**ENVIRONMENTAL PROGRAM SUPPORT SERVICES**

**CLIN 3 ACTIVITY 1**

**PERFORMANCE WORK STATEMENT (PWS)**

## 1.0 REQUEST INFORMATION

**1.1** Type of Activity: The Environmental Program Support Services Activity is a firm fixed-price Activity.
**1.2** Description: Environmental Program Support Services
**1.3** Location: Albany, OR (ALB); Morgantown, WV (MGN); and Pittsburgh, PA (PGH), U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL) sites.
**1.4** Travel: Travel (between sites) is anticipated; however, travel between sites (especially travel to/from the ALB site) for this Activity and associated administrative oversight shall be coordinated with other Activities to minimize overall travel costs.
**1.5** Training: Training is anticipated related to maintaining certifications required to perform scope of work requirements (based on specific needs or certifications, as approved in advance by the Activity Contracting Officer's Representative (ACOR) and will be provided by NETL at minimal levels to support requirements. Normal operations should use on-line training resources to minimize cost of training and any associated travel.

## 2.0 GENERAL REQUIREMENTS

**2.1** The Activity involves:
2.1.1 Air Quality Support
2.1.2 Water Quality Support
2.1.3 Waste Minimization and Pollution Prevention
2.1.4 Chemical Inventory Management Program Support
2.1.5 Waste Management Program Oversight
2.1.6 Environmental Data Analyses
2.1.7 Inspection Support

**2.2** This Activity is covered by the Service Contract Act.

**2.3** Maintenance of equipment used for this Activity will be maintained using equipment manuals and equipment maintenance schedules. Sound judgement to defer maintenance of equipment as cost saving measures shall be implemented as approved by the ACOR.

## 3.0 SCOPE

The Contractor shall provide Environmental Program support activities at the ALB, MGN, and PGH sites as defined in the Deliverables section. These activities include:

**3.1** Air Quality Support
The contractor shall support the implementation and maintenance of an air quality program that is compliant with DOE, Federal, state, and local requirements. The term "air" is defined as: ambient air and stationary source emissions. Support shall include compliance with provisions of the Clean Air Act and shall include:

3.1.1 Obtaining and maintaining necessary permits from the States of Oregon, West Virginia, and Pennsylvania for the ALB, MGN, and PGH facilities as a whole, or for individual on-site projects, as required by law or deemed appropriate by DOE. The contractor shall collate and analyze information, complete/comment/review/edit forms, and provide technical expertise for air dispersion modeling to support

permit requirements.

3.1.2 The contractor shall provide administrative support and technical expertise to conduct meetings associated with permit issuance.

3.1.3 Operating, maintaining, and calibrating (annually) the meteorological towers at MGN and PGH to ensure the individual components are functional and operating according to the manufacturer's specification. The contractor shall integrate the raw data readout into NETL's database to ensure data is available remotely for emergency operations. The contractor shall make the data available to federal ES&H personnel and shall archive the data according to DOE records management schedules. The contractor shall suggest necessary upgrades to ensure data is available for emergency management and response purposes.

3.1.4 Evaluating the need to perform air monitoring, such as point stationary source emissions monitoring, as required by permit or by Federal, state, or local regulations (annually at each site). The contractor shall collect, collate, and interpret the data on a schedule, as required by the applicable regulatory agencies in Oregon, West Virginia, and Pennsylvania.

3.1.5 Documenting air surveillance and preparing air emissions inventories by collecting, collating, and documenting air monitoring results and air emission projections or calculations for inclusion in NETL's air emission inventories (quarterly at each site).

3.1.6 The contractor shall generate information to meet Allegheny County's (PGH) biannual permit reporting requirements and shall enter into the Allegheny County software in preparation for transmittal. The contractor shall prepare the annual air emissions inventories for all NETL sites.

3.1.7 Conducting dispersion modeling for emergency response planning activities. The contractor shall provide technical expertise to operate for air dispersion modeling to support emergency response operations.

3.1.8 Tracking and maintaining inventories of ozone-depleting substances (ODS), such as the location and ultimate disposition of ozone-depleting substances at the NETL facilities (annual).

