis by the professional overseeing the work and rely on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

2) Excluding costs set forth in subsection (d)(1) of this Section, payment for costs associated with the development of Tier 2 or Tier 3 remediation objectives shall not exceed a total of $800.00.

The proposed rate does not address any potential site-specific requirements and there is no justification for the Agency's proposed rate. For these reasons, Section 734.845(3) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and rely on costs provided by and

certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

4) ~~5)~~ Payment for costs associated with the preparation and submission of corrective action completion reports shall not exceed a total of $5,120.00.

It is assumed that the Agency's March 5, 2004 pre-filed testimony, changes were made to Section 734.845(c); in doing so, the previously included 734.845(c)(5) was omitted in the revised 734.845(c).

As with the site-specific costs associated with corrective action plan development for either a conventional or an alternative technology, the costs to develop the corrective action completion report can also be highly variable. When developing a corrective action completion report, the extent and type of the corrective action will dictate the level of reporting necessary for the corrective action completion report. The sampling requirements of the completed corrective will also affect the amount of time and level of reporting for the completion report. Alternative technologies often involve significantly more soil and/or groundwater sampling, thus increasing the time and effort of preparing the data within the completion report. If off-site remediation is conducted, additional reporting and supporting or backup documentation may be required.

The proposed rate does not address any potential site-specific requirements and there is no justification for the Agency's proposed rate. The Agency provided no basis as to how they developed this rate. For these reasons, Section 734.845(4) should be stricken and reasonable costs should be determined on a time and materials basis by the professional overseeing the work and relying on costs provided by and certified by Licensed Professional Engineers and Geologists who are regulated by the Department of Professional Regulations.

732.850 & 734.850 Payment on Time and Materials

This Section sets forth the maximum amounts that may be paid when payment is allowed on a time and material basis.

a) Payment for costs associated with activities that have a maximum payment amount set forth in other sections of this Subpart H (e.g. sample handling and analysis, drilling, well installation and abandonment, drum disposal, or consulting fees for plans, field work, field oversight, and reports) shall not exceed the amounts set forth in those Sections, unless payment is made pursuant to Section 734.855 of this Part.

c) Maximum payments amounts for costs associated with activities that do not have a maximum payment amount set forth in other sections of this Subpart H shall be determined by the Agency on a site-specific basis, provided, however, that personnel costs shall not exceed the amounts set forth in Section 734.Appendix E of this Part. Personnel costs shall be based upon the work being performed, regardless of the title of the person performing the work. Owners and Operators seeking payment shall demonstrate to the Agency that the amounts sought are reasonable.

BOARD NOTE: Alternative technology costs in excess of the costs of conventional technology are ineligible for payment from the Fund. See Sections 734.340(b) and 734.630(z) of this Part.

CW^3M contends that the professional, either a Licensed Professional Engineer or a Licensed Professional Geologist is best suited to make a determination for the personnel necessary to perform any given task under this Part. Dependent upon site-specific issues, the level of experience or knowledge should dictate which personnel conduct certain tasks.

Nowhere in Section 734, does the Agency attempt to define what personnel should conduct what type of work. CW^3M agrees that the Agency should not specifically define these roles. The professional conducting the work should assign tasks based upon knowledge, experience, training and education.

Further, limiting consultants by predetermining the types of tasks appropriate for each personnel title is highly discriminatory to smaller consulting firms. If the Licensed Professional Engineer or Geologist is limited to conducting only very limited activities and a firm is forced to hire other personnel to make the categories match the Agency's, they are forced to incur overhead expenses which cannot be used to generate revenue (paying licensed professionals full salary when only small portions of their time can be billable). Limiting the professional's role in corrective action activities also places the entire program's integrity at risk. The Agency's proposed average rates and personnel limitations will lead to forcing consultants to utilize unqualified or lower paid personnel to conduct the work with no oversight or assistance.

