

PINNACLE
ACTUARIAL RESOURCES, INC. 
The Firm of Choice

524 West State Street, Suite G
Geneva, IL 60134
Phone: (630) 262-0954 Fax: (630) 262-0961

Charles C. Emma, FCAS, MAAA

February 13, 2007


Department of Environmental Protection
Office of Administration
601 57th Street SE
Charleston, WV 25304
ATTN: Mr. Chuck Bowman

Dear Mr Bowman:

Enclosed is our proposal to provide actuarial services to West Virginia Department of Environmental Protection (WVDEP). We trust that you will find it in accordance with your Request for Quotation.

If you have any questions, comments, or if you require anything further please call me at (630) 262-0954

Sincerely,



Charles C. Emma, FCAS, MAAA
Principal & Consulting Actuary

A Proposal to Serve
State of West Virginia
Department of Environmental Protection
Division of Land Restoration
Special Reclamation Fund
(WVDEP)

RFQ Number DEP13936

February 13, 2007

*Pinnacle Actuarial Resources, Inc
524 W State St, Suite G
Geneva, IL 60134*

TABLE OF CONTENTS

CORPORATE EXPERIENCE

Documentation of Qualifications	4
Prior Experience	4
CAS Credentials	4
Adequate Number of Employees	4
Similar Projects	5
Corporate Experience	5
Conflict of Interest	6

STAFF EXPERIENCE

Project Team	7
Accreditation and Professional Membership	8
Experience	8
West Virginia Engagements	8
Knowledge of Similar Authorities and SRF Markets	8

CORPORATE BACKGROUND

About Pinnacle Actuarial Resources, Inc	8
Equal Opportunity Employer	9
External Quality Control Report/Peer Review Procedures	9
Experience in Underground Storage Tanks	10
Project Requirements	11
Project Plan	12
Professional Biographies	13

CORPORATE REFERENCES

Kentucky Petroleum Storage Tank Fund	15
Missouri Petroleum Storage Tank Fund	15
State of Iowa Underground Storage Tank Fund	15

APPENDICES

A	Sample Report – Kentucky Petroleum Storage Tank Environmental Assurance Fund Report as of 06/30/05
B	CAS Membership
C	DEP13936 Cost Proposal
D	WV-1 Vendor Registration and Disclosure Statement - \$125.00 check
E	WV-96 – Agreement Addendum
F	DEP13936 – Affidavit
G	Employment History Disclosure Statement
H	Performance Bond
I	Acknowledgements
J	Request for Quotation DEP13936
K	Curriculum Vitae

State of West Virginia
Department of Environmental Protection

CORPORATE EXPERIENCE

Documentation of Qualifications

- **Prior Experience** – We have included, as “Appendix A”, Pinnacle’s report for the Kentucky Underground Storage Tank Fund.
- **CAS Credentials** - Attached as Appendix B.
- **Adequate Number of Employees** - Our full-time staff totals 40, including fifteen credentialed actuaries. Among our staff we employ many talented professionals trained and experienced in reviewing State Managed Insurance Fund issues. Our staff is very qualified and adequate to fulfill the requirements of this project.

Office Locations

Our office locations include Chicago, New York, San Francisco, Indianapolis, Des Moines, Columbus (OH), and Bloomington, IL.

Professional Service Consultants

Our consultants include seven Principals and eight Consultants

Principals

Shawna S. Ackerman, FCAS, MAAA
Leroy A. Boison, FCAS, MAAA
Charles C. Emma, FCAS, MAAA
Joseph A. Herbers, ACAS, MAAA
Steven G. Lehmann, FCAS, FSA, FCIA, MAAA
Roosevelt C. Mosley, FCAS, MAAA
Robert J. Walling III, FCAS, MAAA

Consultants

Erich A. Brandt, FCAS, MAAA
Chris Catlson, FCAS, MAAA
Kiera E. Doster, FCAS, MAAA
Derek Freihaut, FCAS, MAAA
Laura Maxwell, FCAS, MAAA
Paul Vendetti, FCAS, MAAA
John E. Wade, ACAS, MAAA
Gary Wang, FCAS, MAAA

Similar Projects

- Kentucky Division of Waste Management - Pinnacle Actuarial Resources, Inc (Pinnacle) was retained by the Kentucky Division of Waste Management (DWM) to conduct an actuarial study of the Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) as of June 30, 2005. We developed estimates of loss reserve and made projections of the fund's future financial positions and cashflows in order to evaluate the fund's financial position
- Missouri Petroleum Storage Tank Insurance Fund - From December, 2004 through May, 2005 Pinnacle completed an analysis of this underground storage tank fund for producers, transporters, and distributors of petroleum throughout the State of Missouri. Loss reserve estimates were produced in this study separately for remedial vs. insurance coverages. This work involved the prospective funding analysis through the fund's proposed sunset date in 2010.
- State of Iowa Underground Petroleum Storage Tank Insurance Fund - In 2000 the state's Underground Storage Tank Fund was privatized according to its statutes. It was purchased by members of the Iowa petroleum industry and it was renamed Petroleum Marketers Mutual Insurance Company. Pinnacles actuaries provided loss reserve study and financial projection for the Iowa UST.

Corporate Experience

Iowa Insurance Division Review of PMMIC - Several separate actuarial studies have been conducted by Pinnacle's consultants as commissioned by the State of Iowa's Division of Insurance. Various actuarial studies including loss reserving analyses, financial projections, valuations, and overall capital adequacy analysis studies have been conducted since 2000.

Bureau of Workers Compensation (BWC) – In 2006 Pinnacle's actuaries have been retained by the Ohio BWC to conduct a workers compensation reserve review to provide a second, independent opinion with respect to their claim liabilities. The BWC is the sole provider of workers compensation coverage in the state of Ohio with annual premiums exceeding \$2 Billion. Chuck Emma, FCAS, MAAA, is the lead client service professional for the reserve study on this engagement.

Accident Fund Insurance Company of America - Loss reserve analysis of monoline workers compensation carrier. Accident Fund, once the State Fund of Michigan remains the market leader in Michigan. Pinnacle Actuarial Resources Principal, Chuck Emma served as the Accident Fund's appointed actuary each year from 1995 through 2002. The Accident Fund recorded approximately \$800 Million in loss reserves as of year-end 2005.

SAIF - In 2000 Pinnacle Consultants, Chuck Emma and Shawna Ackerman were engaged to assist it in evaluating SAIF's internal risk modeling applications to project surplus. SAIF is a state owned, competitive writer of workers compensation in the State of Oregon. The consultants' role involved the evaluation of the process in generating stochastic risk factors. Particular attention was paid as to the runoff of workers compensation loss reserves.

Conflict of Interest

Pinnacle Actuarial Resources, Inc does not have an existing conflict of interest with the State of West Virginia. Our policy regarding possible conflict of interest is listed below

Before responding to any RFP, or beginning a review of a specific company's rate filing the consultant must first determine that no potential conflict of interest, or no appearance of conflict of interest, exists. At Pinnacle our conflict check covers past, current and future client relationships.

A conflict of interest may exist on two levels:

- i) A conflict of interest exists if Pinnacle, or the account executive, has any financial interest which may limit the consultant's ability to render an objective, professional opinion
- ii) A conflict exists if working for one client harms our ability to do business with another client

In most cases, if the work is more than three years old that should remove concerns about potential conflicts of interest

The “business” conflict in (ii) typically arises when a client demands that Pinnacle not do business with one of the client’s competitors. This should not be a conflict we would face in any work done for the Kentucky Department of Insurance.

The “professional” conflict of interest in (i) is the more common situation and the one to which references of “conflict of interest” usually applies. The key in determining the existence of a conflict is the ability of the consultant and Pinnacle to render an objective opinion.

Our consultant base is large enough to exclude any consultant from the team of consultants that might be reviewing a specific company and still provide an efficient, professional, and comprehensive work product. However, we will check with the Department on any potential conflicts before accepting an assignment where the potential for conflict exists.

STAFF EXPERIENCE AND QUALIFICATIONS

Project Team

The Pinnacle consultants assigned to this proposed project are both knowledgeable and experienced in Underground Storage Tank (SRF) reserving for state-owned insurers, private carriers, and self-insureds. Below we provide a list of the consultants who will be assigned to this project and what role each will play. Their vitae are provided in the appendices at the back of this proposal.

- Chuck Emma, FCAS, MAAA – Chief Project Consultant
- Shawna Ackerman, FCAS, MAAA – Peer Review

The professional biographies of these actuaries are shown in one of the appendices at the back of this proposal. Pinnacle also has a staff of trained analysts and technicians who are able to produce the technical work product supporting our work.

Accreditation and Professional Membership

Each of Pinnacle's consultants, including those assigned to this project, are members of the Casualty Actuarial Society and the American Academy of Actuaries. Documentation to these facts is provided within.

Experience

Both of the consultants assigned to this project have well over ten years experience in workers compensation loss reserving and funding issues. Many of the exemplary clients listed at the back of this proposal are served by the assigned professional in this document

West Virginia Engagements

Pinnacle Actuarial Resources, Inc. does not have any actuarial engagements with the State of West Virginia.

Experience with Actuarial Studies for Other States

As mentioned above the exemplary client list at the back is evidence of Pinnacle's experience with state and private authorities in State managed insurance funds.

Familiarity with the Special Reclamation Fund

Charles Emma, while at a previous firm, twice conducted an actuarial study of the West Virginia Special Reclamation Fund. The first study was conducted in 1993 the second in 1994.

CORPORATE BACKGROUND

About Pinnacle - Pinnacle is one of the 10 largest property/casualty actuarial consulting firms in the U.S., specializing in loss reserving, insurance pricing, alternative markets and financial risk modeling. Our clients, which are insurers, state regulators, insurance trade organizations,

self-insured businesses, captive insurers, and a variety of risk retention groups, include many of the top U.S. insurance carriers as well as many small to medium size insurers. Our consultants have been in property and casualty actuarial consulting since 1984. For more information concerning our firm and the services we provide, please visit our Website at www.pinnacleactuarial.com.

Equal Opportunity Employer/Affirmative Action Plan

Pinnacle is an equal opportunity employer and does not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, national origin, ancestry, marital status, physical or mental disability or unfavorable discharge from military service. Pinnacle also proactively seeks to ensure that applicants are employed and treated during employment without regard to these factors. Pinnacle also has an Affirmative Action Plan for equal employment opportunity.

Recent External Quality Control Report/Peer Review Procedures and Requirements

Pinnacle does not have an outside external quality control report.

Pinnacle utilizes the internal audit procedures of peer review. The primary purpose of peer review is to maximize the quality and comprehension of our work product, and to minimize our own professional liability exposure within practical time and fee constraints.

The interest of the firm's clients, and those of the firm itself, mandate that work performed by the firm, and the communication of that work by the firm, conform to high professional standards. Appropriate recognition of such interests deserves and requires adoption of and compliance with certain internal standards and procedures regarding work performance and communication of the work product, the objectives of such standards and procedures being to attempt to determine, to the extent practicable, that:

- methods and assumptions employed are appropriate and acceptable in the circumstances;
- judgments made and applied are reasonable and supportable;
- communications to clients are accurate, complete and understandable; and
- work performed adequately supports all statements and conclusions.

A system of peer review is the tool we use to exercise due care and diligence such that these objectives are achieved.

File documentation is an important element of peer review. The file must maintain an adequate trail which minimizes the risk of an undocumented or unsupported work product when viewed from the perspective of an independent third party.

The peer review system is intended to foster the maintenance of high professional standards and practices, consistently applied to Pinnacle Actuarial Resources, Inc (the Firm's) assignments. Thus, the review should not be considered perfunctory, even in cases of the most routine or straightforward assignments.

It will be the expressed duty of the Professional Standards Officer (PSO) to ensure the work product of the firm abides by these guidelines.

Our Experience in State Managed Insurance Funds

Pinnacle's consultants have solid experience in analysis of liability costs for state-owned funds. Within the past twelve months we have conducted studies for the states of Kentucky, Missouri and Iowa. This experience includes analysis of both state-run and privatized funds. Detailed description of these prior work engagements is provided in the *Relevant Experience* section of this proposal.

Requirements – Pinnacle is able and willing to meet all the stated requirements of this proposal.

PROJECT REQUIREMENTS

The State of West Virginia Department of Environmental Protection Division of Procurement Services has issued a Request for Proposals (RFP) seeking assistance from an independent actuarial consulting firm to study the liabilities of the Special Reclamation Fund (SRF)

From a review of the RFP it is clear to Pinnacle what SRF requires. SRF needs an actuarial analysis of the fund's loss experience in order to provide the management of the funds with reasonable conclusions as to the following:

- Meet with the Director of the West Virginia Department of Environmental Protection's Division of Land Restoration Special Reclamation Fund, to discuss project specifics and commence work shortly after the award of the project
- Determine if the fund is actuarially solvent and that revenues are sufficient to address needed site reclamation costs, such that the WVDEP is able to continue funding the system. We will carry this out by constructing financial projections on the Fund over the next several years.
- The actuarial study shall determine the total aggregate liability, which shall include current liabilities and an estimate of future liabilities in terms of established risk categories through 2016. In doing so, the contractor shall estimate an approximate costs/rate per site. Pinnacle will adhere to appropriate actuarial loss reserving standards and methods in meeting this requirement
- Provide the estimated amount of funding needed to fully fund the total liability that may arise from registered mine sites SRFs and expected growth (or decline) of the SRF population through January 2016. This will result from our financial projections.
- Provide monthly progress reports to the Director. This is a natural component of Pinnacle's client service standards

- Provide the SRF Program with an initial draft report on or before May 1, 2007. We will commit to assuring this is on our staff's calendars.
- Provide the SRF Program with an Exit Conference on or before July 15, 2007. We will commit to assuring this is on our staff's calendars.
- Provide the SRF Program with a final report on or before August 31, 2007. We will commit to assuring this is on our staff's calendars.

Pinnacle's abilities and resources to accomplish these objectives are demonstrated by its proposed project plan shown in the next section and assigned project team

Project Plan

Our project plan consists of the following steps:

- Preliminary Meeting – On-site meeting to gain insight as to background, operations and significance of obtained data
- Data Request – Immediately following preliminary meeting, Pinnacle will issue a formal data request outlining all required elements to support our study
- Data Assimilation – Pinnacle will organize and assimilate available data into template for technical analysis
- Analysis
 - Observations of historical financial data
 - Review of structure of SRF
 - Selection of appropriate methods and assumptions
 - Incorporation of Business Plan
- Results
 - Preliminary results
 - Diagnostics and fine-tuning
 - Finalization of range

- Follow-Up with SRF
- Development of Report
 - Draft and Discussion
 - Final Report

PROFESSIONAL BIOGRAPHIES

Charles C. Emma

Mr. Emma is a Principal and Consultant with Pinnacle Actuarial Resources, Inc in its Chicago office. He holds a Bachelor of Science degree in Mathematics from the University of Notre Dame, and has twenty three years of actuarial experience.

Mr. Emma is a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries. In 2006 he was elected to the Board of Directors of the American Academy of Actuaries.

Before joining Pinnacle, Mr Emma was employed by Zurich American Insurance Companies and was a consultant with Deloitte & Touche. His expertise is largely focused on involved loss reserving for property/casualty companies and Enterprise Risk Management. He also provides expert testimony in matters regarding Property Casualty insurance. His experience includes: loss reserve studies for insurance companies; financial modeling and valuation of insurance companies and of non-traditional risks; participation on due diligence teams in mergers and acquisitions of property/casualty insurance companies; development of independent loss reserves for large workers compensation carriers; developing of funding and reserving recommendations for self-insured entities; analysis and strategy regarding Risk Based Capital.

Mr. Emma is a frequent speaker on Enterprise Risk Management and loss reserving. He has participated on various professional society research and communication committees. His most recent published article is the prize-winning "Linking DFA to Corporate Strategy," in *CAS Forum*, 2000.

Shawna S. Ackerman

Ms. Ackerman is a Principal and Consultant with Pinnacle Actuarial Resources, Inc , in San Francisco, California. She holds a Bachelor of Arts degree in mathematics with highest honors from Oregon State University. She has 15 years of experience in the property/casualty insurance industry.

Ms. Ackerman is a Fellow of the Casualty Actuarial Society (CAS) and a member of the American Academy of Actuaries (AAA). She currently serves the CAS as a member of the Committee on the Review of Papers and a member of the AAA Committee on Financial Soundness and Risk Management. She has made several presentations to professional groups on issues such as ratemaking for auto, earthquake, and workers compensation insurance.

Prior to joining Pinnacle Actuarial Resources in 1998, Ms. Ackerman was employed by the California Department of Insurance. At the Department, she was responsible for evaluating ratemaking formulas and procedures for most property and casualty lines of insurance; providing expert witness testimony and other litigation support related to Proposition 103 matters; and analyzing loss and loss adjustment expense reserves for workers' compensation carriers.

Ms. Ackerman's areas of practice include providing litigation support and expert witness testimony to insurance Company and financial institutions, reserving, legislative costing, pricing, and development of new lines of business. Ms. Ackerman continues to advise Insurance Departments regarding rate reviews, reserving and regulatory matters. As a member of the Pinnacle Dynamic Financial Analysis (DFA) Team, she has assisted in the development of DFA solutions for several insurers and made presentations on DFA at CAS meetings.

CORPORATE REFERENCES

In this section we provide an exemplary list of the relevant references that Pinnacle's consultants have for underground storage tank projects

Kentucky Petroleum Storage Tank Environmental Assurance Fund

Pinnacle Actuarial Resources, Inc. (Pinnacle) was retained by the Kentucky Division of Waste Management (DWM) to conduct an actuarial study of the Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) as of June 30, 2005. We developed estimates of loss reserve and made projections of the fund's future financial positions and cashflows in order to evaluate the fund's financial position

Contact Data:

Kentucky Petroleum Storage Tank Environmental Assurance Fund
Ms Lee Ann Brewer, (502) 564-6716
14 Reilly Road
Frankfort, KY 40601

Missouri Petroleum Storage Tank Insurance Fund

From December, 2004 through May, 2005 Pinnacle completed an analysis of this underground storage tank fund for producers, transporters, and distributors of petroleum throughout the State of Missouri. Loss reserve estimates were produced in this study separately for remedial vs. insurance coverages. This work involved the prospective funding analysis through the fund's proposed sunset date in 2010

Contact Data:

Missouri Petroleum Storage Tank Insurance Fund
Ms Carol Eighemy, (573) 522-2352
830 E High St. Suite 211
P.O. Box 836 65102
Jefferson City, MO 65101

State of Iowa - Underground Petroleum Storage Tank Insurance Fund (Petroleum Marketers Mutual Insurance Company)

In 2000 the state's Underground Storage Tank Fund was privatized according to its statutes. It was purchased by members of the Iowa petroleum industry and it was renamed Petroleum

Marketers Mutual Insurance Company Several separate actuarial studies have been conducted by Pinnacle's consultants as commissioned by the State of Iowa's Division of Insurance. Various actuarial studies including loss reserving analyses, financial projections, valuations, and overall capital adequacy analysis studies have been conducted since 2000.