3.1.9 The contractor shall provide technical/regulatory expertise as needed. The contractor shall Maintaining calibration records related to environmental activities in accordance with NETL procedures/manuals.

**3.2** Water Quality Support

3.2.1 The contractor shall support the implementation, maintenance, and infrastructure of a water quality program that is compliant with Federal, state, and local statutory requirements. The term "water" includes: groundwater, surface water, storm water, and industrial and municipal wastewater. Services include compliance with provisions of the Clean Water Act and the Pennsylvania Clean Streams Law, as well as the West Virginia and Oregon State and local regulations.

3.2.2 Obtaining and maintaining permits, including those required by the Pennsylvania and West Virginia Departments of Environmental Protection; the Oregon Department of Environmental Quality; Pleasant Hills Authority Industrial Sewer Use Permit Program; the Morgantown, West Virginia Industrial Waste Ordinance as administered by the Morgantown Utility Board; and the City of Albany, Oregon. Examples include Morgantown NPDES permit PGH Wastewater Treatment Facility, MGN Clarifier, etc.

3.2.3 Updating the Spill Prevention, Control, and Countermeasure (SPCC) plans and Preparedness, Prevention, and Contingency (PPC) plan (and related Quick Reference Guide), annually, or as needed.

3.2.4 Collecting information and updating Storm Water Pollution Prevention Plans (SWPPPs) and

Groundwater Protection Plans (GPPs) annually or as needed for all sites for compliance with applicable policies and regulations. Plans shall include monitoring and maintenance schedules, methods for sampling and analyzing groundwater, as well as, required reporting at each site per site permit or Federal, state, or local regulations.

3.2.5 Performing surface water and sediment monitoring, and instituting management practices eliminating or minimizing surface water and sediment quality impacts for compliance with SWPPPs. The contractor shall collect, analyze, and interpret data (weekly or as requested at each site).

3.2.6 Supporting NETL's Digging Permit Program and participating as necessary, including recordkeeping and archiving permits (scanned) on an NETL server accessible to NETL ES&H personnel, for compliance with site permits and SWPPPs.

3.2.7 The contractor shall maintain and calibrate remote monitoring systems, as needed, and shall propose a reasonable estimate to repair or replace defective instruments based on recent site history. The contractor shall report expenditures against this estimate in the Monthly Status Report for the site support contract. The contractor shall receive approval from the Contracting Officer (CO) before incurring costs in excess of the planned costs for repairs to surface water monitoring instrumentation.

3.2.8 Performing groundwater monitoring and monitoring well maintenance as required by Federal, state, or local regulation and the annual plan. The contractor shall update annually this monitoring and maintenance plan, including a schedule and method for sampling and analyzing groundwater at each site as required by permit or by Federal, state, or local regulation. Updated information on aquifers and site geology for application to the monitoring program will also be included. The contractor shall download data into a Geographical Information System (GIS) to represent the sites' geology and groundwater quality variations. The contractor shall provide statistical analysis of the groundwater quality trends as part of the annual updated groundwater report.

3.2.9 Performing storm water monitoring/sampling and prepare discharge monitoring reports (DMRs) monthly for NETL as required by the National Pollutant Discharge Elimination System (NPDES) storm water monitoring requirements, permits, and associated Quality Assurance/Quality Control (QA/QC). The contractor shall update/revise NETL's storm water monitoring plan and NPDES Permits as required.

3.2.10 Performing industrial wastewater monitoring by sampling and analyzing industrial wastewater as required by the NPDES pretreatment regulations, the Pleasant Hills Authority, Pennsylvania Industrial Sewer Use Permit Program, and the Morgantown Industrial Waste Ordinance, and City of Albany Sewer Use Permit Program.

3.2.11 Maintaining an inventory of oil-filled storage tanks; completing necessary inspections.

3.2.12 Updating fuel delivery checklist (per the SPCC Plan) for maintenance personnel, as required by changes in regulations.

3.2.13 Performing Legionella monitoring at ALB and MGN for the on-site cooling towers, as needed, by implementing a Legionella monitoring plan and sampling schedule.