With regards to the Board Note, the new limitations on the costs for conventional technologies will not match real world costs. IEPA is attempting to lower conventional technology costs below market conditions and as a result, it becomes more unlikely that alternative technologies can be tested and implemented at or below the costs of conventional technologies. Such actions could lead to the demise of alternative technologies. Proven technologies may not be able to be utilized and emerging technologies will be halted because their field demonstrations cannot be approved with the resource limitations. It should also be pointed out that no conventional technology is included for groundwater remediation.

732.855 & 734.855 Unusual or Extraordinary Expenses

If an owner or operator incurs unusual or extraordinary expenses that cause costs eligible for payment to substantially exceed the amounts set forth in this Subpart H, the Agency may determine maximum payment amounts for the expenses on a site-specific basis. Owners and operators seeking payment for unusual or extraordinary expenses shall demonstrate to the Agency that such expenses are unavoidable, reasonable, and necessary in order to satisfy the requirements of this Part.

Given the Agency's methods for determining reasonableness and maximum payment amounts, there is little doubt that owners and operators who incur costs higher than the maximum amounts will utilize Section 734.855 frequently. At the close of the March 15, 2004 hearing, discussions regarding the provision began. Board Member Girard asked if the landfill was located 200 miles from the LUST site, would the higher costs for excavation and disposal be considered an unusual or extraordinary. CW³M had similar questions. Previous discussions with the Agency indicated that their proposed maximum rate of $57/cubic yard did not factor distance to landfill or to the consultant. (CW³M v. IEPA, Bauer Deposition, p. 44, December 2003) When responding, Doug Clay indicated that the Agency had based the $57/cubic yard on some distance but no Agency personnel present had any idea what that number was. CW³M obtained a copy, from the Illinois Department of Transportation website, of the awarded bid tabs for every project in 2003 which contained bid items for environmental work, such as excavation and disposal. These awards were completed following competitive bidding. A summary of the information is included in Appendix J. The awarded average rate for excavation and disposal, per cubic yard, was $99.75, and the standard deviation was more than the average, which indicates that the cost is highly variable from site to site. It should also be pointed out that all available information was used, 36 entries in all, while the Agency only used 25 selected from sometime during the past three or four years.

Without knowing what distance the Agency will develop to match its maximum rate and how the total costs were prepared utilizing the distance, it is difficult to further assess any proposed limit is reasonable. CW³M contends that establishing a maximum rate that automatically limits sites from conducting conventional soil remediation is highly discriminatory and that many sites will need to utilize the provisions of Section 734.855. While set rates may, at face value, appear to benefit tank owners and operators and reduce demands on the Agency and the Board, discriminatory rate setting may ultimately lead to even more appeals of the provisions of 734.

Sites that are remote and located long distances from their professional consultant and other services (drilling, laboratory, liquid disposal, etc.) will also experience higher costs or costs that exceed the Agency's proposed maximum rates, particularly personnel who are required to travel. There is no allowance for greater travel times in this Part.

Sites dealing with emergency operations will also likely incur costs that exceed the proposed maximum rates. On-site personnel requirements will be higher as 1 person may be insufficient. Following the Agency's Emergency Operations lead, at least two technically competent persons should be on-site during emergency operations and work in a "buddy system". Not only is this an OSHA safety requirement, site conditions may require multiple activities to assess and mitigate the cause of the emergency.

Given the Agency's past responsiveness to allowing for higher costs associated with unusual or extraordinary circumstances, it is highly unlikely the Agency will ever allow such costs, regardless of the justification provided. Mr. Harry Chappel indicated that he was unaware of any circumstance for which an owner or operator was provided higher rates or additional budget amounts for unusual circumstances even when justification is provided. (CW³M v. IEPA, Chappel Deposition, p. 40, December 2003)

Mr. Clay stated on page 281 of the March 15, 2004 hearing transcript that he felt the large majority of the sites would fall within the proposed rates. However, when only averages were used to set the rates, it is already a given that 49% of the sites cannot fall at or below the proposed rates. Further, he indicated that the Agency would deny most claims of "extraordinary circumstances", which suggests that a large number of decisions would be appealed to the Board.