Contact Data:
Mr. James Armstrong, CFE
Chief Examiner
Iowa Insurance Division
330 Maple Street
Des Moines, Iowa 50319-0065
(515) 281-4096

BIOGRAPHY

SHAWNA S. ACKERMAN

Ms. Ackerman is a Principal and Consultant with Pinnacle Actuarial Resources, Inc., in San Francisco, California. She holds a Bachelor of Arts degree in mathematics with highest honors from Oregon State University. She has over 15 years experience in the property/casualty insurance industry.

Ms. Ackerman is a Fellow of the Casualty Actuarial Society (CAS) and a member of the American Academy of Actuaries. She currently serves the CAS as a member of the Committee on Dynamic Risk Modeling and the Committee on the Review of Papers. She has made several presentations to professional groups on issues such as ratemaking for auto, earthquake, and workers compensation insurance.

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BIOGRAPHY

CHARLES C. EMMA

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Mr. Emma is a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries. In 2006 he was elected to the Board of Directors of the American Academy of Actuaries.

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Mr. Emma is a frequent speaker on Enterprise Risk Management and loss reserving. He has participated on various professional society research and communication committees. His most recent published article is the prize-winning "Linking DFA to Corporate Strategy," in *CAS Forum*, 2000.

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Roosevelt C. Mosley, FCAS, MAAA
Paul A. Vendetti, FCAS, MAAA
John E. Wade, ACAS, MAAA
Robert A. Walling III, FCAS, MAAA
Gary C. Wang, FCAS, MAAA

March 20, 2006

Ms. Donna Conway
Division of Waste Management
14 Reilly Road
Frankfort, KY 40601

Dear Ms. Conway:

Enclosed is our final report on the actuarial study of the Kentucky Petroleum Storage Tank Environmental Assurance Fund (PSIEAF) as of June 30, 2005. The report has been prepared for PSIEAF.

If you have any questions, or require anything further please call Chuck at (630)262-0954 or John at (309)665-5010.

Sincerely,

Charles C. Emma, FCAS, MAAA
Principal & Consulting Actuary

John E. Wade, ACAS, MAAA
Consulting Actuary

Actuarial Report
on the
State of Kentucky
Petroleum Storage Tank Environmental
Assurance Fund

Actuarial Study
As of June 30, 2005

March, 2006

Pinnacle Actuarial Resources, Inc
319 ½ W. State St., Suite A
Geneva, IL 60134

TABLE OF CONTENTS

<i>I. BACKGROUND</i>	2
Purpose	2
Distribution and Use	2
Reliances and Limitations	2
<i>II. PSTEAF</i>	3
PSTEAF Facts	3
Insurance Coverage	4
Prior Actuarial Reports	4
Extended Reporting Provisions	6
Runoff Issues	6
<i>III. LOSS RESERVE ANALYSIS</i>	7
Results	7
Variability	7
Data	7
Methodology	8
<i>IV. FINANCIAL PROJECTIONS</i>	10
General Conclusions	10
Limitations	10
Methodology	10
Assumptions	11
<i>V. SPECIFIC RESPONSES</i>	12

EXHIBITS

**Kentucky Petroleum Storage Tank Environmental
Assurance Fund
Actuarial Study as of June 30, 2005**

I. BACKGROUND

Purpose & Scope

Pinnacle Actuarial Resources, Inc. (Pinnacle) was retained by the Kentucky Division of Waste Management (DWM) to conduct an actuarial study of the Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) as of June 30, 2005. We developed estimates of loss reserve and made projections of the fund's future financial positions and cashflows in order to evaluate the fund's financial position

Distribution & Use

This study has been conducted at the request of DWM officials. Further distribution or use is expressly prohibited without the prior written consent of Pinnacle. Any reference to Pinnacle in relation to this report in any reports, accounts, or other published documents by DWM is not authorized without our prior written consent. The nature of the material contained in the report is such that this limitation on distribution should apply to requests under any Freedom of Information Act

The exhibits attached in support of our findings are an integral part of this report. These sections have been prepared so that our actuarial assumptions and judgments are documented. Judgments about the conclusions drawn in this report should be made only after considering the report in its entirety. We remain available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

Our conclusions are predicated on a number of assumptions as to future conditions and events. Those assumptions, which are documented in subsequent sections of this report, must be understood in order to place our conclusions in their appropriate context. In addition, our work is subject to inherent limitations, which are also discussed in this report.

Reliances & Limitations

We have prepared this report in conformity with its intended use by persons technically competent in the areas addressed and for the stated purposes only. Judgments as to conclusions, methods, and data

contained in this report should be made only after studying the report in its entirety. Furthermore, we are available to explain any matter presented herein.

Throughout our analysis we have, without audit or verification, relied on historical data and qualitative information provided by DWM. We have reviewed this data for consistency and believe it to be reasonable and accurate. However, we have made no attempt to audit or verify this information. The accuracy of our results is dependent upon the accuracy and completeness of this underlying data. Therefore, any material discrepancies discovered in this data by DWM or its auditor should be reported to us and this report amended accordingly, if warranted.

There is a limitation upon the accuracy of these estimates and projections in that there is an inherent uncertainty in any estimate of loss reserves and financial projections. This is due to the fact that the ultimate liability for claims is subject to the outcome of events yet to occur, e.g., the likelihood of claimants bringing suit, the size of awards, changes in the standards of liability, and the attitudes of claimants toward settlement of their claims. Also our financial projections are subject to a very high degree of uncertainty because they require prediction of future economic, legal, and judicial conditions which are not knowable. In our judgment, we have employed techniques and assumptions that are appropriate, and the conclusions presented herein are reasonable, given the information currently available. However, it should be recognized that future financial results will likely deviate, perhaps materially, from our estimates.

II. PSTEAF BACKGROUND

PSTEAF Facts

The Kentucky Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) was first established in 1990, in response to federal legislation requiring owners and operators of underground storage tanks (UST's) to have financial resources available to pay for cleanup of spills and/or leaks from their tanks. Before PSTEAF's existence, cleanup costs were not covered by the State. Then, all costs were paid by the property owner or by private insurers.

PSTEAF provides coverage for UST's that are in compliance with Kentucky's UST technical regulations. More than 12,000 tanks are eligible to participate in the PSTEAF. Coverage is provided for the costs of cleaning up a leak or spill, as well as third-party property damage or bodily injury resulting from spills or leaks. A deductible applies to each eligible facility based on the number of regulated tanks.

In 1998, the Kentucky EPA mandated upgrades to underground tanks. In future years these upgraded tanks will dominate the insured population of the Fund. As the result, future characteristics of claim frequency and severity are expected to improve significantly.

PSTEAF covers only tanks in the State of Kentucky and has no exposure in other states. PSTEAF is financed primarily with a fee assessed on petroleum imported into Kentucky. The Fund also realizes income from interest on invested assets.

PSTEAF's fiscal year runs from July 1 to June 30. Therefore, for example, fiscal year ending 2005 refers to the twelve month period from July 1, 2004 through June 30, 2005.

Coverage

PSTEAF covers eligible facilities with retroactive dates based on entry to the program. However, claims occurring prior to retroactive date can be honored by PSTEAF so long as there is no intentional withholding of information. Cleanup costs, liability costs, and minor defense costs are included. Tank removal, testing of tanks and piping, first-party property, and business interruption are all excluded costs (Note that tank removal costs are covered for eligible SOTRA applicants.) An eligible applicant incurs all costs initially and is reimbursed by PSTEAF in accordance with applicable regulations.

Experience to date suggests that the majority of covered leaks relate to fittings and joints on pipes. It is less frequent that situated tanks themselves experience punctures or holes in their walls. A minor and

unintended expansion of PSTEAF's coverage has evolved through certain legal decisions which had mandated coverage for leaks at a gas pump, even where the tank is hidden and not directly involved.

Prior Actuarial Reports

The most recent actuarial report was conducted as of June 30, 2003 by Ernst & Young LLP.

Extended Reporting Provisions (ERP's)

This is a fairly new provision which to-date is not often purchased. In such cases, prior owners may have remaining liabilities for late reported claims. We believe that ERP liabilities are an immaterial reserving concern for PSTEAF as of June 30, 2005.

Runoff Issues

Based on conversations with DWM, the fund will require an ongoing expense allocation in the event of runoff / sunset. This concept, known as an Unallocated Loss Adjustment Expenses (ULAE) reserve is consistent with insurance accounting requirements. A provision for such expenses is imbedded in our estimate of general operating expenses. Our financial projections also include consideration for ULAE during runoff.

III. LOSS RESERVE ANALYSIS

Results

Loss reserve estimates for the PSTEAF are shown in the table below. The summarization of these estimates can be seen in Exhibit 1.

PSTEAF
Estimated Loss Reserves as of June 30, 2005
(\$ 000's)

Loss Reserve Type	Recorded Reserves	Pinnacle Selected Estimate	Redundancy/ (Deficiency)
Known Claims	20,324	119,765	(99,441)
IBNR		192,486	(192,486)
Expenses	472	46,838	(46,365)
Total	20,796	359,089	(338,293)

Based on the table we believe that PSTEAF's recorded reserves are understated by approximately \$338 Million as of December 31, 2005.

Variability

Our estimate is characterized by a high degree of uncertainty in estimating loss reserves as discussed previously. Specifically, the variability affecting PSTEAF's reserves is chiefly driven by the future legislation in Kentucky and regulatory standards affecting cleanup costs. The probability that actual future loss and loss expense payments may develop to levels well outside our range must be considered material. The risk of reserve variability is high for PSTEAF compared to a property/casualty insurer. This is due to the following facts:

- o Because of the unique risk characteristics of PSTEAF, a very limited amount of relevant external data upon which to use as benchmark or a-priori assumptions is not readily available
- o PSTEAF's loss reserves consist of approximately 1,400 open claims and a smaller number of expected unreported claims. PSTEAF purchases no reinsurance. PSTEAF is thereby exposed to the full extent of liability of claim costs. There is a high potential for unusually large costs on a small number of claims to create even greater future reserve inadequacies.

Data

We used data provided to us by DWM officials. Most of the data was provided to us in computer file formats and we manipulated the data to organize into an acceptable format for analysis. To the extent

necessary we also utilized historical data contained in the 2003 actuarial study by Ernst & Young. This data was separated by three coverage groups as follows:

- 1 Financial Responsibility Account (FRA)
- 2 Petroleum Storage Tank Account (PSTA)
- 3 Small Owners Tank Removal Account (SOTRA)

Other forms of data used included printed financial and tank demographic data and pro-forma financial projections. These were provided to us directly by DWM.

Pinnacle worked with DWM staff to reconcile historic claim counts and paid amounts at various ages of development to the prior (2003) Actuarial Report by Ernst & Young. An exact reconciliation was not possible because date fields were not consistently completed in the data bases used by DWM. Attempts were made to assign the most accurate release years and payment years to each claim record. In general, Pinnacle's and DWM's interpretation of the data led to a slight shifting of the oldest release years up a few fiscal years and sooner in the payment pattern in comparison to the E&Y triangles. Total claim counts were nearly identical, but total claim payments exceeded the E&Y report by approximately five percent. Since further verification was not possible, we relied on the most recent information provided by DWM in developing the historic diagonals of our claims triangles.

The material data items we relied upon to conduct our study can be listed as follows:

- Historic Loss Development Triangles by coverage group through June 30, 2005
 - Report Year Paid Losses
 - Release Year Paid Losses
 - Report Year Incurred Claim Counts
 - Release Year Incurred Claim Counts
- PSTEAF Financial Statements including balance sheets, income statements, and cashflows
 - As of June 30, 2005 (included 2004)
 - As of June 30, 2003
 - As of June 30, 2002 (included 2001)
- PSTEAF Tank Demographics for FRA, PSTA, and SOTRA programs
- PSTEAF Biennial Budget for Fiscal Year 2006-2008
- Ernst & Young Actuarial Reports
 - As of June 30, 2003
 - As of June 30, 2001

As mentioned earlier, we have relied on this data without audit or verification.

Methodology

We employed paid development loss reserving methods in this study; similar to the methods relied upon in past actuarial studies. Methods for estimating ultimate losses and claim counts were applied to paid incurred losses and incurred claim counts by release year and by report year. Each of the methods described below were used on losses inclusive of third-party property damage (PD) and defense cost data coded on individual claim files. Therefore, our loss reserve estimates implicitly include estimates for unpaid PD and defense costs. Reference to the term "loss" should be understood to be inclusive of these defense costs.

Paid Loss Development Method - Report Year data

This method projects losses to ultimate based upon historical changes in the valuation of losses at given points in time, e.g., 12 months, 24 months, etc. In this method, age-to-age factors are calculated. These factors calculate the development of report year losses over time by dividing the losses at one valuation point by the losses at the point immediately prior (for example, dividing losses at 24 months by losses at 12 months). Reasonable age-to-age factors for future development on report years are selected based on the calculated historical factors and other known information that may influence future development. Tail factors are set based on judgment after reviewing the historical patterns. Loss development techniques are most predictive when historical loss reporting and settlement patterns are relatively consistent. When applied to Report Year data, the resulting estimated ultimate loss is for known claims only. It does not include a provision for Incurred But Not Reported (IBNR) claims.

Paid Loss Development Method - Release Year data

This method is the same as the method described above using Report Year data. The body of data is restated on a Fiscal Year Released basis, age-to-age calculations are made, and selections of ultimate development factors lead to projected ultimate loss for the total of known and IBNR claims combined.

Average Expected Loss Method

Because claim counts and paid amounts for the most recent Release Year and Report Year have decreased significantly, for the 2005 year we relied on the five previously developed Release Years and Report Years for our 2005 estimates. An average of the prior five years was selected as the best estimate of the ultimate loss rather than the paid development method. It is expected that 2005 actual results may not be as diminished as recorded in DWM's data bases. Timing of reports and setting of obligations is heavily influenced by the amount of monies available for remediation.

Ultimate Loss and Reserve Selections

Using the results of the above methods a final loss selection was made by report year and by release year for each coverage group. These selections were made based on our professional judgment noting the relative strengths and weaknesses of the methods for each year and group. From these selected ultimate losses, paid losses as of June 30, 2005 were subtracted and reserve estimates were calculated. (Exhibits 6 and 7)

Developments Rates in Fiscal 2005

Through Fiscal 2005, the Fund's claims experience shows a material reduction in the number of claims reported and the dollars of losses paid. Upon discussion with the Division of Waste Management, we were made aware that in the Fall of 2004 a moratorium was put on all directive letters (i.e., orders for contractors to proceed with site work). This moratorium is the result of a material reduction in resources available to the PSTEAF due to the diversion of PSTEAF funding.

This has reduced the rate of claim payments significantly through the end of Fiscal 2005. It has also reduced the number of claims reported significantly. Based on these discussions our analysis assumes this as a slow-down in the emergence of this loss data rather than a sign of potentially lower ultimate losses of claim counts.

IV. FINANCIAL PROJECTIONS

In order to evaluate the future financial position of the PSTEAF we developed projections of key items belonging to its financial statements, including balance sheets, income statements, and cashflows. We used prior financial statements combined with certain assumptions to drive projections of the financial position of the PSTEAF. It is important to note that our financial projections ignore any possible financing costs the fund may incur due to its material deficit position. Instead our approach assumes that the fund deficit can be absorbed directly by future net income.

General Conclusions

Our financial projections **for the next 10 years** are included on Exhibit 2, Sheets 1 and 2. They support the following chief conclusions:

- Our loss reserve estimates indicate a PSTEAF fund deficiency of approximately \$359 Million as of June 30, 2005.
- During the four calendar years from July 1, 2005 through June 30, 2009, we project that PSTEAF will experience an increase of \$25 Million in its unfunded claims and expense liability. This deficit will increase to \$33 Million by 2014 if a \$30 Million cap on payments and expenses is maintained. See Exhibit 2, Sheet 2.
- The fund will experience significant negative cash flow during the next three years, resulting in negative net balances through 2008. This assumes that \$124 Million dollars is transferred from the fund to the General Fund over the next 3 years, and no further transfers are made. See Exhibit 2, Sheet 1.
- Because our reserves indicate that the fund liability is greater than recorded, PSTEAF will not be able to meet its obligations on future claims without some additional funding.

Limitations

Any model of an insurance fund's financial risk can not contemplate all the risk factors facing a company. There are many factors, beyond the three we used, which can materially affect its financial condition. These include but are not limited to operational risk factors, market risk factors, major economic, judicial, or legislative changes. Because of these limitations our analysis of the projections of the fund inherently understates the level of risk, and thereby the required capital, particularly relating to potential extreme events and conditions. Therefore, our projections of the future financial position for the fund should be viewed only in the context of the assumption which have been contemplated.

Methodology

In developing a framework for projecting financial positions of PSTEAF, we relied upon generally accepted actuarial techniques and were guided by the relevant statement of principles, *The Statement of Principles Regarding Property and Casualty Loss Reserves* and *The Statement of Principles Regarding Property and Casualty Valuations*, adopted by the Casualty Actuarial Society September 1989. We specifically relied on a common method described in two separate articles:

- *Actuarial Valuation of Property/Casualty Insurance Companies*, Proceedings of the Casualty Actuarial Society – Robert W Sturgis, 1981
- *Investigation of Methods, Assumptions, and Risk Modeling for the Valuation of Property/Casualty Insurance Companies*; Casualty Actuarial Society Discussion Paper Program – Robert Miccolis, 1987

In general these methods rely on projecting future income and cashflow data

Assumptions

In the table below we list the critical variables and underlying assumptions affecting our actuarial valuation

Variable	Assumption
Number of Tanks	Constant for FRA, Declined to zero for PSTA and SOTRA
Revenues	Based on anticipated fuel receipts
Paid Losses	Based on incurred projections and consistent with PSTEAF's historical paid loss patterns and external indications
Operating Expense Ratio	15% of unpaid losses
Investment Income	3.5% annual return on average annual assets
Federal Income Tax	\$0

Our assumption of future loss cost inflation of zero percent was based on the belief that future increases will be offset by improved regulation and tanks, and increased efficiency in remediation

V. Specific Responses to Items in Scope of Work

Following are the conclusions for each itemization under Section III B. Detailed Scope of Work. of the original Solicitation.