3.2.14 Drinking water sampling at all three sites, as requested

3.2.15 Analyzing samples collected to support the water quality program using appropriate QA/QC procedures/manuals. Sample collection and analyses shall be limited to those required by Federal, state, or local regulations only unless specifically directed to do otherwise by the ACOR with the prior approval of the CO.

3.2.16 Maintaining calibration records for equipment in accordance with NETL procedures/manuals.

3.2.17 Performing visual inspections of oil-filled transformers and other oil-containing equipment.

3.2.18 Performing site inspections, as required in the SWPPP and other inspections as listed in NETL procedures/manuals/plans.

3.2.19 Completing NETL forms associated with the inspections/plans.

**3.3** Waste Minimization and Pollution Prevention

3.3.1 The contractor shall support implementation of NETL's Waste Minimization and Pollution Prevention Program in accordance with DOE requirements by:

3.3.1.1 Compiling data on a quarterly basis at all sites to support NETL's annual waste minimization and pollution prevention reports (Quarterly Waste Table). The contractor shall provide information to support the generation of the annual Pennsylvania Act 101 recycling report, and West Virginia and Oregon state and local requirements and collect and compile information for NETL's waste minimization report in a format specified by DOE.

**3.4** Chemical Inventory and Safety Data Sheet (SDS) Management Program

3.4.1 Contractor will provide Chemical Inventory SDS Manager (CISM) support by coordinating, implementing, and maintaining activities that support the sites' chemical inventory program. Support of this program will include the following:

3.4.1.1 Maintaining the sites' chemical inventory and safety data sheets (Albany, Morgantown, and Pittsburgh) using a database determined by DOE of chemical locations and quantities, including providing support for chemical inventory questions/concerns and assisting with approval/receipt of chemical purchases per NETL directives. Any equipment purchases in support of this effort will require approval based on contract requirements.

3.4.1.2 Modifying/updating each site's chemical inventory and SDSs, as needed, as chemicals are received. This includes: chemical inventory barcoding, SDS entry, including hazard codes; updating and adjusting data in each site's chemical inventory, and coordinating pickup or delivery of chemicals with end users. If needed, providing technical support to CLIN 3 Activity 5 efforts.

3.4.1.3 Properly transporting chemicals, if chemical transport across public roads is required (i.e., Wallace Road, PGH site), by DOT-Certified personnel, in accordance with 49 CFR and all other applicable Federal, state, and local regulations.

3.4.1.4 Inspecting/scanning (annually) the laboratory areas and facilities to verify that the chemical inventory is accurate, and making corrections as needed to the chemical inventory database. (Past inspection numbers have been up to 15,000 chemicals inspected per year.)

3.4.1.5 Providing SARA Title III Reporting (MGN and PGH) and Oregon State Fire Marshal support for NETL sites ( including data compilation, consultation, and report/memo preparation) and other ad hoc reports as necessary;

3.4.1.6 Providing CISM support, including approving chemical purchases, review of requests for research sample shipping/receiving, and acting as CISM point-of-contact at Albany, Morgantown, and Pittsburgh.

3.4.1.7 Providing support for the organic peroxide shelf-life tracking program.

3.4.1.8 Conducting an annual cylinder inventory at the Albany, Morgantown and Pittsburgh sites,

based on parameters prescribed by the ACOR; and comparing to the inventory in Chemical Safety EMS.

3.4 Waste Management Program Oversight

3.4.16 The contractor shall support efforts to audit and assess NETL's waste programs (i.e., hazardous waste, residual waste, construction waste, medical waste, and other non-RCRA waste programs). This can include audits of waste operations and documentation (manifests including pre-hazardous waste shipment audit forms [NETL-F- 435.1-6, Pre-Transport Hazardous Manifest Checklist], etc.). Preparation of the PA Biennial Residual Waste Report shall also be part of this oversight function.

