Avatar Environmental LLC

Federal Supply Schedule for Environmental Services (SIN 899-1 and 899-1RC)

General Services Administration Contract # GS-10F-0090N

http://www.avatarenviro.com/

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I. Company Overview

Avatar Environmental, LLC (**Avatar**) is a service-disabled veteran-owned small business (SDVOSB) specializing in ecological and human health risk assessments, NEPA-related services, ecological field studies and occupational health assessments. The Avatar principals average more than 25 years of experience in the environmental industry. Our clients include environmental consulting companies, federal, state, and local government agencies, industrial companies, and law firms.

Our senior staff members have been in the environmental consulting business for 15 to 25 years each, giving us a thorough understanding of the needs and desires of our clients. By encouraging both individual creativity and teamwork, we can offer novel and effective solutions to environmental problems. Our diversity of knowledge and experience, combined with the application of the latest technologies, help us create valuable solutions for our clients.

II. Description of Services

Environmental Planning Services and Documentation Capabilities (SIN 899-1 and 899-1RC)

Avatar assists our clients resolve complex scientific and technical issues associated with existing and potential impacts of stressors on human health and the environment. Along with conducting human health and ecological risk assessments, Avatar scientists have designed, directed, and implemented a wide range of ecological and biological studies in support of numerous regulatory initiatives, as well as providing occupational health assessments and NEPA related services. Our services span a wide range of human and ecological health issues,

but are always focused on providing the best value to our clients. Specific areas of technical expertise include the following:

ENVIRONMENTAL RISK ASSESSMENT

- Human Health Risk Assessments
- Ecological Risk Assessments
- Radiological /Mixed Waste Risk Assessments
- Hazardous Waste Combustor Facility Risk Assessments
- Probabilistic Risk Analyses
- Toxicology (Human and Wildlife)
- Exposure Modeling
- Product Evaluations

OCCUPATIONAL HEALTH ASSESSMENTS

- Industrial Hygiene Assessments
- Noise Impact Analyses
- Health Hazard Assessments
- Compliance Audits

NEPA RELATED SERVICES

- Environmental Impact Statements
- Environmental Assessments
- Categorical Exclusions
- Environmental Baseline Surveys

ECOLOGICAL SUPPORT SERVICES

- Large-Scale Aquatic and Terrestrial Ecological Field Studies
- Water Resources and Water Quality Studies

RELATED SUPPORT SERVICES

- Spatial Analysis/GIS
- Risk Communication
- Regulatory Negotiation
- Data Management/Data Interpretation
- Statistical Analyses
- Site Characterization/Remediation Support
- Litigation Support
- Chemical Fate and Transport Evaluations

Distinguishing Characteristics

Many companies are capable of producing simplistic "plug and chug" risk assessments. Often these evaluations are all that is required to meet a client's needs. The Avatar team has years of experience with these types of assessments and provides this level of service to our clients at competitive rates. However, when more complex assessments or supporting services are required, Avatar provides the expertise and experience that distinguishes us from other companies.

Human Health and Ecological Risk Assessments – Risk assessments can be time-consuming and expensive. Avatar specializes in developing and implementing various screening level approaches to streamline the process and save our clients both time and money. Screening level approaches are most applicable in cases where focus is needed before developing plans for a comprehensive baseline risk assessment, or where risks are relatively minor and conservative or even worst-case approaches can be used and still show acceptable levels of risk. However, when more complex baseline assessments are required, we are able to utilize approaches that allow for comprehensive and practical solutions that encompass site-specific data and toxicity information.

Radiological Risk Assessment – Some sites involve both chemical and radionuclide contamination (mixed waste). The overall process for assessing radionuclide exposures and radiation risks parallels the process for assessing risks from chemical exposures. However, there are several aspects of radiological risk assessment that differ substantially from chemical risk assessment. Avatar and its associates are experienced in the use of the broad array of radionuclide risk assessment guidance that has been developed by various agencies, including Nuclear Regulatory Commission (NRC), Oak Ridge National Laboratory (ORNL), Department of Energy (DOE), U.S. Environmental Protection Agency (EPA) and State Agencies. While radiological risk assessment guidance has been well established for addressing human exposure, ecological guidance continues to evolve. Because Avatar and our associates have worked with NRC, ORNL, DOE, EPA and state regulatory agencies in conducting radiological ecological risk assessments, we know how to integrate the different ecological approaches to achieve regulatory compliance.

Hazardous Waste Combustion Risk Assessments – The world of combustion-related risk assessment has undergone continual evolution since the mid-1980s. What once involved a fairly simplistic evaluation of impacts from emissions to the atmosphere has grown into a process that now includes numerous potential pathways of exposure for both human and ecological receptors. Avatar principals have been involved in more than 30 combustion-related risk assessments over the past 15 years and have developed a top-notch reputation with both industry and government regulators. Avatar personnel are intimately familiar with recent EPA guidance on evaluating hazardous waste combustor emissions.