1. Actuarial valuation of total liability of known claims as of June 30, 2005

\$119,800,000 (Exhibit 1)

2. Actuarial valuation of IBNR (or "tail") claims as of June 30, 2005

\$192,500,000 (Exhibit 1)

3. Actuarial estimate of total claims liabilities as of June 30, 2005

\$312,300,000 (Exhibit 1)

4. Estimate of claims adjustment liability as of June 30, 2005

\$46,800,000 (Exhibit 1)

5. Estimate of current portion (due within one year) of claims liability and claims adjustment liability as of June 30, 2005

\$41,400,000 (Exhibit 1)

6. Determination of needed funding for all reported tanks and expected growth in tank population

While the PSTA and SOTRA programs will sunset in 2008, FRA does not have a sunset date. In Exhibit 1 we have shown that future liabilities for the next 10 years (through 2015), are \$163,500,000. After that, it is anticipated that FRA will contribute approximately \$3,000,000 per year in claim liabilities plus associated operating expenses as long as the FRA remains in existence. See Exhibit 2, Sheet 3.1. Even though SOTRA is scheduled for sunset 7/15/2008 with no additional funding for existing claims, we have developed our estimates assuming a continuation of the payment patterns shown in Exhibit 2, Sheet 4.3. It is anticipated if funding is not extended to already reported claims under SOTRA, then the reporting patterns will speed up and the PSTEAF will be responsible for a similar liability, but a few years earlier.

7. Ten year projection of administrative expense and loss (claim) costs

\$78,200,000 claims (\$60,200,000 at four years) (Exhibit 1)

\$11,700,000 operating expenses (\$9,000,000 at four years) (Exhibit 1)

\$123,700,000 transfers to the General Fund (\$123,700,000 at four years) (Exhibit 1)

8. Assessment of the 1990 environmental assurance fee mechanism

The current assessment fee is 1.4 cents per gallon of petroleum products received in the state of Kentucky. As witnessed by the recent transfers from the PSTEAF to the General Fund, this mechanism is more than adequate to cover the costs of the fund, provided the fund is not exhausted by these transfers. The assurance fee generates approximately \$45,000,000 annually in revenues and is generally growing, while claims and operating expenses, exclusive of transfer fees is about \$30,000,000 to \$40,000,000 per year and declining. Coupled with a limitation on obligations and expenses of about \$30,000,000 per year, the assurance fee should always be able to meet the needs of the fund.

9. Assessment of deductibles and limits

There are three mandatory deductible levels under the FRA and PSTA programs: \$500, \$2,500, and \$12,500. The deductible varies depending on the number of eligible tanks. Exhibit 8, Sheet 1 shows the average loss by program by deductible. There is no clear pattern of variance in the size of loss depending on deductible.

Because of the relatively small magnitude of the size of the deductibles, they probably don't serve as a large incentive for claim consciousness on the part of the tank owners. Increasing or decreasing the size of the deductible would not likely impact the number of future claims. On the other hand, any increase in the size of the deductible will have a measurable impact on paid amounts. For example, a mandatory deductible of \$20,000 could potentially have reduced past payments by \$25,000,000 to \$50,000,000. However, no recommendation is being made to change the deductible at this time since the revenues of the fund are more than sufficient to meet claim obligations provided that future transfers to the General Fund are reasonable.

As can be seen in Exhibit 8, Sheet 2, the majority of claims are under \$200,000. While this is based on immature data, it appears that very few claims would have been curtailed even if the limit was lowered to \$500,000. No change in limit is recommended at this time.

10. Correlation of clean-up costs based on tank size, site, and age

The data necessary to conduct such an analysis was not available. DWM representatives have been made aware of this limitation in the available data.

11. Assessment of clean-up standards and remediation costs in light of current operating procedures and regulations

In order to evaluate this we reviewed two important statistics relative to the effectiveness of claims handling in comparison to other petroleum storage tank funds for which we have conducted similar

studies. The comparison group we relied on was from two similar funds, one State-owned and one private.

In specific we reviewed two relevant statistics:

1. Severity (average size) of claims
2. Average time to settlement of claims

Statistic one compares very similarly to both of the other funds. The average claim size for all three is approximately \$80,000. Statistic two runs slightly longer for PSTEAF. The Fund's average time to settlement is approximately 7.5 years while the other two ranged from 5.5 to 6.5 years.

Based on a brief comparison of historical paid loss development data, we believe that this difference may be the function of periodic shortfalls in PSTEAF resources. Occasionally over the fund's history we find protractions in the length of settlement.

In broader insurance data the second observation often leads to higher claim severities as inflation can adversely affect claims remaining open for longer periods of time. As indicated earlier, however, we see no evidence of higher severities in the actual PSTEAF claim history. Therefore we conclude that these periodic resource shortfalls do not seem to be posing additional cost for the Fund.

12. Assessment of revisions to current business practices necessary to improve the long-term viability of the Fund

There are two revisions to current business practices in regards to operating the Fund that should be contemplated. The first is to reduce the size of transfers to the General Fund. If nothing else is transferred beyond that which is planned during the 2006-2008 fiscal years, the Fund can return to a positive cash balance around 2009.

The second revision will be to reduce claims staff (and attendant salaries) gradually with the reduced need for staff with the sunset of PSTA and SOTRA. While this will not have a major impact on outstanding liabilities, dollar savings will be significant, perhaps as much as \$1,000,000 per year.

13. Assessment of the adequacy of cash reserves required to fund outstanding and IBNR claims

As demonstrated in Exhibit 2, Sheet 1, planned transfers to the General Fund over the next 3 years will cause cash reserves to become negative over the next 3 years. Cash reserves will not be adequate to fund outstanding and IBNR claims over the next 3 years.

14. Assessment of SOTRA and its impact on FRA and PSTA

As SOTRA winds down, so does its positive impact on FRA and PSTA. However, the past benefits will be felt far into the future as practically all tanks will be of the protected category in a few years and the claims pattern for FRA should stabilize. PSTA claims will also disappear with its sunset and the fact that unprotected tanks are quickly diminishing. See Exhibit 4.

15. Determination of average reserve amount for each potential obligation

The following percentages should be applied to each potential obligation amount to establish a reserve for the known claim:

- 100% - FRA
- 120% - PSTA
- 80% - SOTRA

See Exhibit 8, Sheet 3 for derivation of these percentages

16. Assessment of the impact of revenue transfers to the General Fund

Past revenue transfers to the General Fund have reduced the Fund's ability to earn investment income, and most recently, the ability to obligate and pay claims without some additional funding provided. The current transfer of \$124,000,000 over the next three years will keep the Fund in a negative cash position and will not allow them to obligate or pay on future or existing claims without receiving additional funding. In fact, the transfer to the General Fund in 2006 is slightly larger than anticipated revenues plus previous balance. Additional funding is planned through the issuance of a \$25,000,000 bond in 2006, and another \$25,000,000 bond in 2007. Even though the retirement of these and past bonds are satisfied from the General Fund, the PSTEAF will run a negative net balance of two to three million dollars over the next three years before returning to a positive balance.

17. Impacts of the sunset dates (PSTA and SOTRA) on the solvency of the Fund

PSTA and SOTRA account for the vast majority of claims paid by the fund. While it will take several years for PSTA to wind down after the sunset, the claims payments will be far less than the assurance fees received. As PSTA does wind down, the Fund could return to a solvent position with the need for special bond issues. In fact, the anticipated Fund claims after the wind down are in the neighborhood of \$3,000,000, while receipts will be closer to \$45,000,000. The key driver will be to what extent transfers to the General Fund continue.

SOTRA payments are nominal and their discontinuance will have a positive, albeit minor, impact on the Fund Solvency.

Since the coverage provided under PSTA and SOTRA will not continue after the respective sunsets, it is not anticipated that FRA will pick up any claims of this nature, without a change to the program as it exists today. Such a change is not contemplated

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Exhibit Index
As of 06/30/05

<u>Exhibit Number</u>	<u>Sheet Number</u>	<u>Exhibit Description</u>
1		Estimate of Total Liabilities Through Fiscal Year 2015
2	1	Cash Flow by Fiscal Year
2	2	Payment Summary by Fiscal Year Paid Through 2015
2	3 1	FRA Payment by Fiscal Year
2	3 2	PSTA Payment by Fiscal Year
2	3 3	SOTRA Payment by Fiscal Year
2	4 1	FRA Payment Pattern By Fiscal Year of Release
2	4 2	PSTA Payment Pattern By Fiscal Year of Release
2	4 3	SOTRA Payment Pattern By Fiscal Year of Release
2	5	Ultimate Paid by Fiscal Year of Release
2	6	Fuel Receipts by Fiscal Year
3		General Expense Ratio
4		Estimated Future Claims by Fiscal Year of Release
5	1 1	FRA IBNR Claims
5	1 2	PSTA IBNR Claims
5	2 1	FRA Claim Reporting Pattern by Fiscal Year of Release
5	2 2	PSTA Claim Reporting Pattern by Fiscal Year of Release
6	1 1	FRA Ultimate Paid by Fiscal Year of Release
6	1 2	PSTA Ultimate Paid by Fiscal Year of Release
6	2 1	FRA Payment Pattern by Fiscal Year of Release
6	2 2	PSTA Payment Pattern by Fiscal Year of Release
7	1 1	FRA Ultimate Paid by Fiscal Year Reported
7	1 2	PSTA Ultimate Paid by Fiscal Year Reported
7	1 3	SOTRA Ultimate Paid by Fiscal Year Application Received
7	2 1	FRA Payment Pattern by Fiscal Year Reported
7	2 2	PSTA Payment Pattern by Fiscal Year Reported
7	2 3	SOTRA Payment Pattern by Fiscal Year Reported
7	3	Reported Claim Comparison
8	1	Average Claim by Deductible Option
8	2	Average Claim by Size of Loss
8	3	Average Claim Related to Average Obligation

Commonwealth of Kentucky
 Petroleum Storage Tank Environmental Assurance Fund
 Estimate of Total Liabilities Through Fiscal Year 2015
 As of 06/30/05

	<u>Current</u>	<u>Noncurrent</u>	<u>Total</u>	
(1) Reported Claims				
FRA			23 928 185	
PSTA			93 506 256	
SOTRA			2 330 256	
Total			119 764 697	
(2) IBNR Claims (Incurred but not Reported)				
FRA			69 073 618	
PSTA			123 412 672	
SOTRA			0	
Total			192 486 290	
(3) Total Outstanding Claims				
FRA	14 066 688	78 935 115	93 001 803	
PSTA	20 743 660	196 175 268	216 918 929	
SOTRA	1,196,920	1,133,335	2,330,256	
Total	<u>36,007,269</u>	<u>276,243,719</u>	<u>312,250,987</u>	
(4) Outstanding Claims General Operating Expenses	5 401 090	41 436 558	46 837 648	
(5) Total Outstanding Claims Liability as of 06/30/05	41 408 359	317 680 276	359 088 635	
(6) Future Released Claims	Current	Noncurrent	Total	Total
	10 Year	10 Year	10 Year	4 Year
FRA	30 446	30 117 448	30 147 894	12 164 792
PSTA	101 044	42 134 295	42 235 339	42 235 339
SOTRA	286 467	5 535 234	5 821 701	5 821 701
Total	417 957	77 786 977	78 204 935	60 221 832
(7) Future Released Claims General Operating Expenses	62 694	11 668 047	11 730 740	
(8) Future Transfers to General Fund	64 097 900	59 561 400	123 659 300	
(9) Future Bond Revenues	25,000,000	25,000,000	50,000,000	
(10) Total Future Liabilities	<u>39,578,551</u>	<u>124,016,424</u>	<u>163,594,975</u>	
(11) Total Future Payments	<u>80,986,910</u>	<u>441,696,700</u>	<u>522,683,610</u>	

Notes:

- (1) Exhibit 7, Sheet 1, Column (4), for each program
- (2) Exhibit 6, Sheet 1, Column (4) - (1), for each program Note: SOTRA has no IBNR
- (3) Current from Exhibit 2, Sheet 3, Current Year Row, for each program
- (3) Noncurrent = Total (3) - Current (3), for each program
- (3) Total = (1) + (2), for each program
- (4) = (3) times selected expense ratio in Exhibit 3
- (5) = (3) + (4)
- (6) Current from Exhibit 2, Sheet 3, Current Release Year paid in Current Year, for each program.
- (6) Noncurrent = Total (6) - Current (6)
- (6) Total = Exhibit 2, Sheet 3, Total - (3)
- (6) 4 year estimates derived as above, but using 4 year totals from Exhibit 2, Sheet 3
- (7) = (6) times selected expense ratio in Exhibit 3
- (8) Exhibit 2, Sheet 1, Column (4)
- (9) Exhibit 2, Sheet 1, Column (5) While this is not a liability, it is an off
- (10) = (6) + (7) + (8) - (9)
- (11) = (5) + (10)

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Cash Flow by Fiscal Year
As of 06/30/05

<u>Fiscal Year</u>	<u>(1) Beginning Balance</u>	<u>(2) Fuel Receipts</u>	<u>(3) Projected Payments</u>	<u>(4) Transfers Out</u>	<u>(5) Bond Revenue</u>	<u>(6) Net Balance</u>	<u>(7) Interest Income</u>	<u>(8) Ending Balance</u>	<u>(9) Future Payments</u>
2005		45,094,786					274,952		341,900,512
2006	20,195,875	45,545,734	29,069,400	64,097,900	25,000,000	-2,425,691	310,978	-2,114,713	312,831,112
2007	-2,114,713	46,001,191	29,164,500	41,997,300	25,000,000	-2,275,322	-76,826	-2,352,147	283,666,612
2008	-2,352,147	46,461,203	29,277,700	17,564,100		-2,732,744	-88,986	-2,821,730	254,388,912
2009	-2,821,730	46,925,815	30,000,000			14,104,085	197,441	14,301,527	224,388,912
2010	14,301,527	47,395,073	30,000,000			31,696,600	804,967	32,501,567	194,388,912
2011	32,501,567	47,869,024	30,000,000			50,370,591	1,450,263	51,820,854	164,388,912
2012	51,820,854	48,347,714	30,000,000			70,168,568	2,134,815	72,303,383	134,388,912
2013	72,303,383	48,831,191	30,000,000			91,134,574	2,860,164	93,994,739	104,388,912
2014	93,994,739	49,319,503	30,000,000			113,314,242	3,627,907	116,942,149	74,388,912
2015	116,942,149	49,812,698	22,862,562			143,892,286	4,564,603	148,456,889	44,388,912

Notes:

- (1) 2006 Beginning Balance Provided by Fund (2005 OPSTEAF Year End Report,
- (2) Exhibit 2, Sheet 6
- (3) Exhibit 2, Sheet 2, minimum of column Columns (4) and (5)
- (4) Transfer to General Fund per State of Kentucky Biennial Budget, 2006-2008
- (5) Bond issued on PSTEAF's behalf, to be repaid by the General Fund
- (6) = (1) + (2) - (3) - (4) + (5)
- (7) = 3.5% x average [Beginning Balance, Column (1) and Net Balance, Column (6)]
- (8) = (6) + (7)
- (9) = Exhibit 2, Sheet 2, Column (10)

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Payment Summary by Fiscal Year Paid Through 2015
As of 06/30/05**

Fiscal Year Paid	(1a) FRA Paid Claims	(1b) PSTA Paid Claims	(1c) SOTRA Paid Claims	(2) Total Paid Claims	(3) Funded Operating Expense	(4) Total Paid Expense
2006	14 097 134	20 844 705	1 483 387	36 425 226	3 715 700	40 140 926
2007	10 315 004	19 033 898	1 663 388	31 012 290	3 817 600	34 829 890
2008	15 962 884	20 807 152	1 812 484	38 582 521	3 930 400	42 512 921
2009	9 426 837	22 641 149	1 824 901	33 892 886	2 358 240	36 251 126
2010	8 566 645	22 054 651	713 044	31 334 339	2 405 405	33 739 744
2011	7 560 056	23 218 911	401 347	31 180 313	2 453 513	33 633 826
2012	9 316 403	20 758 165	172 805	30 247 373	2 502,583	32 749 956
2013	6 540 529	21 424 552	60 479	28 025 560	2 552 635	30 578 194
2014	7 086 565	24 890 995	20 121	31 997 681	2 603 688	34 601 368
2015	5 738 104	14 468 696	0	20 206 800	2 655 761	22 862 562
Total	94,610,160	210,142,872	8,151,956	312,904,988	28,995,524	341,900,512

Fiscal Year Paid	(5) Restricted Funds	(6) Actual Paid Expense	(7) Cumulated Unpaid Liability	(8) Claim Payments Outstanding	(9) Operating Expense Outstanding	(10) Total Outstanding
2006	29,069,400	29 069 400	0	312 904 988	28 995 524	341 900 512
2007	29 164 500	29 164 500	5 665 390	287 551 288	25 279 824	312 831 112
2008	29 277 700	29,277,700	18 900 611	262 204 388	21,462 224	283,666 612
2009	30 000 000	30 000 000	25 151 737	236 857 088	17,531,824	254 388 912
2010	30 000 000	30,000 000	28 891 481	209 215 328	15,173 584	224 388,912
2011	30 000 000	30 000 000	28 891 481	181 620 733	12 768 180	194 388 912
2012	30 000,000	30 000 000	32 525 307	154 074 246	10,314 667	164 388,912
2013	30 000,000	30 000 000	35 275 262	126 576 829	7 812,084	134 388 912
2014	30 000 000	30 000 000	35,853 457	99 129 464	5,259 449	104 388 912
2015	30 000,000	30 000 000	40 454 825	71 733 151	2 655,761	74 388 912
2015	30 000,000	30 000 000	33 317,387	44 388 912	0	44,388,912
Total		297,511,600				

Notes:

(1) Exhibit 2, Sheet 3, for each program

Note that (SOTRA), capped at \$3,000,000 for any Fiscal Year per 401 KAR 42:330

SOTRA shuts down 07/15/08. It has been indicated that all payments cease at that time

If this is truly the case, then it should be expected that future payments will be shifted forward making for larger liabilities in 2008 and 2009

(2) = (1a) + (1b) + (1c)

(3) Exhibit 3

(4) = (2) + (3)

(5) From State of Kentucky Biennial Budget, 2006-2008. Subsequent amounts are for illustrative purposes only

(6) = Minimum [(4) + prior (7), (5)]

(7) = Maximum [prior (7) + (4) - (5), 0]

(8) = Previous (8) - (6) + (3). Starting value equals Column (2) Total

(9) = Previous (9) - (3) Starting value equals Column (3) Total

(10) = (8) + (9)

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Payment by Fiscal Year
As of 06/30/05

