ENTRY GUIDELINES AND INFORMATION FOR THE 2025 EXCELLENCE IN ENVIRONMENTAL ENGINEERING & SCIENCE® COMPETITION

AMERICAN ACADEMY OF ENVIRONMENTAL ENGINEERS & SCIENTISTS®
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SUMMARY

The purpose of the Academy's Excellence in Environmental Engineering & Science® competition is to recognize and promote quality environmental engineering and science. Entries and awards are made in nine (9) categories of practice:

- Design,
- Environmental Sustainability,
- Industrial Waste Practice,
- Operations/Management,
- Planning,
- Research,
- Small Firms,
- Small Projects, and
- University Research.

The winning entries will be profiled in the Spring issue of *Environmental Engineer & Scientist* and the trade press.

Feature stories about the competition and winning entries routinely appear in the trade press and media in the winners' locales as a result of the Academy's public education campaign. E3S award winners are also offered the opportunity to share their knowledge in our AAEES Webinar Series.

The competition is open to all companies, agencies, institutions, and individuals.

One prize for SUPERIOR ACHIEVEMENT for ENVIRONMENTAL ENGINEERING AND SCIENCE EXCELLENCE is awarded to the best project entered in the competition each year. A GRAND PRIZE is awarded to the best project in each category. HONOR AWARDS may also be presented.

An independent panel of judges assesses each entry with respect to the following criteria:

1. Demonstration of a comprehensive, **integrated approach** that considers all environmental media, i.e., air, water, and land.
2. **Quality** as evidenced by the degree of user satisfaction and proven performance.
3. **Originality and innovation**, representing the application of new knowledge, a new application of existing knowledge, or an innovative mix of existing knowledge.
4. The **complexity** of the problem or situation addressed.
5. The extent to which the project **contributes to** or offers the prospect of contributing to environmental, **social, and economic advancement**.

If there are any questions regarding interpretation of competition rules, please email Yolanda Moulden at YMoulden@aaees.org.

WHY PARTICIPATE?

Competing for an Excellence in Environmental Engineering & Science award says to your customers, employees, the profession and the public that you are committed to surpassing their expectations.

By competing, you and your team obtain a powerful learning experience – you find out how good you really are. And, you obtain widespread recognition for your Excellence in Environmental Engineering & Science and management.

ELIGIBILITY

The **Excellence in Environmental Engineering & Science® Award** is a program of the American Academy of Environmental Engineers & Scientists® to recognize and promote quality in environmental engineering and science. The Academy encourages entries from all areas of environmental engineering and science practice, such as odors and air pollution control, air quality management, industrial hygiene, radiation protection, solid waste management, resource recovery, waste minimization, hazardous waste management, toxic materials control, water supply, wastewater treatment, residuals and biosolids, nutrients, renewable energy, microconstituents/trace organics and field and lab instrumentation.

The competition is open to all individuals, companies, or organizations, regardless of affiliation with the Academy. Projects or programs, which have been given an award by others, are not precluded from the competition; in fact, entry of these projects is encouraged.

The entrant must be that person or, in the case of a team effort, that firm, department, division, etc., primarily responsible for the achievement. The application must identify the person in responsible charge of the effort. If the laws governing the entered project or program require, the person in responsible charge must be a licensed professional engineer or scientist.

CATEGORIES

Entries and awards are made in each of nine (9) separate categories.

Research – Research of a basic or applied nature that advances the state of the art of environmental engineering or science including research leading to new or improved environmental engineering or science equipment (process, control, instrumentation, environmental testing, etc.)

Planning – Planning related to an environmental control project, system or environmental management facilities or activities

Design – Design of pollution control or other environmental facilities including projects delivered by alternate methods, such as, design-build or design-build-operate.

Operations/Management – Operations or Management of pollution control or other environmental facilities, a pollution prevention program, or environmental regulatory programs (federal, state or local).

University Research – Research of a basic or applied nature that advances the state of the art of environmental engineering or *science conducted by a university under the direction of a full-time faculty member*. This category differs from the Research category in that a person other than one involved directly with the work can "nominate" another for the award and provide the entry materials, which must be supplied.

Small Projects – Any Research, Planning, Design, or Operations/Management work as defined in the above categories related to a potential or actual capital expenditure of $5 million or less or an operation or management activity with an annual budget of $500,000 or less.

Small Firms – Any Research, Planning, Design, Operations/Management or Small Project defined by the above categories conducted by a small firm. A small firm is defined as one that has annual gross revenue of $5,000,000 or less.

Environmental Sustainability – Environmental Sustainability is the supporting of the quality of life while living within the carrying capacity of all systems. A long-term balance of environmental stewardship, economic development, and social well-being must be achieved. Environmental Sustainability projects should include some level of equability for all individuals residing in the community that balances environmental stewardship, equitable economic development, social well-being and justice should be attempted.

Research, Planning, Design, or Operations/Management including renewable resources timely regenerated, timely substitute replacement of nonrenewable resources, harmful substances absorbed timely or made harmless, climate impacts and mitigation.

Industrial Waste Practice Award – Industrial Waste Practice recognizes outstanding projects that incorporate innovative management and technological approaches to industrial water and waste management issues at pilot or full scale, in the following areas: Treatment of water for industrial uses; Management, including reclamation of industrial liquid, solid, toxic and hazardous wastes and integrated waste management and industrial process modifications to achieve waste minimization and pollution prevention objectives; Management of air emissions; Remediation of groundwater and riverine, lake, estuarine, and marine water resources contaminated by industrial activities; Brownfields/Greenfields restoration; and Management of radioactive waste materials.

