A. Mission Description and Budget Item Justification

This program resource environmental quality technology (EQT) related management support functions including support of research, development, test and evaluation required for EQT technical integration efforts at demonstration/validation test sites, technical information and activities, test facilities and general test instrumentation, and EQT requirement assessments. Funds required to support the management of technology transfer associated with technology demonstrated and validated as part of Army EQT projects are included in this program element. In addition, support to the Army weapon system acquisition community to address generic pollution prevention related requirements are included under the Environmentally Sustainable Acquisition/Logistics Program.

The Environmentally Sustainable Acquisition/Logistics project includes program management for developing acquisition strategies that both achieve system key performance parameters and sustain the environment without permanent and unacceptable change in the natural environment or human health from system concept refinement through disposal. It includes systematic consideration of environmental impacts, energy use, natural resources, installation impacts, economics, and quality of life. It provides support to the system acquisition community, e.g., program and project managers, to integrate environmental quality analyses into the system acquisition process. The goal is to resolve environmental quality issues related to weapon systems that are identified during design, development, testing, operation, or support to reduce Army environmental liabilities and total ownership costs and includes efforts to eliminate the use of hazardous and ozone-depleting materials from weapon systems and facilities and to ensure the availability of Halon 1301 to support weapon system fire suppression requirements.

The Unexploded Ordnance Detection and Clearance project, beginning in FY 2004, is being overseen by the Army. The project had been overseen by Office of the Secretary of Defense in prior years. This project funds the Unexploded Ordnance Center of Excellence (UXOCOE) to provide for coordination of unexploded ordnance (UXO) technologies across the Department of Defense.
The Pollution Prevention Tech Support project funds the management support costs to execute the Toxic Metals Reduction and Airborne Lead Reduction environmental quality technology programs.

### B. Program Change Summary ($ in Millions)

<table>
<thead>
<tr>
<th></th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015 Base</th>
<th>FY 2015 OCO</th>
<th>FY 2015 Total</th>
</tr>
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<tr>
<td>Current President's Budget</td>
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<td>5.191</td>
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<td>Total Adjustments</td>
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<td>-0.002</td>
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<td>• Congressional General Reductions</td>
<td>-0.005</td>
<td>-0.002</td>
<td></td>
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<tr>
<td>• Congressional Directed Reductions</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Congressional Rescissions</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Congressional Adds</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Congressional Directed Transfers</td>
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<td></td>
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<tr>
<td>• Reprogrammings</td>
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<td>• SBIR/STTR Transfer</td>
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<tr>
<td>• Other Adjustments</td>
<td>-0.189</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A. Mission Description and Budget Item Justification

The Environmentally Sustainable Acquisition/Logistics (ESAL) project provides support to the system acquisition community to integrate environmental quality (EQ) issues and concerns into the life cycle system acquisition process. To a much lesser extent, safety, occupational health (OH) and energy efficiency are also addressed. The focus of ESAL is on improving readiness, improving acquisition processes, reducing supportability burden, and minimizing total ownership cost. The Assistant Secretary of the Army for Installations, Energy and Environment (ASA(IE&E)) has defined the functions of the ESAL project in coordination with the Army Acquisition Executive and the Assistant Secretary of the Army (Acquisition, Logistics, and Technology). This project provides direct support to the Army acquisition community to pursue environmental sustainability and comply with legal statutes, policies and regulations during the life cycle of Army materiel. ESAL helps the Army achieve compliance with its weapon systems, industrial base, field and deployed activities directed by international treaties, Federal statutes, Executive Orders, Department of Defense (DoD) and Army policies and regulations.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

**Title:** Environmental Quality (EQ) Support

**Description:** Provide EQ Support to Acquisition Programs

**FY 2013 Accomplishments:**

Provided support to Program Executive Officers and Program Managers (PEOs/PMs) to integrate EQ considerations and, to a much lesser extent, some safety and OH considerations into systems engineering activities. This included fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, participation in development of test plans and protocols, oversight of testing efforts, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Analyzed impending legal statutes impacting production, operation and support of weapon systems. Supported achievement of the Executive Order 13514 energy and greenhouse gas emission reduction goals, Pollution Prevention goals, and Army industrial base facility goals; Executive Order 13423 and associated Army goals for Toxic and Hazardous Chemical Reduction; and the DoD policy, Defense Federal Acquisition Regulation Supplement (DFARS) clause and Army policy restricting the use of hexavalent chromium. Assessed weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues.
B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)
affecting industrial base and garrisons. Provided Army acquisition community representation in Office of the Secretary of Defense (OSD) and Department of the Army (DA) committees addressing environmental legislation and rulemaking.