FY Released	FY Paid 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Subs.	Total
Prior	8,407,124														8,407,124
1991	456,260	4,968,634													5,424,895
1992	994,684	1,655,139													13,540,365
1993	480,353	461,702	11,480,335												6,764,057
1994	539,313	436,133	469,659												6,684,908
1995	447,752	461,314	373,312	419,467											6,165,837
1996	578,923	696,096	719,283	562,038	444,886										10,193,198
1997	313,165	354,716	426,989	439,833	356,010	4,844,787									6,547,946
1998	408,634	383,526	434,412	522,836	404,587	414,097	6,461,141								8,427,743
1999	320,163	316,162	286,735	336,107	111,549	416,852	418,069	3,952,027	4,838,551	3,744,688	1,242,809	1,151,882			6,940,742
2000	171,653	106,258	104,930	98,482	91,278	103,389	136,347	128,227	103,766	99,717	105,776				2,441,928
2001	172,729	158,031	98,484	97,254	50,868	47,146	53,401	64,283	66,230	53,566	51,515	54,634			2,436,019
2002	88,501	88,216	82,141	50,868	50,232	47,146	53,401	64,283	66,230	53,566	51,515	54,634	584,961		1,446,724
2003	345,517	222,727	224,527	206,721	128,018	126,418	118,650	134,393	161,779	166,679	134,883	129,646	137,485	1,497,323	3,724,780
2004	89,621	94,242	80,750	61,241	56,384	34,916	34,481	32,663	36,656	44,126	45,463	36,790	35,382	445,907	1,108,304
2005	251,155	214,851	225,928	145,638	146,815	135,172	83,709	82,663	77,584	87,878	105,785	108,969	88,196	1,153,759	2,908,125
2006	30,446	262,697	224,725	236,311	152,331	153,562	141,384	87,566	86,462	81,149	91,916	110,647	113,898	1,289,032	3,072,216
2007	30,446	30,261	261,093	261,093	223,353	234,868	151,401	140,521	87,022	85,934	80,854	91,355	169,871	1,404,402	3,053,458
2008			30,121	30,121	259,890	222,324	233,766	151,921	139,873	88,631	85,532	86,282	90,934	1,507,396	3,039,389
2009					30,017	259,988	221,552	150,180	151,384	139,366	86,320	85,241	80,003	1,392,781	3,028,838
2010						25,703	233,937	230,540	146,811	149,812	137,931	137,931	85,418	1,656,302	2,997,184
2011						25,703	258,282	218,237	230,540	148,611	148,612	137,931	85,418	1,739,652	2,997,184
2012							25,703	258,282	218,237	230,540	148,611	148,612	85,418	1,825,070	2,997,184
2013								29,703	258,282	218,237	230,540	148,611	148,612	1,963,001	2,997,184
2014									28,703	258,282	218,237	230,540	148,611	2,112,813	2,997,184
2015										28,703	258,282	218,237	230,540	2,261,423	2,997,184
Total	14,097,134	10,315,004	15,962,864	9,426,837	8,566,645	7,560,056	9,316,403	6,540,529	7,006,565	5,738,104	3,173,070	2,821,023	2,087,585	20,457,860	123,149,697
Current Year	14,086,688														

Note:
Exhibit 2, Sheet 4.1 x Exhibit 2, Sheet 5, Column (1)
Current Year is the total paid in 2006 on prior years.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Payment by Fiscal Year
As of 06/30/05

PSTA Only	FY Released	FY Paid 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Subs.	Total
Prior		3,679,509														3,679,509
1991		368,800	1,786,822	2,518,783												2,155,722
1992		306,092	519,846	791,813												3,344,723
1993		838,590	466,228	791,813	3,836,516											5,933,147
1994		971,097	950,831	528,686	887,888	4,350,474	8,298,847									7,659,076
1995		1,894,064	1,852,438	1,813,971	1,008,508	1,712,788	1,802,728	8,734,626								16,580,636
1996		1,521,330	1,993,544	1,949,711	1,909,224	1,061,465	1,389,617	2,360,041	11,434,933							18,972,629
1997		1,242,370	1,891,649	2,609,847	2,552,464	2,499,460	3,965,442	2,204,654	3,744,250	18,141,744						26,080,382
1998		3,352,014	1,971,044	3,159,760	4,140,574	4,049,534	2,123,352	2,079,269	1,156,004	1,963,297	9,512,573					44,729,046
1999		1,457,862	1,757,819	1,033,512	1,656,827	2,171,098	885,601	666,129	800,834	3,880,224						24,911,432
2000		725,300	594,677	716,941	421,574	675,828	539,924	707,514	691,957	471,540	800,834	3,880,224				10,886,794
2001		615,631	579,448	475,082	572,770	336,789	339,924	354,514	464,588	677,569	376,717	639,793	3,099,941			9,313,174
2002		485,638	404,340	380,576	312,036	376,190	221,206	354,514	438,545	454,471	445,034	247,424	420,210	2,036,011		6,602,440
2003		608,737	458,317	381,583	359,165	294,481	365,026	208,761	334,866	438,545	419,956	419,956	233,504	396,569	1,921,467	6,839,730
2004		1,705,531	1,288,738	970,288	807,658	760,376	623,436	751,813	441,962	708,512	828,430	908,016	889,161	494,344	4,907,440	16,185,705
2005		971,055	1,258,267	850,775	715,837	596,002	660,973	459,844	554,508	326,061	522,709	684,956	669,895	655,985	3,965,203	12,912,171
2006		101,044	1,059,459	1,372,819	1,037,333	781,006	650,262	612,043	501,817	604,690	355,745	570,286	747,314	700,882	5,063,719	14,188,730
2007			100,427	1,052,961	1,364,437	1,030,989	776,237	646,292	608,306	488,753	601,296	353,573	566,814	742,751	5,759,221	14,102,098
2008				89,865	1,048,139	1,358,160	1,025,249	772,661	643,314	605,504	495,455	539,526	351,944	564,203	6,472,014	14,037,124
2009					0	0	0	0	0	0	0	0	0	0	0	0
2010					0	0	0	0	0	0	0	0	0	0	0	0
2011					0	0	0	0	0	0	0	0	0	0	0	0
2012					0	0	0	0	0	0	0	0	0	0	0	0
2013					0	0	0	0	0	0	0	0	0	0	0	0
2014					0	0	0	0	0	0	0	0	0	0	0	0
2015					0	0	0	0	0	0	0	0	0	0	0	0
Total		20,844,705	19,033,898	20,807,152	22,641,149	22,054,651	23,216,911	20,758,165	21,424,552	24,890,995	14,468,686	8,302,805	6,978,783	5,620,745	28,109,064	259,154,268
Current Year		20,743,660														

Note:
Exhibit 2, Sheet 4.2 x Exhibit 2, Sheet 5, Column (2)
Current Year is the total paid in 2006 on prior years.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
SOTRA Payment by Fiscal Year
As of 06/30/05

SOTRA Only	FY Released	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
1998													0
1999													0
2000		11,085											11,085
2001		30,033	12,842	0									42,875
2002		99,570	36,607	15,654	0								151,831
2003		191,085	88,596	32,572	13,928								326,182
2004		330,475	224,012	103,863	38,185	16,328	0						712,863
2005		534,672	172,435	116,884	54,193	19,924	8,520						906,629
2006		286,467	842,430	271,688	184,163	85,387	31,393	13,424	0				1,714,951
2007			286,467	842,430	271,688	184,163	85,387	31,393	13,424	0			1,714,951
2008				429,393	1,262,743	407,241	276,047	127,989	47,065	20,121	0	0	2,570,590
2009					0	0	0	0	0	0	0	0	0
Total		1,483,387	1,663,388	1,812,484	1,824,901	713,044	401,347	172,805	60,479	20,121	0	0	8,151,956
Current Year		1,196,920											

Note:
Exhibit 2, Sheet 4.3 x Exhibit 2, Sheet 5, Column (3)
Current Year is the total paid in 2008 on prior years.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Payment Pattern By Fiscal Year of Release
As of 06/30/05

FRA Only	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14	15																	
Release Lag Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Subs.	Subs.	Subs.	Subs.																	
FY Released	FY Paid																																	
Prior	33.3%																																	
1991	3.1%	33.3%																33.3%																
1992	2.9%	3.1%	33.3%															3.1%	33.3%															
1993	3.0%	2.9%	3.1%	33.3%														2.9%	3.1%	33.3%														
1994	3.7%	3.0%	3.0%	3.1%	33.3%													3.0%	3.7%	3.0%	33.3%													
1995	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%												3.6%	2.9%	3.0%	33.3%													
1996	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%											3.0%	3.6%	3.0%	33.3%													
1997	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%										2.6%	3.6%	3.0%	33.3%													
1998	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%									2.8%	3.6%	3.0%	33.3%													
1999	2.8%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%								2.8%	3.6%	3.0%	33.3%													
2000	4.8%	2.8%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%							4.8%	3.6%	3.0%	33.3%													
2001	5.0%	4.6%	2.8%	3.0%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%						5.0%	3.6%	3.0%	33.3%													
2002	5.0%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%					5.0%	3.6%	3.0%	33.3%														
2003	7.7%	5.0%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%				7.7%	3.6%	3.0%	33.3%														
2004	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			7.3%	3.6%	3.0%	33.3%															
2005	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%		8.6%	3.6%	3.0%	33.3%															
2006	1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%		1.0%	3.6%	3.0%	33.3%														
2007		1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%													
2008			1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%												
2009				1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%											
2010					1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%										
2011						1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%									
2012							1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%								
2013								1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%							
2014									1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%						
2015										1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%					
2016											1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%				
2017												1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%			
2018													1.0%	8.6%	7.3%	7.7%	5.0%	4.6%	2.8%	2.6%	3.0%	3.6%	3.7%	3.0%	2.9%	3.1%	33.3%			3.6%	3.0%	33.3%		
Subsequent																																		

Note:
Payment pattern from Exhibit 6, Sheet 2.1

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Payment Pattern By Fiscal Year of Release
As of 06/30/05**

PSTA Only	Release Lag Years	FY Paid															
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Subs.		
Cumulative	0.7%	8.2%	17.9%	25.2%	30.7%	35.3%	39.6%	43.1%	47.4%	49.9%	53.9%	59.2%	64.3%	69.4%	72.2%	76.9%	100.0%
Incremental	0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	3.5%	4.3%	2.5%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%
FY Released																	
Prior																	
1991			23.1%														
1992			4.8%	23.1%													
1993			2.8%	4.8%													
1994			5.0%	2.8%	23.1%												
1995			5.2%	4.8%	4.8%	23.1%											
1996			5.3%	5.0%	2.8%	4.8%	23.1%										
1997			4.0%	5.2%	2.8%	4.8%	4.8%	23.1%									
1998			4.3%	4.0%	5.3%	2.8%	4.8%	4.8%	23.1%								
1999			3.5%	2.5%	4.0%	5.2%	5.0%	2.8%	4.8%	23.1%							
2000			4.3%	4.3%	2.5%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%						
2001			4.6%	4.3%	4.0%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%					
2002			5.5%	4.3%	3.5%	4.0%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%				
2003			7.3%	4.6%	4.3%	2.5%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%				
2004			9.7%	5.5%	4.6%	4.3%	2.5%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%			
2005			7.5%	7.3%	5.5%	4.3%	3.5%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%		
2006			0.7%	9.7%	7.3%	4.6%	4.3%	3.5%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%	
2007				7.5%	9.7%	4.3%	4.3%	3.5%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%	
2008				0.7%	7.5%	4.6%	4.3%	3.5%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%	
2009					0.7%	7.3%	5.5%	4.6%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	4.8%	23.1%	
2010						7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	4.0%	5.3%	5.2%	5.0%	2.8%	
2011						0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	4.0%	5.3%	5.2%	5.0%	
2012							0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	4.0%	5.3%	5.2%	
2013								0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	4.0%	5.3%	
2014									0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	4.0%	
2015										0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	4.3%	
2016											0.7%	7.5%	9.7%	7.3%	5.5%	4.6%	
2017												0.7%	7.5%	9.7%	7.3%	5.5%	
2018													0.7%	7.5%	9.7%	7.3%	
Subsequent																	100.0%

Note:
Payment pattern from Exhibit 6, Sheet 2.2

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
SOTRA Payment Pattern By Fiscal Year of Release
As of 06/30/05**

SOTRA Only

Release Lag Years	0	1	2	3	4	5	6	7			
Cumulative	16.5%	65.2%	80.9%	91.5%	96.4%	98.2%	99.0%	99.0%			
Incremental	16.5%	48.6%	15.7%	10.6%	4.9%	1.8%	0.8%	0.0%			
FY Paid											
<u>Released</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
1998	0.0%										
1999	0.8%										
2000	1.8%										
2001	4.9%		0.0%								
2002	10.6%		0.8%								
2003	15.7%		4.9%	0.8%	0.0%						
2004	48.6%		10.6%	1.8%	0.8%	0.0%					
2005	16.5%		15.7%	4.9%	1.8%	0.8%	0.0%				
2006			48.6%	10.6%	4.9%	1.8%	0.8%	0.0%			
2007			16.5%	15.7%	10.6%	4.9%	1.8%	0.8%	0.0%		
2008				48.6%	15.7%	10.6%	4.9%	1.8%	0.8%	0.0%	
2009				16.5%	48.6%	15.7%	10.6%	4.9%	1.8%	0.8%	0.0%

Note:
Payment pattern from Exhibit 7, Sheet 2.3

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Ultimate Paid by Fiscal Year of Release
As of 06/30/05**

<u>FY Released</u>	<u>(1) FRA Ultimate</u>	<u>(2) PSTA Ultimate</u>	<u>(3) SOTRA Ultimate</u>
Prior	25,221,371	15,944,539	
1991	14,905,903	7,743,329	
1992	34,471,005	10,914,725	
1993	15,997,027	16,624,901	
1994	14,534,360	18,852,052	
1995	12,432,291	35,961,670	
1996	19,383,422	37,850,046	
1997	11,856,081	49,551,378	
1998	14,519,853	78,614,222	5,343,055
1999	11,234,067	41,221,148	2,604,221
2000	3,728,428	16,814,306	1,430,337
2001	3,455,676	13,433,077	1,657,061
2002	1,784,884	8,822,715	2,019,815
2003	4,491,970	8,326,357	1,797,202
2004	1,225,211	17,627,465	2,106,886
2005	2,937,234	13,004,784	1,099,327
2006	3,072,216	14,188,730	1,732,100
2007	3,053,458	14,102,098	1,732,100
2008	3,039,389	14,037,124	2,596,296
2009	3,028,838	0	0
2010	2,997,184	0	0
2011	2,997,184	0	0
2012	2,997,184	0	0
2013	2,997,184	0	0
2014	2,997,184	0	0
2015	2,997,184	0	0

Notes:

- (1) Exhibit 6, Sheet 1.1, Column 3**
- (2) Exhibit 6, Sheet 1.2, Column 3**
- (3) Exhibit 7, Sheet 1.3, Column 3**

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Fuel Receipts by Fiscal Year
As of 06/30/05**

<u>Fiscal Year</u>	(1) <u>Actual Fuel Receipts</u>	(2) <u>Annual Trend</u>	<u>Fiscal Year</u>	(3) <u>Projected Fuel Receipts</u>
2000	44,373,798		2006	45,545,734
2001	42,511,867	-4.2%	2007	46,001,191
2002	43,235,618	1.7%	2008	46,461,203
2003	44,879,246	3.8%	2009	46,925,815
2004	44,728,554	-0.3%	2010	47,395,073
2005	45,094,786	0.8%	2011	47,869,024
Selected		1.0%	2012	48,347,714
			2013	48,831,191
			2014	49,319,503
			2015	49,812,698

Notes:

- (1) Provided by Company (OPSTEAF Fund Balance Report.)
- (2) = (1) / Prior (1) - 1.000
- (3) Fuel Receipts projected to increase using the selected trend.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
General Expense Ratio
As of 06/30/05**

Fiscal Year	(1) Total Expenses Paid	(2) Annual Change	(3) Salary Expenses Paid	(4) Annual Change	(5) Paid Claims	(6) Expense To Claims
2001	4,444,434		3,076,764		28,229,554	15.7%
2002	3,909,069	-12.0%	3,301,666	7.3%	24,094,429	16.2%
2003	3,556,267	-9.0%	3,197,303	-3.2%	26,085,853	13.6%
2004	3,653,516	2.7%	3,333,444	4.3%	21,574,579	16.9%
2005	2,903,831	-20.5%	2,348,706	-29.5%	19,792,004	14.7%
2006	3,715,700	28.0%	3,215,700	36.9%		
2007	3,817,600	2.7%	3,317,600	3.2%	Average	15.4%
2008	3,930,400	3.0%	3,430,400	3.4%	Weighted Average	15.4%
2009	2,358,240	-40.0%			Selected Average	15.0%
2010	2,405,405	2.0%				
2011	2,453,513	2.0%				
2012	2,502,583	2.0%				
2013	2,552,635	2.0%				
2014	2,603,688	2.0%				
2015	2,655,761	2.0%				

Notes:

(1) and (3) Provided by Fund (PSTEAF Financial Statements)
 Large reduction in 2005 the result of a reorganization of the fund management.
 A similar reduction is expected in 2009 when PSTA and SOTRA expire.
 Projected Expenses for 2006-2008 taken from the Biennial Budget.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Estimated Future Claims by Fiscal Year of Release
As of 06/30/05**

As Of 06/30	(1) Protected Tanks Active	(2) Unprotected Tanks Active	(3) Total Active Tanks	FY Released	(4) Releases Reported to ERT	(5) Release %	(6) Ultimate Claims FRA	(7) Ultimate Claims PSTA	(8) Ultimate Claims SOTRA
1991	11,430	20,674	32,104	1991	147	0.46%	63	61	
1992	11,785	18,554	30,339	1992	194	0.64%	220	92	
1993	12,002	16,695	28,697	1993	473	1.65%	118	155	
1994	12,101	15,038	27,139	1994	481	1.77%	112	179	
1995	12,360	13,473	25,833	1995	459	1.78%	97	252	
1996	12,459	11,845	24,304	1996	510	2.10%	101	311	
1997	12,579	9,690	22,269	1997	991	4.45%	75	570	
1998	12,503	5,970	18,473	1998	1,455	7.88%	139	979	507
1999	12,692	3,573	16,265	1999	818	5.03%	113	482	289
2000	12,631	2,265	14,896	2000	560	3.76%	56	256	177
2001	13,025	1,589	14,614	2001	549	3.76%	32	238	194
2002	12,933	1,127	14,060	2002	238	1.69%	28	182	225
2003	12,739	781	13,520	2003	243	1.80%	36	170	179
2004	12,685	691	13,376	2004	306	2.29%	19	131	212
2005	12,433	415	12,848	2005	649	5.05%	19	43	124
2006	12,433	311	12,744	2006	446	3.50%	35	201	187
2007	12,433	233	12,666	2007	443	3.50%	35	199	187
2008	12,433	175	12,608	2008	441	3.50%	35	199	280
2009	12,433	131	12,564	2009	440	3.50%	35	PSTA ends 01/15/08	SOTRA ends 07/15/08
2010	12,433	PSTA ends 01/15/08	12,433	2010	435	3.50%	35		
2011	12,433		12,433	2011	435	3.50%	35		
2012	12,433		12,433	2012	435	3.50%	35		
2013	12,433		12,433	2013	435	3.50%	35		
2014	12,433		12,433	2014	435	3.50%	35		
2015	12,433		12,433	2015	435	3.50%	35		