3.5 Environmental Data Analyses

3.5.16 Deliverables for environmental data analysis support are listed in the Deliverables table, section 6.0. The contractor shall provide GIS management, analysis, and modeling services in support of NETL's on-site and off-site environmental programs. As requested, the contractor shall provide:

3.5.16.1 Generation of spatial information into GIS databases
3.5.16.2 Research, retrieval, and formatting of existing data
3.5.16.3 Geographical analyses of data
3.5.16.4 Generation of geo-referencing information
3.5.16.5 Modeling, analysis, and display of data
3.5.16.6 Tracking of the effectiveness of remedial actions
3.5.16.7 Generation of maps and other graphical outputs
3.5.16.8 Manipulation and conversion of existing data from various sources as necessary
3.5.16.9 Development of initial sampling strategies in support of eventual data analyses
3.5.16.10 Acquiring and analyzing of geophysical and remote sensing data.

3.5.17 The contractor shall collect and deliver performance indicators to NETL (typically hazardous waste quantity, regulated liquid effluents, air emissions, and reportable occurrences) on a quarterly basis.

3.5.18 The contractor shall track/collect data and prepare a waste table that will include all wastes generated/disposed of by NETL (hazardous, non-hazardous, medical, residual, etc.). This waste table shall be delivered to NETL on a quarterly basis.

3.6 Inspection Support

3.6.16 Deliverables for inspection support are listed in the Deliverables table section 6.0. The Contractor shall provide support for inspections required in various environmental areas, including items such as (approximately 1,300 inspections in various areas are required annually):

3.6.16.1 Air Quality: Inspections are to include areas related to boiler stacks, research vent stacks, or other sources of air emissions.

3.6.16.2 Water Quality: Approximately 800 inspections in this area including groundwater, industrial wastewater, and storm water [oil transformers/switches/drums, above ground storage tanks (e.g., ferric chloride and caustic soda), and outdoor storage areas]. Inspections shall occur weekly for Storm Water Pollution Prevention Plan (SWPPP), two times per week for the MGN clarifier (the first and last day of each work week), quarterly groundwater elevations, weekly and monthly storage tank, environmental digging permits, and other areas. as needed.

3.6.16.3 Waste Management Oversight/Disposition: Areas inspected include waste dumpsters, scrap metal containers, excess equipment, construction activities or other facilities and activities related to waste management.

3.6.16.4 Excess Equipment: Based on inspection of excess equipment, provide recommended pathways for disposition of excess equipment based on any observed contamination or potential environmental release of controlled substances.

3.6.16.5 Participation and support of R&D, Support Operations, and Facility SARS inspections, as they relate to environmental quality; including, but not limited to support related to satellite accumulation areas, discharges to sinks/drains (industrial wastewater), chemical inventory labeling, and spill kits.

3.6.16.6 Completing NETL forms associated with the inspections/plans.

## 4.0 SUPPORTING FUNCTIONS

**4.1** Directives Support

4.1.1 The Contractor shall assist with reviewing and revising NETL directives to ensure that they reflect the current site practices, new or changed responsibilities of individuals, DOE orders and regulatory requirements, and quality assurance measures.

**4.2** Training

4.2.1 Delivery of lecture-based and assist with development/review ES&H environmental-related training.

**4.3** Corrective Action

4.3.1 The Contractor shall implement on-site corrective/preventive actions associated with action plans previously developed, self-assessments, and other types of internal and external reviews.

**4.4** International Organization for Standardization (ISO) 14001/ ISO 45001 Certification Initiatives and Internal Audits

4.4.1 The Contractor shall support NETL's efforts to maintain ISO 14001 and ISO 45001 certifications as part of the ES&H Management System and shall participate in NETL's internal audits and assessments. Support activities include:

4.4.1.1 Participating in planning and closeout meetings of internal audits.

4.4.1.2 Assisting in external ISO audits as required. This could include gathering information and/or participating as a subject matter expert.

**4.5** Annual Site Environmental Report

4.5.1 Deliverables for ASER support are listed in the Deliverables table section 6.0. The contractor shall update the annual site environmental report by assisting in collecting all required information and providing and analyzing environmental monitoring and surveillance information and data obtained through the above environmental support programs. The contractor shall prepare a draft ASER, per DOE guidance documents.

**4.6** Consulting and Assistance

4.6.1 Consulting and assistance with other NETL deliverables. This could be due to change in regulations or DOE/Executive Orders, new initiatives, or change in NETL policy.