**FY 2014 Plans:**
Provide support to PEOs/PMs to integrate EQ considerations into systems engineering activities. This includes fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Analyze impending legal statutes impacting production, operation and support of weapon systems. Assess weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues affecting industrial base and garrisons. Provide Army acquisition community representation in select OSD and DA committees addressing environmental legislation and rulemaking.

**FY 2015 Plans:**
Will provide support to PEOs/PMs to integrate EQ considerations into systems engineering activities. This will include fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Will analyze impending legal statutes impacting production, operation and support of weapon systems. Will assess weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues affecting industrial base and garrisons. Will provide Army acquisition community representation in select OSD and DA committees addressing environmental legislation and rulemaking.

**Description:** Provide management support for Army EQ technology efforts.

**FY 2013 Accomplishments:**
Provided system acquisition support to the Army’s Environmental Technology Technical Council (ETTC) and coordination of EQ-related systems' needs for expanded research, development, test and evaluation (RDT&E) efforts. Managed and oversaw technology integration efforts by Army Life Cycle Management Commands and PEO/PM environmental integrated process teams for weapon systems in all stages of design, procurement and operations/support. Coordinated RDT&E Budget Activity -1 (BA-1) and BA-2 requirements among members of the Pollution Prevention Technology Team, coordinated RDT&E BA-3 and BA-4 technology evaluations and operational requirements in support of weapon system platform integration, managed and oversaw test plan development, oversaw testing activities, and analyzed test results to support weapon systems engineering.
### B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

<table>
<thead>
<tr>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>decision making. Participated in performance and cost/risk assessments in support of ASA(IE&amp;E) program objectives. Managed development and execution of plans for the following pollution prevention technology areas: reformulation of materials used in ammunition and pyrotechnics to remove hazardous constituents; Zero Footprint Camp to reduce the fuel and water logistics burden in Overseas Contingency Operations; Reductions in Toxic Metals Used in Surface Finishing on Army Weapon Systems; Alternative Battlefield Fuels; and Airborne Lead Reduction in Army Weapon Systems.</td>
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</table>

**FY 2014 Plans:**

Provide system acquisition support to the Army's ETTC and coordination of EQ-related systems' needs for expanded RDT&E efforts. Manage and oversee technology integration efforts by Army Life Cycle Management Commands for weapon systems in all stages of design, procurement and operations/support. Coordinate RDT&E BA-2 requirements among members of the Pollution Prevention Technology Team, coordinate RDT&E BA-3 and BA-4 technology evaluations and operational requirements in support of weapon system platform integration, manage and oversee test plan development, oversee testing activities, and analyze test results to support weapon systems engineering decision making. Manage development and execution of plans for the following pollution prevention technology areas: reformulation of materials used in ammunition and pyrotechnics to remove hazardous constituents; Zero Footprint Camp to reduce the fuel and water logistics burden in Overseas Contingency Operations; Reductions in Toxic Metals Used in Surface Finishing on Army Weapon Systems; and Airborne Lead Reduction in Army Weapon Systems.

**FY 2015 Plans:**

Will provide system acquisition support to the Army's EQ technology program and coordination of EQ-related systems' needs for expanded RDT&E efforts. Will manage and oversee technology integration efforts by Army Life Cycle Management Commands for weapon systems in all stages of design, procurement and operations/support. Will coordinate RDT&E requirements among members of the Pollution Prevention Technology Team, coordinate technology evaluations and operational requirements in support of weapon system platform integration, manage and oversee test plan development, oversee testing activities, and analyze test results to support weapon systems engineering decision making.

**Title:** Ozone Depleting Substance Management

**Description:** Oversee Army efforts to manage the use/elimination of ozone depleting substances on Army weapon systems.

**FY 2013 Accomplishments:**

Oversaw Army efforts to manage the use/elimination of ozone-depleting substances, greenhouse gases, and hazardous and toxic materials on Army weapon systems. Managed and oversaw the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Coordinated with PEOs/PMs to affect system replacement and retrofit to eliminate ozone depleting substances while...
### B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

<table>
<thead>
<tr>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
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</table>

- minimizing greenhouse gases, obtained approval to require use of Halon in new contracts, and assisted garrison commanders to assure recovery and deposit of excess Halon and R-22 into the reserve. Participated in Federal government and multi-national forums discussing use and replacement of ozone depleting substances and greenhouse gases, justifying mission critical applications, and addressing international importation and use regulations/restrictions.

**FY 2014 Plans:**
Oversee Army efforts to manage the use/elimination of ozone-depleting substances on Army weapon systems. Monitor the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Coordinate with PEOs/PMs to affect system replacement and retrofit to eliminate ozone depleting substances while minimizing greenhouse gases and will obtain approval to require use of Halon in new contracts.