Notes:

- (1) - (4) Provided by Fund for 1991 through 2005.
For 2006 through 2015:
- (1) = 2005 entry as a conservative measure. Expect some movement from unprotected as PSTA nears expiration.
- (2) 2006 and subsequent years reflect a 25% annual decline,
- (4) = (3) x (5)
- (6) = (4) / (3) through 2006. Judgmental selection for 2006 and subsequent.
- (6) From Exhibit 6, Sheet 1.1, Column (5) for 1991 through 2005.
- (7) From Exhibit 6, Sheet 1.2, Column (5) for 1991 through 2005.
- (8) From Exhibit 7, Sheet 1.3, Column (5) for 1998 through 2005.
- For 2006 through 2015:
- (6) = (4) x Selected Future Release Percentage shown on Exhibit 5, Sheet 1.1
- (7) = (4) x Selected Future Release Percentage shown on Exhibit 5, Sheet 1.2
- (8) From Exhibit 7, Sheet 1.3, Column (8)

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA IBNR Claims
As of 06/30/05

FRA Only

FY Released	(1) Claims Reported	(2) CDF	(3) Ultimate Reported	(4) IBNR Claims	(5) Cumulative Reported	(6) Reported to ERT	(7) Cumulative Releases	(8) Cumulative Ratio	(9) Annual Ratio
Prior	118	1,010	119	1	119	147	147	123.7%	42.6%
1991	62	1,010	63	1	182	194	341	117.9%	113.5%
1992	217	1,014	220	3	402	473	814	63.8%	24.9%
1993	116	1,014	118	2	520	481	1,295	48.8%	23.3%
1994	110	1,021	112	2	632	459	1,754	41.6%	21.2%
1995	94	1,036	97	3	729	510	2,264	36.7%	19.9%
1996	97	1,044	101	4	831	991	3,255	27.8%	7.6%
1997	71	1,056	75	4	906	1,455	4,710	22.2%	9.5%
1998	130	1,068	139	9	1,044	818	5,528	20.9%	13.9%
1999	105	1,081	113	8	1,158	560	6,088	19.9%	9.9%
2000	50	1,111	56	6	1,213	549	6,637	18.8%	5.8%
2001	28	1,133	32	4	1,245	238	6,875	18.5%	11.8%
2002	24	1,171	28	4	1,273	243	7,118	18.4%	14.7%
2003	29	1,232	36	7	1,309	306	7,424	17.9%	6.1%
2004	13	1,443	19	6	1,328	649	8,073	16.7%	2.9%
2005	6	3,085	19	13	1,346				
Total	1,270		1,346	76		8,073		Selected Future Percentage	8.0%

Notes:

- (1) Exhibit 5, Sheet 2.1
- (2) Exhibit 5, Sheet 2.1
- (3) = (1) x (2)
- (4) = (3) - (1)
- (5) Prior (5) + (3)
- (6) Provided by Fund
- (7) Prior (7) + (6)
- (8) = (5) / (7)
- (9) = (3) / (6)

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA IBNR Claims
As of 06/30/05**

PSTA Only

FY Released	(1) Claims Reported	(2) CDF	(3) Ultimate Reported	(4) IBNR Claims	(5) Cumulative Reported	(6) Reported to ERT	(7) Cumulative Releases	(8) Cumulative Ratio	(9) Annual Ratio
Prior	84	1,040	87	3	87	147	147	101.0%	41.5%
1991	58	1,053	61	3	148	194	341	70.5%	47.5%
1992	87	1,059	92	5	241	473	814	48.6%	32.8%
1993	144	1,076	155	11	395	481	1,295	44.4%	37.2%
1994	165	1,086	179	14	575	459	1,754	47.1%	54.9%
1995	218	1,155	252	34	826	510	2,264	50.3%	61.0%
1996	264	1,179	311	47	1,138	991	3,255	52.5%	57.6%
1997	479	1,191	570	91	1,708	1,455	4,710	57.0%	67.3%
1998	813	1,204	979	166	2,687	818	5,528	57.3%	58.9%
1999	397	1,214	482	85	3,169	560	6,088	56.3%	45.7%
2000	209	1,226	256	47	3,425	549	6,637	55.2%	43.4%
2001	192	1,242	238	46	3,664	238	6,875	55.9%	76.5%
2002	144	1,264	182	38	3,846	243	7,118	56.4%	70.0%
2003	130	1,309	170	40	4,016	306	7,424	55.9%	43.0%
2004	91	1,445	131	40	4,147	649	8,073	51.9%	6.7%
2005	17	2,545	43	26	4,190				
Total	3,492		4,190	698		8,073		Selected Future Percentage	45.0%

Notes:

- (1) Exhibit 5, Sheet 2.2
- (2) Exhibit 5, Sheet 2.2
- (3) = (1) x (2)
- (4) = (3) - (1)
- (5) Prior (5) + (3)
- (6) Provided by Fund
- (7) Prior (7) + (6)
- (8) = (5) / (7)
- (9) = (3) / (6)

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Claim Reporting Pattern by Fiscal Year of Release
As of 06/30/05

FY Released	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	Total
Prior																	
1991	10	23	12	32	42	47	49	58	80	94	107	114	117	117	118	118	118
1992	107	169	97	44	46	48	52	55	58	61	62	62	62	62	62	62	62
1993	64	74	192	184	188	199	204	209	214	215	217	217	217	217	217	217	217
1994	55	70	78	87	99	99	101	107	110	110	115	116	116	116	116	116	116
1995	56	74	84	86	87	88	89	89	92	92	93	94	94	94	94	94	94
1996	34	72	80	85	86	86	86	86	86	86	86	86	86	86	86	86	86
1997	23	49	61	65	66	66	69	70	70	71	71	71	71	71	71	71	71
1998	52	111	121	124	127	130	130	130	130	130	130	130	130	130	130	130	130
1999	57	89	96	101	104	105	105	105	105	105	105	105	105	105	105	105	105
2000	19	35	42	46	48	48	48	48	48	48	48	48	48	48	48	48	48
2001	9	24	25	26	26	28	28	28	28	28	28	28	28	28	28	28	28
2002	9	16	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
2003	11	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
2004	7	13															
2005	6																

FY Development Factors

FY Released	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192+
Prior																
1991	2,300	12,000	2,667	1,313	1,119	1,043	1,368	1,176	1,175	1,138	1,065	1,026	1,000	1,009	1,000	1,000
1992	1,891	1,809	1,189	1,045	1,043	1,083	1,058	1,055	1,052	1,016	1,000	1,000	1,000	1,000	1,000	1,000
1993	1,579	1,077	1,011	1,022	1,059	1,025	1,025	1,025	1,009	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1994	1,156	1,014	1,053	1,101	1,034	1,122	1,059	1,028	1,045	1,000	1,009	1,000	1,000	1,000	1,000	1,000
1995	1,273	1,114	1,115	1,138	1,030	1,049	1,028	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1996	1,321	1,135	1,024	1,012	1,011	1,011	1,034	1,000	1,011	1,011	1,011	1,011	1,011	1,011	1,011	1,011
1997	1,118	1,111	1,063	1,012	1,000	1,116	1,000	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1998	1,690	1,245	1,068	1,015	1,045	1,014	1,000	1,014	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1999	2,135	1,080	1,025	1,024	1,024	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000	1,561	1,079	1,052	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001	1,842	1,200	1,143	1,021	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002	2,667	1,042	1,040	1,077	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003	1,778	1,500	1,000													
2004	2,545	1,036														
2004	1,857															

Average	1.844	1.946	1.188	1.067	1.036	1.046	1.066	1.038	1.041	1.029	1.015	1.007	1.000	1.004	1.000	1.000
Last 5	2.138	1.171	1.052	1.033	1.020	1.028	1.012	1.011	1.012	1.007	1.015	1.007	1.000	1.004	1.000	1.000
Last 3	2.050	1.192	1.061	1.042	1.018	1.005	1.000	1.008	1.004	1.004	1.003	1.000	1.000	1.004	1.000	1.000
Wtd Avg	1.632	1.133	1.074	1.050	1.034	1.040	1.043	1.031	1.032	1.025	1.013	1.006	1.000	1.006	1.000	1.000

Selected Cumulative %	32.4%	69.3%	81.2%	85.4%	88.2%	90.0%	92.5%	93.7%	94.7%	95.8%	96.5%	97.9%	98.6%	98.6%	99.0%	99.0%
Average	2.138	1.171	1.052	1.033	1.020	1.028	1.012	1.011	1.012	1.007	1.015	1.007	1.000	1.004	1.000	1.000
Last 5	3.085	1.443	1.232	1.171	1.133	1.111	1.081	1.068	1.055	1.044	1.036	1.021	1.014	1.014	1.010	1.010
%	32.4%	69.3%	81.2%	85.4%	88.2%	90.0%	92.5%	93.7%	94.7%	95.8%	96.5%	97.9%	98.6%	98.6%	99.0%	99.0%

Notes: Development factors equal cumulative claims reported at X + 12 months divided by cumulative claims reported at X months.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Claim Reporting Pattern by Fiscal Year of Release
As of 06/30/05

FY Released	Reporting Lag Months from Beginning of Fiscal Year												Total			
	12	24	36	48	60	72	84	96	108	120	132	144		156	168	180
Prior			2	8	17	28	38	48	57	60	65	79	81	82	83	84
1991	4	14	16	22	31	31	39	43	46	49	51	56	56	58	58	58
1992	16	35	46	51	60	69	74	76	80	80	82	86	87	87	87	87
1993	56	66	78	104	118	129	135	136	140	142	144	144	144	144	144	144
1994	63	88	101	112	140	157	158	160	163	164	164	165	165	165	165	165
1995	109	181	193	202	207	212	212	217	217	218	218	218	218	218	218	218
1996	112	226	244	251	259	259	262	263	264	264	264	264	264	264	264	264
1997	255	451	461	465	469	475	478	478	478	479	479	479	479	479	479	479
1998	372	723	745	761	776	781	812	813	813	813	813	813	813	813	813	813
1999	238	324	362	378	388	395	397	397	397	397	397	397	397	397	397	397
2000	105	177	202	208	208	209	209	209	209	209	209	209	209	209	209	209
2001	62	149	183	191	192	192	192	192	192	192	192	192	192	192	192	192
2002	81	132	141	144	144	144	144	144	144	144	144	144	144	144	144	144
2003	74	128	130	130	130	130	130	130	130	130	130	130	130	130	130	130
2004	67	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
2005	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17

FY Released	Development Factors												192+		
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156		156-168	168-180
Prior			4.000	2.125	1.647	1.357	1.263	1.188	1.053	1.083	1.215	1.025	1.012	1.012	1.012
1991	3.500	1.222	1.286	1.409	1.258	1.070	1.065	1.041	1.041	1.041	1.098	1.036	1.000	1.000	1.012
1992	2.188	1.314	1.109	1.176	1.150	1.072	1.027	1.025	1.025	1.049	1.000	1.012	1.000	1.000	1.012
1993	1.179	1.162	1.333	1.135	1.093	1.047	1.007	1.029	1.014	1.014	1.000	1.000	1.000	1.000	1.000
1994	1.397	1.148	1.109	1.250	1.121	1.005	1.019	1.006	1.006	1.000	1.006	1.000	1.000	1.000	1.000
1995	1.661	1.066	1.047	1.025	1.024	1.000	1.024	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000
1996	2.018	1.060	1.029	1.020	1.012	1.012	1.004	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.769	1.022	1.011	1.006	1.013	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.944	1.030	1.021	1.020	1.019	1.027	1.001	1.002	1.002	1.004	1.004	1.004	1.004	1.004	1.004
1999	1.361	1.117	1.044	1.026	1.018	1.027	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
2000	1.686	1.090	1.047	1.030	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
2001	2.403	1.228	1.044	1.044	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
2002	1.630	1.068	1.021	1.021	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
2003	1.730	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016	1.016
2004	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358	1.358
Average	1.297	1.297	1.315	1.170	1.137	1.079	1.049	1.045	1.024	1.031	1.064	1.009	1.016	1.006	1.012
Last 5	1.761	1.104	1.035	1.018	1.013	1.010	1.008	1.011	1.010	1.021	1.064	1.009	1.016	1.006	1.012
Last 3	1.573	1.104	1.037	1.020	1.014	1.013	1.002	1.002	1.004	1.005	1.002	1.004	1.016	1.006	1.012
Wtd Avg	1.721	1.077	1.045	1.040	1.035	1.023	1.012	1.016	1.012	1.016	1.039	1.008	1.013	1.007	1.012
Selected Cumulative %	1.761	1.104	1.035	1.018	1.013	1.010	1.008	1.011	1.010	1.021	1.064	1.009	1.016	1.006	1.012
	2.545	1.445	1.309	1.264	1.242	1.226	1.214	1.204	1.191	1.179	1.155	1.086	1.076	1.059	1.040
	39.3%	89.2%	76.4%	79.1%	80.5%	81.6%	82.4%	83.1%	84.0%	84.9%	86.6%	92.1%	92.9%	94.4%	96.2%

Notes:
Development factors equal cumulative claims reported at X + 12 months divided by cumulative claims reported at X months.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Ultimate Paid by Fiscal Year of Release
As of 06/30/05

FRA Only

<u>FY Released</u>	(1) <u>Cumulative Paid</u>	(2) <u>CDF</u>	(3) <u>Ultimate Paid</u>	(4) <u>Unpaid</u>	(5) <u>Ultimate Claims</u>	(6) <u>Average Severity</u>
Prior	16 814 247	1 500	25 221 371	8 407 124	119	211 624
1991	9 481 008	1 572	14 905 903	5 424 895	63	238 037
1992	20 930 640	1 647	34 471 005	13 540 365	220	156 610
1993	9 232 970	1 733	15 997 027	6 764 057	118	135 959
1994	7 849 453	1 852	14 534 360	6 684 908	112	129 414
1995	6 266 453	1 984	12 432 291	6 165 837	97	127 647
1996	9 190 224	2 109	19 383 422	10 193 198	101	191 466
1997	5 308 135	2 234	11 856,081	6 547 946	75	158 070
1998	6 092 110	2 383	14 519 853	8 427 743	139	104 624
1999	4 393 326	2 557	11 234 067	6 840 742	113	98 998
2000	1 286 500	2 898	3 728 428	2 441 928	56	67 091
2001	1 019 657	3 389	3 455,676	2 436 019	32	108 883
2002	438 161	4 074	1 784 884	1 346 724	28	63 491
2003	757 190	5 932	4 491 970	3 734 780	36	125 706
2004	116 907	10 480	1 225 211	1 108 304	19	65 306
2005	0		2 937 234	2 937 234		86 095
Total	99 176 981		192 178,784	93 001 803	1 346	142 756

<u>FY Released</u>	(7) <u>Ultimate Paid</u>	(8) <u>Ultimate Claims</u>	(9) <u>Average Severity</u>
2006	3 072 216	36	86 095
2007	3,053,458	35	86 095
2008	3 039,389	35	86 095
2009	3 028 838	35	86 095
2010	2 997 184	35	86,095
2011	2 997 184	35	86 095
2012	2 997,184	35	86 095
2013	2 997,184	35	86,095
2014	2 997 184	35	86 095
2015	2,997 184	35	86 095

Notes:

- (1) Exhibit 6, Sheet 2.1
 - (2) Exhibit 6, Sheet 2.1
 - (3) = (1) x (2) except 2005, which is based on a five year average of column (3) from 2000 through 2004.
 - (4) = (3) - (1)
 - (5) Exhibit 5, Sheet 1.1, Column 3
 - (6) = (3) / (5) except 2005, which is based on a five year average of column (6) from 2000 through 2004
 - (7) = (8) x (9)
 - (8) Exhibit 4, Column (6)
 - (9) = (6) for most recent Fiscal Year Released
- It is assumed that the average severity of claims will not increase in the future, because future inflation in the cost of site remediation will be offset by:
- (1) Improved regulation
 - (2) More efficient remediation of contaminated sites
 - (3) Impact of HB 282 on reimbursable costs,
 - (4) Earlier remediation of the worst contaminated sites

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Ultimate Paid by Fiscal Year of Release
As of 06/30/05**

PSTA Only

<u>FY Released</u>	(1) <u>Cumulative Paid</u>	(2) <u>CDF</u>	(3) <u>Ultimate Paid</u>	(4) <u>Unpaid</u>	(5) <u>Ultimate Claims</u>	(6) <u>Average Severity</u>
Prior	12 265 030	1 300	15 944 539	3 679 509	87	182 515
1991	5 587 606	1 386	7 743 329	2 155 722	61	126 843
1992	7 570 002	1 442	10 914 725	3 344 723	92	118 473
1993	10 691 754	1 555	16 624 901	5 933,147	155	107 305
1994	11 152 976	1 690	18,852 052	7 699 076	179	105 222
1995	19 381 034	1 856	35 961 670	16 580 636	252	142 794
1996	18 877 417	2 005	37 850 046	18,972 629	311	121 584
1997	23 470 996	2 111	49 551 378	26 080 382	570	86 858
1998	33 885 176	2 320	78 614 222	44 729 046	979	80 321
1999	16 309 716	2 527	41 221 148	24 911 432	482	85,542
2000	5 927 512	2 837	16 814 306	10 886 794	256	65 630
2001	4 119 904	3 261	13 433 077	9 313 174	238	56 323
2002	2 220 275	3 974	8 822 715	6 602 440	182	48 475
2003	1 486 627	5 601	8 326 357	6 839 730	170	48 939
2004	1 441 759	12 226	17 627 465	16,185 705	131	134.075
2005	0		13,004 784	13,004.784		70 688
Total	174 387 785		391 306 714	216 918 929	4 190	93 380

<u>FY Released</u>	(7) <u>Ultimate Paid</u>	(8) <u>Ultimate Claims</u>	(9) <u>Average Severity</u>
2006	14 188 730	201	70 688
2007	14 102,098	199	70 688
2008	14 037,124	199	70 688
2009			
2010			
2011			
2012			
2013			
2014			
2015			

Notes:

- (1) Exhibit 6, Sheet 2.2
- (2) Exhibit 6, Sheet 2.2
- (3) = (1) x (2) except 2005, which is based on a five year average of column (3) from 2000 through 2004
- (4) = (3) - (1)
- (5) Exhibit 5, Sheet 1.2, Column 3
- (6) = (3) / (5) except 2005, which is based on a five year average of column (6) from 2000 through 2004.
- (7) = (8) x (9)
- (8) Exhibit 4, Column (7)
- (9) = (6) for most recent Fiscal Year Released