Probabilistic Risk Assessment – Point estimate (or deterministic) risk assessments, based on conservative assumptions and procedures, are often criticized as being ultra-conservative. Monte Carlo analysis and other probabilistic methods, such as probability bounds analysis, are numerical techniques for evaluating uncertainty through the risk assessment process. These techniques are gaining wide acceptance as tools for analyzing uncertainty, and allow risk

managers to make more informed decisions. Avatar scientists have experience in using a wide variety of probabilistic techniques to provide our clients with more realistic risk estimates that result in more defensible risk management decisions.

Toxicology –Avatar toxicologists have provided support to numerous government agencies and private sector clients in the development of defensible toxicological benchmarks. These benchmarks range from human health criteria for short-term occupational exposure to inhalation toxicants to various wildlife reference toxicity values (RTVs). In addition to toxicological literature review and analysis activities, Avatar scientists have incorporated the use of generalized linear models (GLM), species sensitivity distributions and meta-analysis to summarize the results of numerous toxicity studies to develop both single TRVs and toxicity distributions for mammalian and avian wildlife.

Occupational Health Assessments - Avatar industrial hygienists and occupational health specialists have broad experience in a variety of technical areas including ergonomics, ionizing and non-ionizing radiation, chemical hazards, hazard communication, hearing conservation, occupational health management, personal protective equipment (PPE), respiratory protection, thermal stress, and ventilation systems. Avatar performs occupational health assessments in the industrial workplace and provides the tools to assess compliance with all applicable OSHA, DOD, Air Force and state/local regulations.

NEPA Related Services - Avatar scientists have broad experience in preparing EA, EIS, and other NEPA-related documents for a variety of agencies including U.S. Department of Agriculture (USDA), Federal Aviation Administration (FAA), Federal Energy Regulatory Commission (FERC), the U.S. Department of Transportation (USDOT), and the Department of Defense (DoD). Avatar scientists bring years of experience, familiarity, and innovative approach with the NEPA review process, NEPA compliance, and the requisite documentation.

Ecological Studies – Avatar scientists have been conducting ecological studies in support of numerous regulatory initiatives for over 25 years. Projects for industrial and government clients have taken Avatar scientists throughout the principal ecoregions of the United States. The design, implementation and performance of aquatic, terrestrial and wetland monitoring programs have been conducted to support not only ecological risk assessment, but also the following; NPDES permitting, dredging programs., natural resources damage assessments, brownfield development, and natural resource inventories.

Marine Environmental Services – Avatar scientists have over 25 years of providing ecological services in marine and estuarine environments for the government and private sector. Avatar has the in-house expertise to provide consulting support for biological monitoring of marine/estuarine fisheries; marine construction and dredging impacts; ocean outfalls; salt marsh, beach and dune restoration; submerged aquatic vegetation evaluations; intertidal and benthic ecology; blue water biology; and tropical/subtropical ecology.

GIS/Spatial Analysis – Traditionally, human health and ecological exposure analysis has been limited to evaluating media-specific contaminant distributions and calculating the 95% upper confidence limit of the mean (95% UCL) by assuming the contaminant concentrations are normally or log-normally distributed. This approach often results in the estimation of highly-

skewed and unrealistic exposure point concentrations (EPCs). Numerous statistical and geospatial methodologies are available to deal with "imperfect" data sets that allow for the estimation of more realistic EPCs for use in probabilistic and deterministic risk assessments. These methods include bootstrapping procedures, confidence interval estimations, spatial-weighting methodologies (e.g., Thiessen polygons and inverse distance weighting), and random walk models. Incorporation of these methods into a risk assessment framework provides risk managers with a more accurate representation of exposure uncertainty and the subsequent estimation of probability of adverse effects. These geospatial and statistical techniques, when integrated with a thematic-based geographic information system (GIS) such as ARC Info®, permit the development of exposure assessments that can incorporate essential spatial and temporal information.

Risk Communication – Avatar's senior risk assessment personnel are involved in many projects that require not only the best scientific and technological approaches to calculating risks, but also the ability to explain these risks to committees or public groups in ways that can be understood and fairly evaluated. Avatar offers a wide variety of risk communication experience involving standard public hearing support. In addition, Avatar staff has provided long-term assistance to committees investigating potential risks to a major planned development, such as a hazardous waste incinerator or a remedial action at a hazardous waste site.

Regulatory Negotiation – In the face of ever-changing federal, state, and local regulations, risk assessment demands a comprehensive knowledge of the growing information base of regulatory guidance and the latest technological advances. Avatar provides its clients with risk assessment expertise within the framework of all relevant federal environmental regulations.