## 5.0 SAFETY AND HEALTH

**5.1** The contractor shall implement their integrated safety management (ISM) plan as related to Environmental Programs Support services performed under this Activity and in accordance with DOE P 450.4, Safety Management Policy and Integrated Safety Management System Guide, DOE G 450.4-1, Volumes 1 and 2.

**5.2** Contractor personnel shall give safety briefings to personnel and maintain records of attendance for periodic safety briefings conducted by supervisors and attend appropriate training.

**5.3** The contractor shall assure that at least one of the staff is certified as a Professional Engineer (PE) for reporting/regulatory documents requiring a PE license in the States of Oregon, Pennsylvania, and West Virginia. Reciprocity is acceptable.

## 6.0 DELIVERABLES

The following table contains the deliverables associated with this Activity. A copy of each deliverable shall be provided to the ACOR.

| DELIVERABLE | FORMAT | FREQUENCY |
|---|---|---|
| Air Emissions Inventories<br>ALB, MGN, and PGH | Report | Annual and Quarterly |
| Air Emissions –<br>Performance Indicators<br>ALB, MGN, and PGH | Report | Quarterly |
| Air Emission Permits<br>PGH – Allegheny County Health Department | Permit format: application package, data, analysis, calculations, and cover letter. | PGH – every 5 years, or when new emission sources require permit update. |
| Air Emission Permits<br>MGN – State, if applicable<br>ALB – State, if applicable | Permit format: application package, data, analysis, calculations, and cover letter. | As required |
| Allegheny County Health Department Title V Permit Biannual Report – PGH | Report | Biannual (twice a year) as required in Title V permit |
| Ozone-Depleting Substances Inventory<br>ALB, MGN, PGH | Report (List of ODSs) | Annual |
| Allegheny County Health Department Air Permit Certification Letter | Letter | Annual |
| Greenhouse Gas (GHG)<br>Emissions report. ALB, MGN,<br>PGH | Report | Annual |
| Refrigerant Metrics (Mass Balance Spreadsheet for DOE Site Sustainability Plan) | Metrics Report | Quarterly – 15 days after the Quarter<br>Annual – November 15 |
| Meteorological<br>Tower Report<br>MGN and PGH | Data Collection/Report | Quarterly |
| Air Dispersion Modeling | Modeling Data | As required for Emergency Response, or for a specific research project. |
| NPDES Permits<br>MGN – WVDEP | Permit format: application package, data, analysis, calculations, and cover letter. | As needed, or when regulatory agency requires permit update. |
| Storm Water Pollution Prevention Plan (SWPPP) – ALB, MGN, PGH | Updated plan | Semi-Annual |
| NPDES Storm Water Discharge Monitoring Reports (DMRs) | Sampling/analysis/Reports | MGN – Quarterly |
| SWPPP Inspection Report<br>ALB, MGN, PGH | Report | Semi-Annual |

| DELIVERABLE | FORMAT | FREQUENCY |
|---|---|---|
| Industrial Wastewater Permits<br>ALB – City of Albany<br>MGN -Morgantown Utility Board<br>PGH - Pleasant Hills Authority (PHA) | Permit format: application package, data, analysis, calculations, and cover letter. | ALB – Annual Review/Every 5 years for Renewal<br>MGN – Annual Review/ Every 5 years for Renewal<br>PGH – Annual |
| Pleasant Hills Industrial Waste Survey<br>PGH | Report | Annual |
| Industrial Wastewater Discharge Monitoring Reports (DMRs)<br>ALB, MGN, PGH | Sampling/Analysis/Reports | ALB - Semi-Annually<br>MGN – Quarterly<br>PGH – Monthly/Semi-Annual |
| Slug Discharge Plan – City of Albany | Updated Plan | Once per permit renewal (minimum) and with major renovations/updates (two per permit renewal cycle) |
| Site Drainage Dye<br>testing<br>ALB, MGN, PGH | Testing/Input to database | As needed) |
| *Legionella* Monitoring Reports<br>ALB, MGN | Sampling/Analysis/Reports | Quarterly |
| Spill Prevention, Control and Countermeasure Plan (SPCC)<br>Guide | Updated plan | Annual Review |
| Preparedness, Prevention, and Contingency Plan (PPC)/<br>/Quick Reference PGH | Updated plan | Annual |
| Groundwater Monitoring Reports<br>MGN, PGH | Sampling/Analysis/Reports | Semi-Annual (MGN)<br>Semi-Annual (PGH) |
| Annual Site Environmental Report<br>Groundwater Monitoring Summary<br>MGN, PGH | Report/Table | Annually |
| Groundwater Protection Plan<br>MGN, PGH | Updated plan | Annually |
| Aboveground Storage Tank (AST)<br>Interstitial Report | Report/Checklist | Quarterly |
| Drinking Water Quality<br>ALB, MGN, PGH | Sampling/Analysis/Report | As requested |
| Pennsylvania Act 101 Recycling Report<br>PGH | Report | Annual |
| Annual Site Environmental Report (ASER) –<br>ALB, MGN, PGH, Houston, Alaska | Information for inclusion in the ASER, which will be updated by DOE. Tracking, editing, layout, and review of ASER, including the Executive Summary. | Annually |
| Quarterly Waste Table<br>ALB, MGN, PGH | Database/Table | Quarterly |
| Spill Kit Inventory Report<br>ALB, MGN, PGH | Report/checklist | Quarterly |