**FY 2015 Plans:**
Will oversee Army efforts to manage the use/elimination of ozone-depleting substances on Army weapon systems. Will monitor the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Will coordinate with PEOs/PMs to affect system replacement and retrofit to eliminate ozone depleting substances while minimizing greenhouse gases and will obtain approval to require use of Halon in new contracts.

### Title: Headquarters Army Environmental System (HQAES)

### Description: Headquarters Army Environmental System (HQAES) support.

**FY 2014 Plans:**
Support Headquarters Army Environmental System (HQAES) modifications recommended by Configuration Control Management Board in order to support network security worthiness.

| Accomplishments/Planned Programs Subtotals | 3.245 | 4.277 | 2.340 |

### C. Other Program Funding Summary ($ in Millions)

| N/A |

### Remarks

### D. Acquisition Strategy

| N/A |

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PE 0605857A: Environmental Quality Technology Mgmt Support

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Page 6 of 12

R-1 Line #155
<table>
<thead>
<tr>
<th>Appropriation/Budget Activity</th>
<th>R-1 Program Element (Number/Name)</th>
<th>Project (Number/Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2040 / 6</td>
<td>PE 0605857A / Environmental Quality Technology Mgmt Support</td>
<td>031 / Environmentally Sustainable Acquisition/Logistics</td>
</tr>
</tbody>
</table>

### E. Performance Metrics

N/A
UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army

Appropriation/Budget Activity
2040 / 6

R-1 Program Element (Number/Name)
PE 0605857A / Environmental Quality Technology Mgmt Support

Project (Number/Name)
06H / Unexploded Ordnance Clearance Technology Support

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<td>06H: Unexploded Ordnance Clearance Technology Support</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
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</tr>
</tbody>
</table>

Quantity of RDT&E Articles
- - - - - - - - - - - -

Note
The funding for Unexploded Ordnance Clearance Technology Support will be transferred to OMA starting FY15.

A. Mission Description and Budget Item Justification
This effort was devolved to the Army from the office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)). This effort funds the Unexploded Ordnance Center of Excellence (UXOCOE), which provides the day-to-day management, coordination, and information clearinghouse functions, and serves as the Department of Defense's (DoD) center for coordinating Unexploded Ordnance (UXO) Research, Development, Test and Evaluation (RDT&E) requirements and programs across DoD; develops and promotes standards for testing, modeling, and evaluation; maintains information on technologies for UXO detection and clearance; publishes an annual report summarizing the activities and accomplishments of the UXOCOE in order to improve the effectiveness and economy of UXO detection and clearance RDT&E efforts throughout DoD; and gathers and maintains a database for the results of these efforts. The Army manages, oversees, and coordinates this effort on behalf of the office of the USD(AT&L).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

Title: Coordinate/collect/analyze UXO RDT&E information via conferences, seminars, and workshops.

Description: Coordinate/collect/analyze UXO RDT&E information via conferences, seminars, and workshops.

FY 2013 Accomplishments:
Coordinated/collected/analyzed UXO RDT&E information via conferences, seminars, and workshops.

FY 2014 Plans:
Catalogue and conduct analysis of explosive hazards requirements and technologies across the detection and neutralization tenets to identify explosive hazards technology capability gaps and leveraging opportunities found across DoD and other research and engineering activities.

Title: Generate an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.

Articles: 0.389 0.503 -

FY 2013 FY 2014 FY 2015

The FY 2015 OCO Request will be submitted at a later date.

Note
The funding for Unexploded Ordnance Clearance Technology Support will be transferred to OMA starting FY15.

A. Mission Description and Budget Item Justification
This effort was devolved to the Army from the office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)). This effort funds the Unexploded Ordnance Center of Excellence (UXOCOE), which provides the day-to-day management, coordination, and information clearinghouse functions, and serves as the Department of Defense's (DoD) center for coordinating Unexploded Ordnance (UXO) Research, Development, Test and Evaluation (RDT&E) requirements and programs across DoD; develops and promotes standards for testing, modeling, and evaluation; maintains information on technologies for UXO detection and clearance; publishes an annual report summarizing the activities and accomplishments of the UXOCOE in order to improve the effectiveness and economy of UXO detection and clearance RDT&E efforts throughout DoD; and gathers and maintains a database for the results of these efforts. The Army manages, oversees, and coordinates this effort on behalf of the office of the USD(AT&L).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

Title: Coordinate/collect/analyze UXO RDT&E information via conferences, seminars, and workshops.

Description: Coordinate/collect/analyze UXO RDT&E information via conferences, seminars, and workshops.

FY 2013 Accomplishments:
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FY 2014 Plans:
Catalogue and conduct analysis of explosive hazards requirements and technologies across the detection and neutralization tenets to identify explosive hazards technology capability gaps and leveraging opportunities found across DoD and other research and engineering activities.

Title: Generate an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.