It is assumed that the average severity of claims will not increase in the future, because future inflation in the cost of site remediation will be offset by:

- (1) Improved regulation
- (2) More efficient remediation of contaminated sites
- (3) Impact of HB 282 on reimbursable costs,
- (4) Earlier remediation of the worst contaminated sites.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Payment Pattern by Fiscal Year of Release
As of 06/30/05

FY Released	Payment Lag Months from Beginning of Fiscal Year												Total			
	12	24	36	48	60	72	84	96	108	120	132	144		156	168	180
Prior					1,681,507	3,525,487	4,237,713	5,257,070	7,533,855	9,621,614	11,654,278	12,873,037	13,963,658	15,010,387	16,042,237	16,814,247
1991			864,467	1,375,087	3,500,943	4,346,285	4,893,201	5,916,831	8,373,941	7,189,980	7,575,153	8,108,863	8,730,412	9,237,830	9,481,008	9,481,008
1992	2,181,304	4,651,476	7,988,885	10,035,607	11,976,180	13,165,568	14,374,222	16,076,876	16,542,607	17,300,391	18,469,804	19,793,714	20,480,156	20,930,640	20,930,640	
1993	227,149	1,642,550	2,940,280	3,423,624	4,085,619	4,914,787	5,445,561	5,976,854	6,719,816	7,199,137	8,009,230	8,550,732	9,232,870			9,232,870
1994	155,219	1,871,805	2,968,656	4,124,676	4,910,758	5,402,138	5,845,436	6,549,816	6,623,947	7,305,558	7,526,274	7,849,453				7,849,453
1995	255,204	1,305,098	2,491,150	3,008,694	3,838,747	4,608,863	5,235,702	5,420,620	5,708,471	5,958,888	6,266,453					6,266,453
1996	28,265	1,244,838	2,807,624	4,180,044	5,854,655	7,218,478	7,711,277	8,318,293	8,591,551	9,190,224						9,190,224
1997	54,915	824,949	1,642,769	2,662,571	3,309,683	3,879,796	4,652,053	4,900,053	5,308,135							5,308,135
1998	42,208	1,317,914	2,576,270	3,675,644	4,228,461	5,088,859	5,661,756	6,092,110								6,092,110
1999	135,210	1,993,187	2,437,252	2,824,780	3,230,957	3,752,946	4,393,326									4,393,326
2000	40,172	285,887	551,248	889,464	1,019,657	1,286,500										1,286,500
2001	28,476	380,960	587,209	886,754												886,754
2002	0	140,156	289,898	438,161												438,161
2003	42,083	574,384														574,384
2004	26,373	116,907														116,907
2005	0															0

FY Released	Paid Development Factors												Total			
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156		156-168	168-180	180-192
Prior					2,047	2,097	1,241	1,433	1,277	1,211	1,105	1,085	1,075	1,069	1,048	
1991			1,591	1,793	1,420	1,241	1,209	1,077	1,128	1,054	1,070	1,077	1,058	1,026		
1992	2,132	1,717	1,256	1,183	1,099	1,092	1,118	1,035	1,040	1,068	1,072	1,034	1,023			
1993	7,231	1,780	1,164	1,193	1,203	1,108	1,088	1,124	1,071	1,113	1,068	1,080				
1994	10,771	1,776	1,389	1,191	1,100	1,101	1,102	1,042	1,071	1,030	1,043					
1995	5,114	1,909	1,409	1,122	1,170	1,136	1,035	1,053	1,044	1,052						
1996	44,042	2,336	1,438	1,420	1,318	1,068	1,079	1,033	1,070							
1997	15,022	1,891	1,631	1,243	1,172	1,189	1,053	1,083								
1998	31,374	1,865	1,427	1,160	1,093	1,093	1,085	1,095								
1999	8,864	2,032	1,159	1,144	1,162	1,171										
2000	7,967	1,874	1,310	1,323	1,093											
2001	13,368	1,543	1,511													
2002		2,068														
2003	13,546	1,316														
2004	4,433															
Average	10,571	1,938	1,492	1,335	1,251	1,130	1,114	1,110	1,100	1,066	1,071	1,069	1,052	1,048	1,048	
Last 5	9,628	1,767	1,456	1,202	1,169	1,133	1,073	1,067	1,059	1,063	1,071	1,063	1,052	1,048	1,048	
Last 3	9,039	1,643	1,585	1,205	1,153	1,154	1,076	1,056	1,051	1,065	1,061	1,063	1,052	1,048	1,048	
Wtd Avg	4,728	1,342	1,369	1,245	1,192	1,117	1,111	1,090	1,092	1,090	1,074	1,062	1,047	1,053	1,048	
Selected Cumulative %	9,628	1,767	1,456	1,202	1,169	1,133	1,073	1,067	1,059	1,063	1,071	1,069	1,052	1,048	1,048	1,500
	100,006	10,460	5,932	4,074	3,389	2,898	2,357	2,334	2,109	1,984	1,852	1,733	1,647	1,572	1,500	1,500
	1.0%	9.5%	16.9%	24.5%	29.5%	34.5%	39.1%	42.0%	44.8%	47.4%	50.4%	54.0%	57.7%	60.7%	63.6%	66.7%

Note: Development factors equal cumulative payments at X + 12 months divided by cumulative payments at X months

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Payment Pattern by Fiscal Year of Release
As of 06/30/05

FY Released	Payment Lag Months from Beginning of Fiscal Year												Total				
	12	24	36	48	60	72	84	96	108	120	132	144		156	168	180	192
Prior																	
1991				28,983	71,936	356,430	1,053,824	3,527,564	5,497,355	6,289,524	7,259,883	8,488,383	10,130,104	11,050,187	11,505,621	12,265,030	
1992				1,107,708	308,948	684,423	1,129,802	1,710,326	2,407,096	3,424,007	3,874,711	4,352,958	4,866,639	5,374,483	5,587,506	5,887,506	
1993				587,508	3,011,493	3,760,983	4,426,593	4,975,333	5,366,917	5,663,259	6,361,514	7,069,844	7,227,989	7,570,002	7,870,002	7,870,002	
1994				2,957,795	5,155,004	6,237,266	7,421,556	8,548,113	9,219,907	9,747,822	10,022,044	10,468,561	10,591,754	10,681,754	10,681,754	10,681,754	
1995	0	310,209	3,177,612	9,670,253	12,314,032	14,607,490	16,189,161	17,035,158	17,538,327	18,233,488	18,664,534	19,008,154	19,381,034	19,381,034	19,381,034	19,381,034	
1996	484,414	4,192,262	9,907,581	12,328,658	14,583,431	15,903,406	16,781,852	17,817,774	18,377,417	18,877,417	19,381,034	19,381,034	19,381,034	19,381,034	19,381,034	19,381,034	
1997	196,547	3,306,441	7,913,608	9,907,581	12,328,658	14,583,431	15,903,406	16,781,852	17,817,774	18,377,417	18,877,417	19,381,034	19,381,034	19,381,034	19,381,034	19,381,034	
1998	137,892	5,432,107	14,353,247	19,329,840	23,036,924	27,009,811	30,468,123	33,885,175	33,885,175	33,885,175	33,885,175	33,885,175	33,885,175	33,885,175	33,885,175	33,885,175	
1999	175,154	3,296,506	6,951,904	9,853,771	12,350,371	14,391,415	16,308,716	18,308,716	18,308,716	18,308,716	18,308,716	18,308,716	18,308,716	18,308,716	18,308,716	18,308,716	
2000	184,133	1,878,378	3,009,743	4,545,208	5,457,478	5,927,512											
2001	28,401	718,867	1,889,403	3,303,803	4,119,904												
2002	76,532	757,334	1,889,403	2,220,275													
2003	145,016	825,107	1,486,627														
2004	200,713	1,441,759															
2005	0																

FY Released	Paid Development Factors												Total			
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156		156-168	168-180	180-192
Prior																
1991				10,660	4,955	2,857	3,347	1,358	1,144	1,154	1,163	1,180	1,091	1,041	1,066	
1992				3,719	2,215	1,651	1,914	1,407	1,422	1,132	1,123	1,118	1,104	1,040		
1993				1,743	1,249	1,177	1,124	1,078	1,055	1,129	1,108	1,029	1,040			
1994				1,259	1,210	1,180	1,132	1,079	1,057	1,028	1,045	1,021				
1995	6,554	4,088	1,584	1,259	1,090	1,193	1,125	1,225	1,058	1,096	1,032					
1996	16,663	2,307	1,273	1,186	1,108	1,056	1,033	1,024	1,019							
1997	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
1998	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
1999	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2000	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2001	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2002	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2003	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2004	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
2005	16,663	2,307	1,273	1,186	1,091	1,055	1,062	1,059								
Average	15,636	2,488	1,550	2,267	1,598	1,378	1,398	1,192	1,119	1,093	1,098	1,087	1,078	1,040	1,066	
Last 5	11,485	2,183	1,409	1,219	1,149	1,122	1,089	1,099	1,053	1,081	1,098	1,087	1,078	1,040	1,066	
Last 3	7,590	2,395	1,425	1,333	1,142	1,156	1,089	1,064	1,051	1,047	1,061	1,056	1,078	1,040	1,066	
Wtd Avg	13,712	2,290	1,392	1,260	1,160	1,142	1,123	1,111	1,070	1,069	1,082	1,082	1,077	1,041	1,066	
Selected Cumulative %	11,485	2,183	1,409	1,219	1,149	1,122	1,089	1,099	1,053	1,081	1,098	1,087	1,078	1,040	1,066	1,300
	140,421	12,226	3,974	2,837	2,527	2,320	2,111	2,005	1,856	1,691	1,560	1,555	1,442	1,386	1,300	1,300
	0.7%	8.2%	17.9%	25.2%	30.7%	35.3%	39.6%	43.1%	47.4%	49.9%	53.9%	59.2%	64.3%	69.4%	72.2%	76.9%

Note:
Development factors equal cumulative payments at X + 12 months divided by cumulative payments at X months

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Ultimate Paid by Fiscal Year Reported
As of 06/30/05**

FRA Only

<u>FY</u> <u>Reported</u>	<u>(1)</u> <u>Cumulative</u> <u>Paid</u>	<u>(2)</u> <u>CDF</u>	<u>(3)</u> <u>Ultimate</u> <u>Paid</u>	<u>(4)</u> <u>Unpaid</u>	<u>(5)</u> <u>Reported</u> <u>Claims</u>	<u>(6)</u> <u>Ultimate</u> <u>Average</u> <u>Severity</u>
1991	2,047,729	1.030	2,109,161	61,432	11	191,742
1992	12,786,549	1.040	13,301,847	515,298	131	101,541
1993	20,395,015	1.056	21,538,008	1,142,993	160	134,613
1994	11,915,582	1.077	12,832,439	916,857	96	133,671
1995	5,686,345	1.116	6,345,407	659,063	80	79,318
1996	7,016,208	1.159	8,133,868	1,117,660	72	112,970
1997	12,006,854	1.215	14,592,167	2,585,313	128	114,001
1998	7,302,915	1.275	9,312,985	2,010,071	117	79,598
1999	8,960,835	1.350	12,097,947	3,137,112	171	70,748
2000	5,648,080	1.444	8,153,960	2,505,880	98	83,204
2001	1,866,822	1.665	3,109,153	1,242,330	52	59,791
2002	1,720,238	1.883	3,238,874	1,518,637	65	49,829
2003	999,589	2.215	2,213,862	1,214,273	32	69,183
2004	788,629	2.940	2,318,599	1,529,970	39	59,451
2005	35,592		3,806,890	3,771,297	18	64,292
Total	99,176,981		123,105,165	23,928,185	1,270	96,933

Notes:

- (1) Exhibit 7, Sheet 2.1
- (2) Exhibit 7, Sheet 2.1
- (3) = (1) x (2) except 2005, which is based on a five year average of column (3) from 2000 through 2004.
- (4) = (3) - (1)
- (5) Exhibit 7, Sheet 3, Column 1
- (6) = (3) / (5) except 2005, which is based on a five year average of column (6) from 2000 through 2004.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Ultimate Paid by Fiscal Year Reported
As of 06/30/05

PSTA Only

FY <u>Reported</u>	(1) <u>Cumulative Paid</u>	(2) <u>CDF</u>	(3) <u>Ultimate Paid</u>	(4) <u>Unpaid</u>	(5) <u>Reported Claims</u>	(6) <u>Ultimate Average Severity</u>
1991						
1992	3,136,738	1.120	3,513,147	376,409	22	159,688
1993	10,293,072	1.155	11,889,435	1,596,363	94	126,483
1994	7,481,946	1.166	8,724,710	1,242,765	94	92,816
1995	17,122,893	1.235	21,154,815	4,031,922	169	125,176
1996	22,560,924	1.300	29,334,788	6,773,864	249	117,810
1997	27,539,369	1.340	36,900,196	9,360,826	434	85,023
1998	29,453,954	1.408	41,484,535	12,030,582	654	63,432
1999	27,700,794	1.513	41,903,841	14,203,047	640	65,475
2000	9,046,224	1.648	14,906,440	5,860,216	240	62,110
2001	8,395,805	1.839	15,436,597	7,040,792	218	70,810
2002	6,355,765	2.117	13,456,866	7,101,101	245	54,926
2003	3,022,556	2.596	7,847,425	4,824,869	201	39,042
2004	2,264,832	4.052	9,176,484	6,911,651	178	51,553
2005	12,912		12,164,762	12,151,851	54	55,688
Total	174,387,785		267,894,042	93,506,256	3,492	76,717

Notes:

- (1) Exhibit 7, Sheet 2.2
- (2) Exhibit 7, Sheet 2.2
- (3) = (1) x (2) except 2005, which is based on a five year average of column (3) from 2000 through 2004.
- (4) = (3) - (1)
- (5) Exhibit 7, Sheet 3, Column 2
- (6) = (3) / (5) except 2005, which is based on a five year average of column (6) from 2000 through 2004.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
SOTRA Ultimate Paid by Fiscal Year Application Received
As of 06/30/05**

SOTRA Only

<u>FY Received</u>	(1) <u>Cumulative Paid</u>	(2) <u>CDF</u>	(3) <u>Ultimate Paid</u>	(4) <u>Unpaid</u>	(5) <u>Number of Applications</u>	(6) <u>Ultimate Average Severity</u>
1998	5,290,153	1.010	5,343,055	52,902	507	10,539
1999	2,578,437	1.010	2,604,221	25,784	289	9,011
2000	1,405,090	1.018	1,430,337	25,247	177	8,081
2001	1,597,780	1.037	1,657,061	59,281	194	8,542
2002	1,847,986	1.093	2,019,815	171,829	225	8,977
2003	1,453,226	1.237	1,797,202	343,976	179	10,040
2004	1,373,163	1.534	2,106,886	733,723	212	9,938
2005	181,814	6.046	1,099,327	917,513	124	8,866
Total	15,727,649		18,057,905	2,330,256	1,907	9,469
<u>Projected FY Received</u>	(7) <u>Ultimate Paid</u>	(8) <u>Number of Applications</u>	(9) <u>Average Severity</u>			
2006	1,732,100	187	9,272			
2007	1,732,100	187	9,272			
2008	2,596,296	280	9,272			
2009	0	0	0			

Notes:

- (1) Exhibit 7, Sheet 2.3
- (2) Exhibit 7, Sheet 2.3
- (3) = (1) x (2)
- (4) = (3) - (1)
- (5) Exhibit 7, Sheet 3, Column 2
- (6) = (3) / (5)

(7) = (8) x (9) Note: SOTRA terminates 07/15/08.
 (8) = Five Year Average of Column (5). 2008 increased 50%
 to cover surge in last year to apply.
 (9) = Five Year Average of Column (6).

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
FRA Payment Pattern by Fiscal Year Reported
As of 06/30/05**

FRA Only

FY Reported	Payment Lag Months from Beginning of Fiscal Year												Total		
	12	24	36	48	60	72	84	96	108	120	132	144		156	168
1991			1,017,852	1,259,074	1,448,491	1,592,897	1,626,834	1,753,931	1,821,567	1,957,106	1,952,617	1,982,330	2,031,300	2,046,554	2,047,729
1992	2,360,893	5,136,217	7,265,605	8,823,087	9,735,202	10,385,761	11,071,126	11,507,736	11,405,711	11,731,909	11,920,869	12,323,817	12,502,051	12,786,549	20,395,015
1993	538,997	5,045,871	8,615,231	10,332,571	11,674,922	13,592,370	15,117,623	15,978,644	16,663,507	17,684,777	19,146,224	19,990,878	20,395,015		11,915,582
1994	155,219	2,682,424	4,534,870	6,121,199	7,758,411	8,560,589	9,066,335	9,161,976	10,160,304	10,834,679	11,331,337	11,915,582			5,696,345
1995	215,768	1,885,369	3,247,279	3,796,809	4,187,778	4,569,408	4,730,509	4,931,701	5,225,739	5,468,236	5,696,345				7,016,208
1996	169,141	1,393,413	2,648,368	3,349,501	4,659,437	5,822,542	6,085,590	6,508,424	6,817,639	7,016,208					12,006,854
1997	740,533	3,534,639	5,519,764	7,866,517	8,900,713	9,857,823	10,721,312	11,368,934	12,006,854						7,302,915
1998	711,575	3,531,464	4,806,436	5,510,569	5,909,747	6,896,006	6,997,366	7,302,915							8,960,835
1999	504,334	3,745,431	5,542,118	6,121,770	7,004,650	7,904,672	8,960,835								5,648,080
2000	317,027	2,085,666	3,099,291	4,090,218	4,914,848	5,648,080									1,866,822
2001	646,311	1,081,206	1,388,798	1,692,940	1,896,822										1,720,238
2002	706,822	1,255,306	1,542,008	1,720,238											999,569
2003	78,481	862,635	999,569												788,629
2004	96,331	768,629													35,592
2005	35,592														

FY Paid Development Factors

FY Reported	Paid Development Factors												180+	
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156		156-168
1991		1,237	1,150	1,100	1,023	1,077	1,039	1,020	1,031	1,020	1,015	1,025	1,008	1,001
1992	2,176	1,418	1,211	1,103	1,067	1,066	1,099	0,991	1,029	1,016	1,034	1,014	1,023	
1993	9,362	1,707	1,199	1,130	1,164	1,112	1,057	1,043	1,061	1,083	1,044	1,020		
1994	17,282	1,691	1,350	1,267	1,103	1,059	1,061	1,055	1,076	1,036	1,052			
1995	8,739	1,722	1,169	1,103	1,091	1,035	1,043	1,060	1,046	1,040				
1996	8,238	1,901	1,265	1,391	1,250	1,045	1,045	1,086	1,032	1,029				
1997	4,773	1,562	1,425	1,131	1,108	1,088	1,060	1,056						
1998	4,963	1,390	1,123	1,072	1,133	1,045	1,044							
1999	7,426	1,480	1,105	1,144	1,128	1,134								
2000	6,579	1,486	1,320	1,202	1,149									
2001	1,568	1,284	1,219	1,103										
2002	1,776	1,228	1,116											
2003	10,992	1,159												
2004	8,187													
Average	7,089	1,482	1,221	1,159	1,122	1,073	1,054	1,037	1,045	1,039	1,036	1,020	1,015	1,001
Last 5	5,840	1,327	1,176	1,130	1,154	1,069	1,059	1,049	1,048	1,039	1,036	1,020	1,015	1,001
Last 3	6,985	1,224	1,218	1,150	1,137	1,089	1,083	1,049	1,061	1,053	1,043	1,020	1,015	1,001
Wtdl Avg	4,560	1,521	1,228	1,153	1,126	1,079	1,055	1,037	1,050	1,048	1,042	1,018	1,021	1,001
Selected	7,089	1,327	1,176	1,130	1,154	1,069	1,059	1,048	1,048	1,039	1,036	1,020	1,015	1,010
Cumulative	20,842	2,940	2,215	1,883	1,665	1,444	1,350	1,275	1,215	1,159	1,116	1,077	1,056	1,030
%	4.9%	34.0%	45.2%	53.1%	60.0%	69.3%	74.1%	78.4%	82.3%	86.3%	89.6%	92.9%	94.7%	96.1%

Note:
Development factors equal cumulative payments at X + 12 months divided by cumulative payments at X months.

Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
PSTA Payment Pattern by Fiscal Year Reported
As of 06/30/05

PSTA Only

FY Reported	12	24	36	48	60	72	84	96	108	120	132	144	156	168	Total
1992			633,226	1,134,542	2,491,836	2,621,734	2,698,739	2,738,419	2,764,336	2,809,829	2,845,987	3,031,852	3,041,446	3,136,738	3,136,738
1993		338,929	1,077,914	3,420,450	5,130,796	6,007,351	6,646,701	7,634,148	8,459,301	8,916,397	9,444,806	10,131,970	10,293,072	10,293,072	10,293,072
1994	36,481	1,040,886	2,999,312	4,221,512	5,073,121	5,292,053	5,562,981	6,134,060	6,405,644	6,580,120	7,191,403	7,481,946	7,481,946	7,481,946	7,481,946
1995	561,613	4,432,098	9,025,090	11,414,024	12,627,896	13,589,954	14,440,567	15,283,718	15,895,210	16,330,343	17,122,893	17,122,893	17,122,893	17,122,893	17,122,893
1996	1,116,524	6,753,094	13,886,605	16,242,943	18,501,438	19,648,928	20,644,156	21,446,400	22,040,160	22,580,924	22,580,924	22,580,924	22,580,924	22,580,924	22,580,924
1997	1,071,036	8,395,122	13,648,740	16,962,369	19,817,008	21,568,465	24,163,235	25,889,352	27,539,369	27,539,369	27,539,369	27,539,369	27,539,369	27,539,369	27,539,369
1998	533,255	7,005,977	14,133,863	17,943,746	20,813,604	24,248,786	26,808,288	29,453,954	29,453,954	29,453,954	29,453,954	29,453,954	29,453,954	29,453,954	29,453,954
1999	1,227,770	9,438,196	16,282,271	18,928,669	22,228,382	25,004,465	27,700,794	27,700,794	27,700,794	27,700,794	27,700,794	27,700,794	27,700,794	27,700,794	27,700,794
2000	569,879	3,161,240	5,206,103	6,816,381	7,944,937	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224	9,046,224
2001	1,113,618	4,067,714	6,506,295	7,704,792	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805	8,395,805
2002	1,889,614	3,603,687	5,626,634	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765	6,355,765
2003	540,067	2,071,862	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556	3,022,556
2004	390,452	2,264,832													2,264,832
2005	12,912														12,912

FY Reported	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168+
1992			1,792	2,196	1,052	1,029	1,015	1,009	1,016	1,013	1,065	1,003	1,031	
1993		3,180	3,173	1,500	1,171	1,107	1,178	1,080	1,064	1,059	1,073	1,016		
1994	26,532	2,861	1,407	1,202	1,043	1,051	1,103	1,044	1,027	1,063	1,040			
1995	7,852	2,036	1,265	1,106	1,076	1,063	1,058	1,040	1,031	1,045				
1996	7,940	1,586	1,170	1,139	1,062	1,051	1,039	1,028	1,024					
1997	7,838	1,626	1,243	1,168	1,088	1,120	1,072	1,064						
1998	13,138	2,017	1,270	1,160	1,165	1,106	1,089							
1999	7,687	1,619	1,239	1,174	1,125	1,108								
2000	5,547	1,647	1,309	1,166	1,139									
2001	3,653	1,589	1,184	1,090										
2002	2,014	1,479	1,130											
2003	3,836	1,459												
2004	5,501													

Average	8,525	1,921	1,471	1,290	1,102	1,079	1,080	1,044	1,031	1,052	1,059	1,010	1,031	
Last 5	4,170	1,561	1,226	1,152	1,116	1,089	1,074	1,051	1,031	1,052	1,059	1,010	1,031	
Last 3	3,884	1,512	1,208	1,143	1,111	1,111	1,070	1,044	1,027	1,066	1,059	1,010	1,031	
Wtd Avg	6,015	1,722	1,263	1,174	1,108	1,090	1,077	1,046	1,030	1,055	1,060	1,013	1,031	
Selected Cumulative %	5,000	1,561	1,226	1,152	1,116	1,089	1,074	1,051	1,031	1,052	1,059	1,010	1,031	1,120
	20,259	4,052	2,596	2,117	1,838	1,648	1,513	1,408	1,340	1,300	1,235	1,166	1,155	1,120
	4.9%	24.7%	38.5%	47.2%	54.4%	60.7%	66.1%	71.0%	74.6%	76.9%	80.9%	85.8%	86.6%	89.3%

Note:
Development factors equal cumulative payments at X + 12 months divided by cumulative payments at X months.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
SOTRA Payment Pattern by Fiscal Year Reported
As of 06/30/05**

SOTRA Only

FY Reported	Payment Lag Months from Beginning of Fiscal Year										Total
	12	24	36	48	60	72	84	96			
1998	905,698	3,441,063	4,801,083	5,128,270	5,239,393	5,261,603	5,290,153	5,290,153			5,290,153
1999	0	759,632	1,906,217	2,286,657	2,446,954	2,552,017	2,578,437			2,578,437	
2000	0	479,561	1,103,916	1,317,545	1,392,262	1,405,090			1,405,090		
2001	112,591	1,007,294	1,334,922	1,543,882	1,597,780			1,597,780			
2002	237,208	1,471,285	1,769,546	1,847,986			1,847,986				
2003	406,643	1,217,083	1,453,226			1,453,226					
2004	522,755	1,373,163					1,373,163				
2005	181,814							181,814			

Paid Development Factors

FY Reported	Paid Development Factors										
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96+			
1998	3.799	1.395	1.068	1.022	1.004	1.005	1.000				
1999	2.509	1.200	1.070	1.043							
2000	2.302	1.194	1.057	1.009							
2001	8.946	1.325	1.157	1.035							
2002	6.202	1.203	1.044								
2003	2.993	1.194									
2004	2.627										
Average	4.914	1.655	1.132	1.046	1.019	1.008	1.000				
Last 5	5.192	1.707	1.132	1.046	1.019	1.008	1.000				
Last 3	3.941	1.241	1.131	1.054	1.019	1.008	1.000				
Wtd Avg	3.895	1.477	1.111	1.039	1.015	1.007	1.000				
Selected	3.941	1.241	1.131	1.054	1.019	1.008	1.000	1.010			
Cumulative	6.046	1.534	1.237	1.093	1.037	1.018	1.010	1.010			
%	16.5%	65.2%	80.9%	91.5%	96.4%	98.2%	99.0%	99.0%			

Note:
Development factors equal cumulative payments at X + 12 months divided by cumulative payments at X months.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Reported Claim Comparison
as of 06/30/05**

<u>FY</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
<u>Reported</u>	<u>FRA</u>	<u>PSTA</u>	<u>Subtotal</u>	<u>SOTRA</u>	<u>Total</u>
	<u>6/30/2005</u>	<u>6/30/2005</u>	<u>6/30/2005</u>	<u>6/30/2005</u>	<u>6/30/2005</u>
1991	11		11		11
1992	131	22	153		153
1993	160	94	254		254
1994	96	94	190		190
1995	80	169	249		249
1996	72	249	321		321
1997	128	434	562		562
1998	117	654	771	507	1,278
1999	171	640	811	289	1,100
2000	98	240	338	177	515
2001	52	218	270	194	464
2002	65	245	310	225	535
2003	32	201	233	179	412
2004	39	178	217	212	429
2005	18	54	72	124	196
TOTAL	1,270	3,492	4,762	1,907	6,669

Notes:
Provided by Fund

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Average Claim by Deductible Option
As of 06/30/05**

<u>Deductible</u>	(1)	(2)	(3)	(4)	(5)	(6)
	Average Closed Claim <u>FRA</u>	Average Closed Claim <u>PSTA</u>	Average Closed Claim <u>Combined</u>	Average All Claims <u>FRA</u>	Average All Claims <u>PSTA</u>	Average All Claims <u>Combined</u>
0	31,066	50,434	50,389	38,373	51,513	51,468
500	30,817	48,452	31,896	31,965	53,109	40,294
1,000	68,242	119,422	75,031	100,896	94,036	98,447
2,500	107,478	67,472	101,324	57,517	33,461	47,058
5,000	142,529	320,134	157,973	115,787	140,401	124,578
10,000	62,240	46,140	58,886	51,682	18,877	42,527
12,500	64,035	81,756	65,132	65,247	71,306	66,125
25,000	112,256	103,540	111,530	125,194	97,309	120,470
50,000				212,147		212,147
No Code	0	2,810	2,018	541	1,790	1,430
Total	67,000	48,903	51,758	80,591	50,615	58,571

<u>Deductible</u>	(7)	(8)	(9)	(10)	(11)	(12)
	Claim Count Closed Claim <u>FRA</u>	Claim Count Closed Claim <u>PSTA</u>	Claim Count Closed Claim <u>Combined</u>	Claim Count All Claims <u>FRA</u>	Claim Count All Claims <u>PSTA</u>	Claim Count All Claims <u>Combined</u>
0	6	2,586	2,592	10	2,865	2,875
500	92	6	98	160	104	264
1,000	85	13	98	200	111	311
2,500	11	2	13	26	20	46
5,000	21	2	23	45	25	70
10,000	38	10	48	93	36	129
12,500	91	6	97	236	40	276
25,000	121	11	132	402	82	484
50,000	0	0	0	2	0	2
No Code	53	135	188	108	267	375
Total	519	2,771	3,290	1,283	3,551	4,834

Notes:
All fields derived from PSTEAF's Payment and Claims data bases.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Average Claim by Size of Loss
As of 06/30/05**

<u>Size of Loss</u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Claim Count <u>FRA</u>	Claim Count <u>PSTA</u>	Claim Count <u>Combined</u>	Claim Count <u>SOTRA</u>	Average Claim <u>FRA</u>	Average Claim <u>PSTA</u>	Average Claim <u>Combined</u>	Average Claim <u>SOTRA</u>
0	231	533	764	470	0	0	0	0
10,000	115	567	682	901	5,858	5,866	5,865	7,161
20,000	146	613	759	507	14,628	14,560	14,573	13,799
30,000	101	414	515	108	24,899	24,743	24,773	23,474
40,000	103	297	400	22	34,692	34,864	34,820	33,746
50,000	63	211	274	5	45,038	44,381	44,532	43,341
60,000	54	150	204		55,031	54,544	54,673	
70,000	44	110	154		64,384	65,071	64,875	
80,000	45	88	133		73,945	74,764	74,487	
90,000	45	79	124		84,890	85,278	85,137	
100,000	29	43	72		94,748	94,671	94,702	
200,000	163	271	434		140,986	138,204	139,249	
300,000	65	84	149		245,108	245,007	245,051	
400,000	38	37	75		337,809	341,060	339,413	
500,000	18	19	37		447,701	469,771	459,034	
600,000	6	10	16		523,798	547,297	538,485	
700,000	5	7	12		635,721	645,691	641,537	
800,000	5	6	11		754,500	743,921	748,729	
900,000	5	6	11		842,523	840,926	841,652	
1,000,000	2	5	7		924,779	942,349	937,329	
1,100,000	1	1	2		1,000,000	1,000,000	1,000,000	
Total	1,283	3,551	4,834	2,013	80,591	50,615	58,571	8,416

Notes:

All fields derived from PSTEAF's Payment and Claims data bases.

Size of Loss Label reflects top end of range.

For example, the \$50,000 label reflects claims that have accumulated to over \$40,000, up to \$50,000.

**Commonwealth of Kentucky
Petroleum Storage Tank Environmental Assurance Fund
Average Claim Related to Average Obligation
As of 06/30/05**

<u>Program</u>	(1) Closed Claim Average <u>Obligation</u>	(2) Closed Claim Average <u>Payment</u>	(3) Ratio of Payment to <u>Obligation</u>	(4) Release Year Ultimate <u>Severity</u>	(5) Report Year Ultimate <u>Severity</u>	(6) Selected Ultimate <u>Severity</u>	(7) Indicated Pmt/Obl <u>Ratio</u>	(8) Selected Pmt/Obl <u>Ratio</u>
FRA	80,575	64,981	80.65%	86,095	64,292	80,000	99.29%	100.00%
PSTA	55,053	44,465	80.77%	70,688	55,688	65,000	118.07%	120.00%
SOTRA	12,611	11,015	87.34%		8,866	10,000	79.29%	80.00%

Notes:

- (1) Derived from Fund Closed Claim Report, 6/30/05
- (2) Derived from Fund Closed Claim Report, 6/30/05
- (3) = (2) / (1)
- (4) Exhibit 6, Sheet 1, Column (6) for Fiscal Year 2005
- (5) Exhibit 7, Sheet 1, Column (6) for Fiscal Year 2005
- (6) = Judgment based on Columns (2), (4), and (5)
- (7) = (3) x (6) / (2)
- (8) Judgment




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Search completed, 1 meets your criteria

Charles C. Emma [FCAS, 1993/11]  

Title: Principal

Company: Pinnacle Actuarial Resources, Inc.
524 W. State Street
Ste G
Geneva, IL 60134

Phone: (630)262-0954 Fax: (630)262-0961

E-mail: cemma@pinnacleactuaries.com 

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Casualty Actuarial Society • 4350 N. Fairfax Drive, Suite 250 • Arlington, VA 22203 • Ph: (703) 276-3100 • Fax: (703) 276-3108 • office@casact.org

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Shawna S. Ackerman [FCAS, 1996/11] 

Title: Principal & Consulting Actuary

Company: Pinnacle Actuarial Resources, Inc
50 California St, #1500
San Francisco, CA 94111

Phone: (415)439-5226 Fax: (415)439-5228

E-mail: shawnaa@pinnacleactuaries.com 

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RFQ# DEP13936
 Bid Date: 02/20/2007
 Cost Proposal Format / Bid Sheets

Name of Proposing Firm: <p style="text-align: center;">Pinnacle Actuarial Resources, Inc.</p>
--

Task	Hours	Total Proposed Cost
Entrance Conference (3 4 a)	4	\$2,500.00
Actuarial Report (3 4 b 1-7)	110	\$28,000.00
Physical and electronic copies of work papers (3 4 c)	4	\$1,000.00
Three (3) on-site consultations (3 4 d)	4 per = 12	\$3 @ \$2,500.00 =\$7,500.00
Exit Conference (3 4 e)	4	\$2,500.00
Monthly status reports (3 4 f)	4	\$1,000.00
Grand Total	138	\$42,500.00

Hourly Rates and Projected Work Distribution Assigned Staff:

	Hourly Rate	Projected Distribution
Partner	\$ 400.00	20%
Senior Actuary	\$ 325.00	30%
Staff Actuary Actuary Assistant	\$ 200.00 \$ 200.00	40%
Administrative Staff Clerical Staff	\$ 90.00 \$ 90.00	10%
Total	N/A	100%

The hourly rates listed are considered firm for Fiscal Year 2006 and FY2007. Ancillary expenses (travel, meals, lodging, etc) are to be included in Total Proposed Cost and proposed hourly rates.

Revised 1-22-07

Must	be properly licensed and possess certification as a member of the American Academy of Actuaries and either a Fellow of the Society of Actuaries or a Fellow to the Casualty Actuarial Society.
Must	Demonstrate experience in providing actuarial rate setting and plan design services to a client involving environmental liabilities.
Shall	The firm <i>shall</i> also provide information on the results of any federal or state desk reviews or field reviews of its audits during the past three (3) years.
Shall	the firm <i>shall</i> provide information on the circumstances and status of any litigation taken or pending against the firm during the past three (3) years with any government regulatory bodies or professional organizations.
Will	The bids from firms failing to meet the mandatory criteria <i>will</i> not be considered further in the evaluation process.

AGREEMENT ADDENDUM

In the event of conflict between this addendum and the agreement this addendum shall control:

- 1 **ARBITRATION** - Any references to arbitration contained in the agreement are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims
- 2 **HOLD HARMLESS** - Any clause requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety
- 3 **GOVERNING LAW** - The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law
- 4 **TAXES** - Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party
- 5 **PAYMENT** - Any references to prepayment are deleted. Payment will be in arrears
- 6 **INTEREST** - Should the agreement include a provision for interest on late payments, the Agency agrees to pay the maximum legal rate under West Virginia law. All other references to interest or late charges are deleted
- 7 **RECOUPMENT** - Any language in the agreement waiving the Agency's right to set-off, counterclaim, recoupment, or other defense is hereby deleted
- 8 **FISCAL YEAR FUNDING** - Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default
- 9 **STATUTE OF LIMITATION** - Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted
- 10 **SIMILAR SERVICES** - Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted
- 11 **ATTORNEY FEES** - The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void
- 12 **ASSIGNMENT** - Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement
- 13 **LIMITATION OF LIABILITY** - The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision limiting the Vendor's liability for direct damages or limiting the Vendor's liability under a warranty to a certain dollar amount or to the amount of the agreement is hereby deleted. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property
- 14 **RIGHT TO TERMINATE** - Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor
- 15 **TERMINATION CHARGES** - Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term
- 16 **RENEWAL** - Any reference to automatic renewal is hereby deleted. The agreement may be renewed only upon mutual written agreement of the parties
- 17 **INSURANCE** - Any provision requiring the Agency to insure equipment or property of any kind and name the Vendor as beneficiary or as an additional insured is hereby deleted
- 18 **RIGHT TO NOTICE** - Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
- 19 **ACCELERATION** - Any reference to acceleration of payments in the event of default or non-funding is hereby deleted
- 20 **AMENDMENTS** - All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General

ACCEPTED BY:
STATE OF WEST VIRGINIA

VENDOR

Spending Unit: _____

Company Name: ~~Pinnacle Actuarial Resources,~~

Signed: _____

Signed: 

Title: _____

Title: Principal

Date: _____

Date: 12-19-06

AFFIDAVIT

West Virginia Code §5A-3-10a states:

No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount

EXCEPTION:

The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies

Under penalty of law for false swearing (West Virginia Code, §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and are in compliance with the requirements as stated.