| DELIVERABLE | FORMAT | FREQUENCY |
|---|---|---|
| PA Residual Waste Report<br>PGH | Report | Bi-Annual |
| SARA Title III Report<br>MGN, PGH | Report/Forms | Annual |
| State of Oregon Fire Marshal Report/<br>SARA Title III Report ALB | Report | Annual |
| Assist with Directives Review and Revision | As determined by ACOR | Annual<br>3/Year |
| Other Inspection and Assessment | Information/audit reports | As requested |
| Contract Performance Measures | Summary | Quarterly |
| Updated ISM plan | Plan | At least annually, or as needed |
| ISM plan's milestones and contractor-generated performance measures | Report | Quarterly/Annual |
| ES&H Management System (ES&HMS) Internal Audits | ISO 14001/ ISO 45001<br>Checklist Completion | Semi-Annual |
| ES&HMS Surveillance Audit Support | Information/Data Collection | As requested |
| Calibration of Environmental monitoring equipment<br>ALB, MGN, PGH | All environmental monitoring equipment-maintain records | Daily/Monthly |
| Inspection – Digging Permits<br>ALB, MGN, PGH | Checklist/Form | Daily/Monthly |
| Inspection/Maintenance – Spill Kits<br>ALB, MGN, PGH | Checklist/Form/Purchase | Quarterly |
| PADEP Storage Tank Inspections | Checklist/Form | Quarterly |
| Inspection – Storage Tanks<br>ALB, MGN, PGH | Checklist/Form | Quarterly |
| Inspection – Scrap Metal Disposal<br>ALB, MGN, PGH | Checklist/Form | Weekly |
| Inspections - Chemical Inventory (including peroxide-forming chemical shelf-life tracking)<br>ALB, MGN, PGH | Report/Data Entry | As required (all labs/areas are completed on an annual basis, coinciding with assessments), inventory posted monthly |
| Program Self Assessments | Report | As requested |
| Hazardous Waste Program Audit<br>ALB, MGN, PGH | Checklist/Report | Annual |
| Hazardous Waste Shipment Audit<br>ALB, MGN, PGH | Checklist/Report | 12 – 16 per year, with shipments |

| DELIVERABLE | FORMAT | FREQUENCY |
|---|---|---|
| Environmental Presentations<br>ALB, MGN, PGH | Presentation/Talk | 6 per year/As requested |
| Input to Training Modules | Summary/Presentation Material | 6 per year/As requested |
| ES&H Regulatory Highlights | Regulatory Highlights/Post to Intranet | Bi-Weekly |
| FECM ES&H Annual Report Support | Data/Information | Annual |
| Environmental Performance Indicators Summary Table | Table | Quarterly |
| Environmental Issue Consulting and Assistance<br>ALB, MGN, PGH | Reports, data, checklist, presentation | 150 hours/year, Engineer or Environmental Scientist,<br>As requested. |