732.865 & 734.865 Increase in Maximum Payment Amounts

The maximum payment amounts set forth in this Subpart H shall be adjusted annually by an inflation factor determined by the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business.

a) The inflation factor shall be calculated each year by dividing the latest published annual Implicit Price Deflator for Gross National Product by the annual Implicit Price Deflator for Gross National Product for the previous year. The inflation factor shall be rounded to the nearest $1/100^{th}$. In no case shall the inflation factor be more than five percent in a single year.

Given the Agency's proposed method of determining an annual inflation value, there should be no limit to percentage increase each year; it is what is. If inflation rises more than 5%, owners and operators will experience increases in corrective action costs comparable to the inflation factor. For any year where inflation is greater than 5%, the rates will never reflect the amount over 5%.

b) Adjusted maximum payment amounts shall become effective on July 1 of each year and shall remain in effect through June 30 of the following year. The first adjustment shall be made on July 1, 2006, by multiplying the

maximum payment amounts set forth in this Subpart H by the applicable inflation factor. Subsequent adjustments shall be made by multiplying the latest adjusted maximum payment amounts by the latest inflation factor.

As the proposed rates are already lower than the Agency has historically deemed reasonable and because the proposed rates were developed over one year ago and were based by rates that where then one to four years old already, the inflation factor should be applied to the proposed maximum rates now and again one year or at the start of the next State fiscal year after adoption. There is no reason to wait over two years to add an inflation factor when the proposed rates are already significantly lower than those previously being paid.

SUBPART H: MAXIMUM PAYMENT AMOUNTS

In conclusion of comments regarding Subpart H, CW^{3}M recommends the following course of action for establishing a rate structure for the Agency to utilize to make reasonableness determinations. As was apparent during the March 15, 2004 hearing, consultants representing UST owners and operators expressed great concern regarding the Agency's proposed rate structure. It is our opinion that if procedures for rate setting could be addressed in a manner consistent with proper statistical analysis and practicality, the Agency could achieve concurrence with the regulated community.

1. ***The Board should proceed with rulemaking proceedings for Part 734 without Subpart H or any reference to maximum rates.***

2. ***Redevelop Subpart H for a later rulemaking procedure. The replaced Subpart H should include:***

   Detailed procedures for the submittal of data in the form of budgets and payment requests. Allow the Agency a means of collecting data in a format that is comparable and can be properly analyzed.

   Detailed procedures for selecting the data to be evaluated. Selected data should not be limited to data from only budgets that IEPA has approved or approved as modified. The data should include the full range of costs as submitted.

   Detailed procedures for statistical analysis of the data sets, such as the selection and evaluation criteria utilized in SW 846.

   Detailed procedures for publishing the data.

   Detailed procedures for use of the data as guidance. This should include a process for evaluation of site-specific factors which may dictate costs that exceed the guidance rates.

Developed rates should be detailed unit costs or individual task amounts rather than lump sum rates which include multiple tasks.

❸ *The rates should be published guidance rates and should not be adopted as rule, thereby allowing the Agency to periodically and easily update the rates for inflation and as new data is generated and analyzed. The rates, utilized as guidance would also be readily adaptable for unusual and extraordinary circumstances. A mechanism for inflationary increases can also easily be applied to the published guidance. This recommendation also reduces the frequency on which the Board has to act on rate modifications.*

❹ *During this interim, the Agency should utilize the most current version RS Means for unit cost rate guidance. This will provide the Agency a means of determining reasonableness during the process of collecting, analyzing and publishing data until legitimate rates can be determined.*

732 & 734.Appendix E Personnel Titles and Rates

CW^3M requests that the Agency provide the back-up or input data used to develop the rates so that the inputs and statistical analysis can be evaluated for accuracy.

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