Articles: 0.237 0.183 -

Note
The funding for Unexploded Ordnance Clearance Technology Support will be transferred to OMA starting FY15.
### B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
</tr>
</thead>
</table>

**FY 2013 Accomplishments:**
Generated an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.

**FY 2014 Plans:**
Generate an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.

<table>
<thead>
<tr>
<th>Title</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain and update the UXO clearance/detection databases and computer web site and analyze data from and programs in UXO RDT&amp;E for potential solutions to UXO related needs.</td>
<td>0.329</td>
</tr>
</tbody>
</table>

**Description:** Maintain and update the UXO clearance/detection databases and computer web site and analyze data from and programs in UXO RDT&E for potential solutions to UXO related needs.

**FY 2013 Accomplishments:**
Maintained and updated the UXO clearance/detection databases and computer web site and analyzed data from and programs in UXO RDT&E for potential solutions to UXO related needs.

**FY 2014 Plans:**
Maintain and update the UXO clearance/detection databases and computer web site and analyze data from and programs in UXO RDT&E for potential solutions to UXO related needs.

<table>
<thead>
<tr>
<th>Title</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide oversight of UXOCOE's Ft. A. P. Hill test site which is used for standardized scientific experiments to help gather data on and model the performance of potential UXO sensors.</td>
<td>0.076</td>
</tr>
</tbody>
</table>

**Description:** Provide oversight of UXOCOE's Ft. A. P. Hill test site which is used for standardized scientific experiments to help gather data on and model the performance of potential UXO sensors. Data are needed for the acquisition of UXO sensor performance data versus a full system evaluation. Focus is on the sensor itself, not on full-scale operational system capability. Full-scale development would occur during engineering and manufacturing development and be aimed at meeting validated requirements prior to full-rate production.

**FY 2013 Accomplishments:**
### B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)

<table>
<thead>
<tr>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
</tr>
</thead>
</table>

Provided oversight of UXOCOE’s Ft. A. P. Hill test site which is used for standardized scientific experiments to help gather data on and model the performance of potential UXO sensors. Data was needed for the acquisition of UXO sensor performance data versus a full system evaluation. Focus was on the sensor itself, not on full-scale operational system capability. Full-scale development would occur during engineering and manufacturing development and be aimed at meeting validated requirements prior to full-rate production.

**Title:** Maintain awareness of UXO issues

**Description:** Conduct and attend requirements and technology conferences, seminars and workshops and meetings to coordinate and improve the awareness of explosive hazards technology research and engineering initiatives being developed.

**FY 2014 Plans:**

Plan, organize and conduct an annual explosive hazards technology coordination meeting bringing together the major Military Service and OSD technologists and program managers. Identify and participate in DoD, industry and academia sponsored meetings and symposiums. Update on a quarterly basis UXOCOE information products with information collected at various meetings and conferences. Identify and disseminate technology leveraging opportunities within explosive hazards community.

| Accomplishments/Planned Programs Subtotals | 1.031 | 0.914 | - |

### C. Other Program Funding Summary ($ in Millions)

N/A

### Remarks

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A
### A. Mission Description and Budget Item Justification

This project provides RDTE Management Support for the demonstration and validation of weapon system pollution prevention technologies within the Army's Environmental Quality Technology program. The project increases operational sustainment and warfighter training capabilities by reducing soldier and worker health risks and environmental impacts that would otherwise result in restoration needs and compliance enforcement actions against installations while simultaneously increasing performance and standardization across the Army. This project provides for management of RDTE activities conducted under project 0603779A, Environmental Quality Technology Dem/Val (E21). The project expedites technology transition from the laboratory to operational use by supporting the demonstration of new materials and processes to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals, Drawings and other technical data.

### B. Accomplishments/Planned Programs ($ in Millions)

**Title:** Management of pollution prevention technology programs

**Description:** Manage and oversee the demonstration/validation of weapon system pollution prevention technologies within the Army's Environmental Quality Technology Program.

**FY 2015 Plans:**
Will manage and oversee the demonstration/validation of two pollution prevention technology efforts: Toxic Metal Reduction in Surface Finishing of Army Weapon Systems, and Airborne Lead Reduction from Army Weapon Systems

<table>
<thead>
<tr>
<th>Accomplishments/Planned Programs Subtotals</th>
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<td></td>
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### C. Other Program Funding Summary ($ in Millions)

N/A

**Remarks**
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<th>R-1 Program Element (Number/Name)</th>
<th>Project (Number/Name)</th>
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</thead>
<tbody>
<tr>
<td>2040 / 6</td>
<td>PE 0605857A / Environmental Quality Technology Mgmt Support</td>
<td>06I / POLLUTION PREVENTION TECH SUPPORT</td>
</tr>
</tbody>
</table>

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A