Vendor's Name: Pinnacle Actuarial Resources, Inc.

Authorized Signature:  Date: 2-13-07

No Debt Affidavit (Revised 10/13/06) Charles C. Emma



State of West Virginia
Department of Administration
Purchasing Division

EMPLOYMENT HISTORY DISCLOSURE STATEMENT

Vendor shall identify any other work, similar or otherwise currently being performed for any agency, institution, educational facility, city, county, municipality or political subdivision of the State of West Virginia. The State of West Virginia is concerned that current work could logically prevent the vendor from responsibly completing the referenced contract.

The state of West Virginia reserves the sole and exclusive right to reject the bid of any vendor when the state believes any current work could logically prevent the vendor from successfully completing the bid/contract in question. Failure to provide or disclose the required information listed shall be grounds for immediate disqualification/cancellation of the contract.

Below, the vendor shall provide the agency name, effective dates, value, general description and time required to fulfill the duties of each contract.

<u>Agency Name</u>	<u>Effective Dates</u>	<u>Value</u>	<u>General Description</u>	<u>Time Required Per Week</u>
None				

Check here if additional sheets are attached

I certify that the statements made above are true and accurate.

Charles C. Emma, Principal
Printed Name

12-19-06
Date

Signature



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
DEP13936

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
CHUCK BOWMAN 304-558-2157

VENDOR

|||||
 Pinnacle Actuarial Resources, Inc
 Attention: Charles C. Emma
 524 West State Street, Suite G
 Geneva, IL 60134

SHIP TO

ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF ADMINISTRATION
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED 01/31/2007	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
OPENING DATE 02/21/2007		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		946-12		
ACTUARIAL SERVICES * REBID OF DEP13887, SOME MANDATORIES HAVE CHANGED. * ***** THE WEST VIRGINIA PURCHASING DIVISION, ON BEHALF OF THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S DIVISION OF LAND RESTORATION SPECIAL RECLAMATION FUND, IS SOLICITING BIDS FOR AN ACTUARIAL SERVICES CONTRACT PER THE FOLLOWING SPECIFICATIONS, SCOPE OF WORK, TERMS AND CONDITIONS AND THE LIST OF MANDATORY REQUIREMENTS AS ATTACHED. THE CONTRACT WILL BE AWARDED TO THE RESPONSIBLE VENDOR WITH THE LOWEST PROPOSED TOTAL COST AS SUBMITTED ON THE ATTACHED BID PROPOSAL FORM. IT IS PREFERRED THAT THE MANDATORY REQUIRED SPECIFIED ITEMS BE NOTED WITH THE VENDOR'S BID PROPOSAL AT THE TIME OF BID SUBMISSION. HOWEVER; THE AGENCY RESERVES THE RIGHT TO REQUEST THE SUBMISSION OF THESE REQUIREMENTS OR ANY OTHER INFORMATION AT ANY TIME DURING THE BID EVALUATION PROCESS PRIOR TO MAKING A RECOMMENDATION TO AWARD TO THE PURCHASING DIVISION. FAILURE ON THE VENDOR'S PART TO COMPLY WITH SUCH A REQUEST FOR ADDITIONAL INFORMATION WITHIN THE TIME FRAME STATED IN SAID REQUEST, MAY RESULT IN THE DISQUALIFICATION OF VENDOR'S BID SUBMISSION AND RECOMMENDATION FOR AWARD. EXHIBIT 3 LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE UPON AWARD AND EXTENDS FOR A PERIOD OF TWO (2)						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Charles C. Emma</i>	TELEPHONE (630) 262-0954	DATE 2-13-07
TI Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia
2. The State may accept or reject in part or in whole, any bid
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties
13. **BANKRUPTCY:** in the event the vendor/contractor files for bankruptcy protection, this contract is automatically null and void, and is terminated without further order
14. **HIPAA Business Associate Addendum -** The West Virginia State Government HIPAA Business Associate Addendum (BAA) approved by the Attorney General and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Covered Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications
3. Complete all sections of the quotation form
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F O B destination unless alternate shipping terms are clearly identified in the quotation
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications

SIGNED BID TO:

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFO NUMBER
 DEP13936

PAGE
 3

ADDRESS CORRESPONDENCE TO ATTENTION OF
 CHUCK BOWMAN
 304-558-2157

RFQ COPY

TYPE NAME/ADDRESS HERE

VENDOR

Pinnacle Actuarial Resources, Inc.
 524 West State Street, Suite G
 Geneva, IL 60134

SHIP TO

ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF ADMINISTRATION
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED 01/31/2007	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
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BID OPENING DATE 02/21/2007 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.</p> <p>REV. 04/11/2001</p> <p>VENDOR PREFERENCE CERTIFICATE</p> <p>CERTIFICATION AND APPLICATION* IS HEREBY MADE FOR PREFERENCE IN ACCORDANCE WITH WEST VIRGINIA CODE, 5A-3-37 (DOES NOT APPLY TO CONSTRUCTION CONTRACTS).</p> <p>A. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS AN INDIVIDUAL RESIDENT VENDOR AND HAS RESIDED CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p> <p>() BIDDER IS A PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR AND HAS MAINTAINED ITS HEAD-QUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR 80% OF THE OWNERSHIP INTEREST OF BIDDER IS HELD BY ANOTHER INDIVIDUAL, PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR WHO HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p> <p>(X) BIDDER IS A CORPORATION NONRESIDENT VENDOR</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Clb CB</i>	TELEPHONE (630) 262-0954	DATE 2-13-07
Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 DEP13936

PAGE
 2

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 304-558-2157

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VENDOR

Pinnacle Actuarial Resources, Inc
 524 West State Street, Suite G
 Geneva, IL 60134

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 25304 304-926-0499

DATE PRINTED 01/31/2007	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: 02/21/2007 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>YEARS OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 90 DAYS WRITTEN NOTICE. NOTICE BY VENDOR OF INTENT TO TERMINATE WILL NOT RELIEVE VENDOR OF THE OBLIGATION TO CONTINUE TO PROVIDE SERVICES PURSUANT TO TERMS OF CONTRACT</p> <p>UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</p> <p>RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID & CONTRACT HEREIN. SEE SPECIFICATIONS FOR ADDITIONAL CANCELLATION SCENARIOS.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

GNATURE <i>[Signature]</i>	TELEPHONE (630) 262-0954	DATE 2-13-07
Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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Request for Quotation

RFQ NUMBER
DEP13936

PAGE
4

ADDRESS CORRESPONDENCE TO ATTENTION OF
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 Geneva, IL 60134

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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/31/2007				

BID OPENING DATE: 02/21/2007 BID OPENING TIME: 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>WHICH HAS AN AFFILIATE OR SUBSIDIARY WHICH EMPLOYS A MINIMUM OF ONE HUNDRED STATE RESIDENTS AND WHICH HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA CONTINUOUSLY FOR THE FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION.</p> <p>B. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS A RESIDENT VENDOR WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES WORKING ON THE PROJECT BEING BID ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID;</p> <p>OR</p> <p>() BIDDER IS A NONRESIDENT VENDOR EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS OR IS A NONRESIDENT VENDOR WITH AN AFFILIATE OR SUBSIDIARY WHICH MAINTAINS ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES OR BIDDERS' AFFILIATE'S OR SUBSIDIARY'S EMPLOYEES ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID.</p> <p>BIDDER UNDERSTANDS IF THE SECRETARY OF TAX & REVENUE DETERMINES THAT A BIDDER RECEIVING PREFERENCE HAS FAILED TO CONTINUE TO MEET THE REQUIREMENTS FOR SUCH PREFERENCE, THE SECRETARY MAY ORDER THE DIRECTOR OF PURCHASING TO: (A) RESCIND THE CONTRACT OR PURCHASE ORDER ISSUED; OR (B) ASSESS A PENALTY AGAINST SUCH BIDDER IN AN AMOUNT NOT TO EXCEED 5% OF THE BID AMOUNT</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE:	TELEPHONE: (630) 262-0954	DATE: 2-13-07
Principal	FEIN: 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for
 Quotation

RFQ NUMBER
 DEP13936

PAGE
 5

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 CHUCK BOWMAN
 304-558-2157

RFQ COPY
 TYPE NAME/ADDRESS HERE

V
E
N
D
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R

Pinnacle Actuarial Resources, Inc.
 524 West State Street, Suite G
 Geneva, IL 60134

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ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF ADMINISTRATION
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
01/31/2007				

D OPENING DATE 02/21/2007 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
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AND THAT SUCH PENALTY WILL BE PAID TO THE CONTRACTING AGENCY OR DEDUCTED FROM ANY UNPAID BALANCE ON THE CONTRACT OR PURCHASE ORDER.

BY SUBMISSION OF THIS CERTIFICATE, BIDDER AGREES TO DISCLOSE ANY REASONABLY REQUESTED INFORMATION TO THE PURCHASING DIVISION AND AUTHORIZES THE DEPARTMENT OF TAX AND REVENUE TO DISCLOSE TO THE DIRECTOR OF PURCHASING APPROPRIATE INFORMATION VERIFYING THAT BIDDER HAS PAID THE REQUIRED BUSINESS TAXES, PROVIDED THAT SUCH INFORMATION DOES NOT CONTAIN THE AMOUNTS OF TAXES PAID NOR ANY OTHER INFORMATION DEEMED BY THE TAX COMMISSIONER TO BE CONFIDENTIAL.

UNDER PENALTY OF LAW FOR FALSE SWEARING (WEST VIRGINIA CODE 61-5-3), BIDDER HEREBY CERTIFIES THAT THIS CERTIFICATE IS TRUE AND ACCURATE IN ALL RESPECTS; AND THAT IF A CONTRACT IS ISSUED TO BIDDER AND IF ANYTHING CONTAINED WITHIN THIS CERTIFICATE CHANGES DURING THE TERM OF THE CONTRACT, BIDDER WILL NOTIFY THE PURCHASING DIVISION IN WRITING IMMEDIATELY.

BIDDER: Pinnacle Actuarial Resources, Inc.

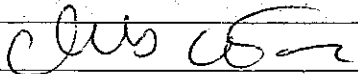
DATE: 2-13-07

SIGNED: 
 Charles C. Emma

TITLE: Principal

* CHECK ANY COMBINATION OF PREFERENCE CONSIDERATION(S) IN EITHER "A" OR "B", OR BOTH "A" AND "B" WHICH YOU ARE

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE (630) 262-0954	DATE 2-13-07
NAME Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
DEP13936

PAGE
6

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CHUCK BOWMAN 304-558-2157

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 Pinnacle Actuarial Resources, Inc.
 524 West State Street, Suite G
 Geneva, IL 60134

SHIP TO

ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF ADMINISTRATION
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED 01/31/2007	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
BID OPENING DATE 02/21/2007		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>ENTITLED TO RECEIVE. YOU MAY REQUEST UP TO THE MAXIMUM 5% PREFERENCE FOR BOTH "A" AND "B". (REV. 12/00)</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: CB-23</p> <p>RFQ NO.: DEP13936</p> <p>BID OPENING DATE: 02/21/2007</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: (630) 262-0961</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE (630) 262-0954	DATE 2-13-07
NAME Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

request for
Quotation

RFO NUMBER

DEP13936

PAGE

7

ADDRESS CORRESPONDENCE TO ATTENTION OF:

CHUCK BOWMAN
 304-558-2157

RFQ COPY
 TYPE NAME/ADDRESS HERE

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Pinnacle Actuarial Resources, Inc.
 524 West State Street, Suite G
 Geneva, IL 60134

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ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF ADMINISTRATION
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/31/2007				

BID OPENING DATE 02/21/2007 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
CONTACT PERSON (PLEASE PRINT CLEARLY): Charles C. Emma, FCAS, MAAA Principal 524 West State Street, Suite G Geneva, IL 60134 (630) 262-0954 Cemma@pinnacleactuaries.com ***** THIS IS THE END OF RFQ DEP13936 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
<i>Charles C. Emma</i>	(630) 262-0954	2-13-07
Principal	FEIN 11-3669570	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____
(Name address or legal title of the Contractor)

as Principal, hereinafter called Contractor and _____

_____ a corporation organized and existing under
the laws of the State of _____, with its principal office in the City of _____

as Surety, hereinafter called Surety, are held firmly bound unto _____
(Name address or legal title of Owner)

as Obligee, hereinafter called Owner, in the amount of _____

Dollars (\$ _____), for the payment whereof Contractor and Surety bind themselves, their heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents

WHEREAS, Contractor has by written agreement dated _____
_____ entered into a contract with Owner for _____

in accordance with drawings and specifications prepared by _____

which contract is by reference made a part hereof, and is hereinafter referred to as the CONTRACT

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall, promptly and faithfully
Perform and CONTRACT, then this obligation shall be null and void, otherwise it shall remain in full force and effect

The Surety hereby waives notice of any alteration or extension of time made by the Owner

Whenever Contractor shall be, and declared by Owner to be in default under the CONTRACT the Owner having performed
Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

1. Complete the CONTRACT in accordance with its terms and conditions, and
2. Shall save the Owner harmless from any claims, judgments, or liens arising from the Surety's failure to either remedy
the default or to complete the CONTRACT in accordance with its terms and conditions in a timely manner

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein
or the successors of Owner

Signed and sealed this * _____ day of _____

Principal Raised Corporate Seal _____ (Seal)
(Contractor Name)

Surety Raised Corporate Seal By _____ (Seal)
(Must be President or Vice President)

(Title)

(Surety)

By _____ (Seal)

NOTE: Raised Corporate Seals are mandatory.
Please attach Power of Attorney

NOTE: Applicable Section of attached acknowledge-
ment must be completed and returned as part of
the bond.

* Power of Attorney must be certified on this date or later.

APPROVED AG 10-30-95

ACKNOWLEDGEMENTS

Acknowledgement by Principal if individual or Partnership

1 STATE OF _____
2 County of _____ to-wit:
3 I _____ a Notary Public in and for the
4 county and state aforesaid, do hereby certify that _____
whose name is signed to the foregoing writing has this day acknowledged the same before me in my said county
5 Given under my hand this _____ day of _____ 20____
6 Notary Seal 7 _____ (Notary Public)
8 My commission expires on the _____ day of _____ 20____

Acknowledgement by Principal if Corporation

9 STATE OF Illinois
10 County of Kane to-wit:
11 I, Linda E. Callahan a Notary Public in and for the
12 county and state aforesaid, do hereby certify that Charles C. Emma
13 who as, Principal signed the foregoing writing for
14 Pinnacle Actuarial Resources, Inc. a corporation,
has this day in my said county, before me acknowledged the said writing to be the act and deed of the said corporation
15 Given under my hand this 19th day of December 2006
16 Notary Seal LINDA E. CALLAHAN 17 Linda E Callahan (Notary Public)
Notary Public, State of Illinois
My Commission Expires 10/14/09
18 My commission expires on the 14th day of October 2009



Acknowledgement by Surety

19 STATE OF _____
20 County of _____ to-wit:
21 I, _____, a Notary Public in and for the
22 county and state aforesaid, do hereby certify that _____
23 who as, _____ signed the foregoing writing for
24 _____ a corporation,
has this day, in my said county, before me, acknowledged the said writing to be the act and deed of the said corporation
25 Given under my hand this _____ day of _____ 20____
26 Notary Seal 27 _____ (Notary Public)
28 My commission expires on the _____ day of _____ 20____

Sufficiency in Form and Manner Of Execution Approved

Attorney General

This _____ day of _____ 20____

By _____ (Assistant Attorney General)

ACKNOWLEDGEMENT PREPARATION INSTRUCTIONS

- 1 IF PRINCIPAL IS AN INDIVIDUAL OR PARTNERSHIP, HAVE NOTARY COMPLETE LINES (1) through (8)
- 2 IF PRINCIPAL IS A CORPORATION, HAVE NOTARY COMPLETE LINES (9) through (18)
- 3 SURETY MUST HAVE NOTARY COMPLETE LINES (19) through (28)
- 4 **Notaries must:**

ACKNOWLEDGEMENT BY PRINCIPAL IF INDIVIDUAL OR PARTNERSHIP

- 1 Enter name of State.
- 2 Enter name of County.
- 3 Enter name of Notary Public witnessing transactions
- 4 Enter name of principal covered by bond if individual or partnership Notary enters date bond was witnessed
- 5 Must be the same as or later than signature date
- 6 Affix Notary Seal
- 7 Notary affixes his/her signature
- 8 Notary enters commission date

ACKNOWLEDGEMENT BY PRINCIPAL IF CORPORATION

- 9 Enter name of State.
- 10 Enter name of County.
- 11 Enter name of Notary Public witnessing transactions
- 12 Enter name of Corporate Officer signing bond (Must be President or Vice President.)
- 13 Enter Title of Corporate Officer signing bond
- 14 Enter name of Company or Corporation.
- 15 Notary enters date bond was witnessed. Must be the same as or later than signature date
- 16 Affix Notary Seal
- 17 Notary affixes his/her signature
- 18 Notary enters commission date.

ACKNOWLEDGEMENT BY SURETY

- 19 Enter name of State.
- 20 Enter name of County.
- 21 Enter name of Notary Public witnessing transactions
- 22 Enter name of person having power of attorney to bind Surety Company
- 23 Enter Title of person binding Surety Company
- 24 Enter name of Insurance Company (Surety).
- 25 Notary enters date bond was witnessed. Must be the same as or later than signature date.
- 26 Affix Notary Seal
- 27 Notary affixes his/her signature.
- 28 Notary enters commission date

POWER OF ATTORNEY INSTRUCTIONS

Power of attorney for surety must be attached showing that it was in full force and effect on signature date indicated on the face of the bond. A raised corporate seal must also be affixed to the Power of Attorney form.

- a. Name of attorney in fact must be listed (if attorney is a non-resident, bond must be countersigned by West Virginia resident agent)
- b. Power of Attorney may not exceed imposed limitations.
- c. Certificate date, the signature date of bond must be entered
- d. Signature of authorizing official must be affixed. (Signature may be facsimile)
- e. **Raised seal must be affixed**