In addition to remaining current with the constantly changing regulatory environment, Avatar works closely with and provides technical support to environmental regulators in EPA Regions nationwide, as well as numerous states. These working relationships benefit both our industrial and governmental clients by providing insight into regulatory perspectives on important risk assessment issues and by facilitating access to the regulators.

Data Management and Statistical Analysis – Analytical data are the cornerstone for determining the potential magnitude of exposure for risk assessments and characterizing the nature and extent of contamination problems. Avatar has extensive experience in database construction, analysis, and data management utilizing database programs in conjunction with a broad application of statistical methods in the areas of environmental compliance, risk assessment methodology, chemistry, and environmental monitoring studies for all media.

Site Characterization/Remediation Support Activities – Avatar has routinely played a significant role assisting site investigation/remedial investigation project managers in developing field sampling plans that meet the data quality objectives of the risk assessment and feasibility studies. Avatar has a long track record of developing portions of large work plans/sampling plans/quality assurance plans to ensure that the data is useable for subsequent assessments, including risk assessment, cleanup goal development, and remedial design.

Litigation Support Services – Avatar has highly qualified technical experts who have a strong track record of assisting in environmental litigation. Our scientists assist with strategic

planning to help our clients determine the best approach to technical and strategic goals by providing professional interpretation of technical information and its implications. We prepare attorney-client work products that are carefully researched and structured, and at the same time easily understood by our clients.

III. GSA Price List Effective April 17, 2008

Avatar was awarded a GSA contract under Special Item Number 899-1 and 899-1RC in 2002. A five year contract extension was awarded on November 14, 2007 and is effective until November 14, 2012. Amendment PS-0005, effective April 17, 2008, authorized an Economic Price Adjustment for our hourly rates for all labor categories, as well as addition of the Junior Engineer category. Current hourly rates for each labor category are listed below. Descriptions of each labor category including minimum education and experience can be found on Page 7.

SINs 899-1 and 899-1RC

Labor Category	Hourly Rate
Senior Technical Director	$122.24
Senior Engineer	$121.50
Technical Director	$107.92
Senior Project Manager	$104.72
Project Manager	$96.79
Technical Manager	$84.42
Senior Scientist	$69.42
Project Scientist	$55.57
Jr. Engineer	$52.99
Business Manager	$40.46
Associate Scientist	$41.39
Assistant Scientist	$35.27
Administrative Assistant	$32.05

Labor Category Descriptions

Labor Category	Description
Senior Technical Director	Masters degree or PhD plus 15 years of relevant experience demonstrating a progressive increase in financial, supervisory, and sales accountability and authority.
Senior Engineer	B.S. in Engineering plus 17 years experience, or Masters in Engineering plus 15 years experience. Certification required - Professional Engineer's License. Coordinate the technical direction of the engineering scope of projects and provide senior-level technical engineering knowledge on all project aspects.
Technical Director	Masters degree or PhD preferred with appropriate level of experience demonstrating a progressive increase in financial, supervisory, and sales accountability and authority.
Senior Project Manager	B.S. plus 12 years of experience, or equivalent or M.S. plus 10 years of experience, or equivalent. Experience demonstrating progressive increase in financial/supervisory accountability and authority.
Project Manager	B.S. plus 8 years of experience, or equivalent or M.S. plus 6 yrs of experience. Responsible for all aspects of day-to-day management of projects, including financial and resource management, technical direction, effective communication with team and client, and overall client satisfaction.
Technical Manager	B.S. plus 8 years of experience or M.S. plus 6 years of experience. Responsible for serving as technical lead on assigned projects, providing leadership and guidance to staff on technical matters. Idnetify and keep abreast of new technologies in area of expertise.
Senior Scientist	B.S. or B.A. plus 7 years of experience, or M.S. plus 5 years of experience. Responsible for planning, conducting, and supervising routine projects, demonstrate ability to complete projects on time and within budget.
Project Scientist	B.S. or B.A. plus 5 years of experience, or M.S. plus 3 years of experience. Responsible for providing accurate and pertinent scientific data according to agreed upon methods, procedures, and techniques. Demonstrate ability to provide sound conclusions and recommendations within the established

Jr. Engineer	B.S. in Engineering plus 0-3 years of experience. Familiarity with technology in discipline, good mathematics and scientific background, general ability to employ logical thought processes, and capability to learn rapidly.
Business Manager	Responsible for the day-to-day accounting and financial reporting of the organization. Degree in bookkeeping or equivalent, plus 4 years of experience.
Associate Scientist	B.S. or B.A. plus 2 years of experience. Responsible for providing clients with accurate and pertinent scientific data according to agreed upon methods, procedures, and techniques under the direction of a Project or Sr. Scientist.
Assistant Scientist	B.S. or B.A in Natural or Biological Science or related program.
Administrative Assistant	High School diploma. Provide administrative and secretarial support and related responsibilities as assigned.