AWARDS

The awards will be presented at the 2025 Academy Convocation and Celebration of Excellence (previously known as the AAEES Awards Ceremony and Conference) on Thursday, April 10, 2025. Details will be posted to https://www.aaees.org/events.

There are three categories of prizes, which will be awarded. The **Superior Achievement for Environmental Engineering & Science Excellence** award will be presented to the best project entered in the competition. A **Grand Prize** (in name of category) will be awarded to the best entry in each category. **Honor Awards** will be presented in each category to those entries as determined by the judges.

In some cases, entries may not merit an award in any category.

The **Superior Achievement for Environmental Engineering & Science Excellence** consists of a 14-inch high crystal or acrylic-mounted on a wood base identifying the award as Excellence in Environmental Engineering & Science® and will be inscribed with the:

- □ entry name
- □ entrant's name
- □ entry location
- □ owner's name
- □ year of competition

The **Grand Prize** for the winning entry in each category consists of a free-form acrylic sculpture encapsulating a specially designed three-inch diameter medallion identifying the award as Excellence in Environmental Engineering & Science®. The sculpture is mounted on a walnut base bearing a brass plaque inscribed with the:

- □ category
- □ entrant's name
- □ entry name
- □ owner's name
- □ entry location
- □ year of competition

Honor Awards consist of a walnut-mounted, etched plate which identifies the award as Excellence in Environmental Engineering & Science® and the:

- □ category
- □ entrant's name
- □ entry name
- □ owner's name
- □ entry location
- □ year of competition

Winning entrants wanting duplicate award(s) for other participants may order them at their own expense.

BENEFITS

The public relations value of participation in the Excellence in Environmental Engineering & Science® program is considerable. There are many ways your participation investment will be rewarded through Press Announcements, coverage on AAEES's Website, articles in *Environmental Engineer & Scientist*, announcements on Social Media, and opportunities to present your project as part of the AAEES Webinar Series.

The experience of entering will boost staff morale. It also provides an effective mechanism for enhancing your relations with other project participants, clients, owners and others you involve in the entering process. All will be pleased that you think enough of the project to enter it in a national competition.

Each winning entrant's panel will be displayed at a reception preceding the Awards Luncheon where the Awards will be presented. Of course, when you win an award, the public relations opportunities are increased.

A feature will be included in the Spring issue of the *Environmental Engineer & Scientist* which will include profiles those entries that win the Superior Achievement Award, Grand Prizes, and Honor Awards. This will include photos of projects plus the project descriptions and information the reader can use to contact your organization. We also include the profile and photos of each project on our website. Operations/Management award winners may also include a profile of the responsible designer and/or O&M staff team leader.

All E3S award winners to present their project as part of the AAEES Webinar Series.

HOW TO ENTER

These guidelines and all entry materials are available on our website at https://www.aaees.org/e3scompetition. The Reservation Form acts as your intent to enter and is required to generate your secured link for uploading your project. The reservation form can be completed online.

The entry must be accompanied by:

- the official entry form, and
- the entry fee (link will be included with submission link).

Each complete entry must be uploaded no later than December 31, 2024.

GENERAL SPECIFICATIONS

- □ An entrant may submit more than one entry.
- □ Provided that it meets the qualifications, a project may be entered in more than one category. Each project submission counts as a new entry.
- □ The work entered must have been completed to such an extent that the primary beneficiaries of the work prior to can assess the performance of the entry. The work must not have been completed prior to December 31, 2022.
- □ If the governing law in the area where the project/program exists requires the work to be performed by or under the supervision of a licensed professional engineer or scientist, then the person in responsible charge of the entered project/program must be a licensed professional engineer or scientist.
- □ Increasingly, environmental facilities design work is delivered by design-build and design-build-operate systems. Such projects may be entered in the Design category, regardless of the method of design implementation.
- □ Research and development leading to new process equipment, new instrumentation and controls, new investigation and monitoring technology, etc., are eligible for entry in the category of Research.

SUBMISSION REQUIREMENTS

REMEMBER, all entries must be submitted in a single PDF file.

- □ **Entry Form** – Please use the official entry form.
- □ **Release Letter** – A release letter from the person for whom the work was performed permitting entry and publication of the project **without qualification**.
- □ **Entrant Profile** – A profile of the Entrant not to exceed 250 words including the entrant's role in the project and the names of others that assisted in the effort.
- □ **Project Description** – A description of the project or program not to exceed 1,000 words, which addresses each of the judging criteria. The number of words used in the description is checked to ensure compliance with the 1,000-word limit. (Each word or grouped together symbols, abbreviations, are counted as one word.). The following elements should be included. These elements do not count towards the 1,000-word limit
    - Subtitles for the five criteria so it is clear how each of the criteria are addressed
    - A process flow diagram drawing or layout of project
    - Relevant captioned photos of the system with a maximum of 10 - limit
    - Page limit (e.g. 10 pages) on supplemental information in award packet (testimonials, supporting information indicated in 'hints' section
- □ **Testimonials** – A testimonial letter from the project's primary beneficiary that describes the degree of satisfaction with the work performed. Such letters shall address the technical quality of work, adherence to project schedule requirements, quality of service, and the like. For *RESEARCH* and *UNIVERSITY RESEARCH* projects, such testimonials shall also include a letter from a recognized peer(s) of the research that comments on the significance of the research.
    - For *OPERATIONS/MANAGEMENT* entries, the entrant shall submit documentation of the program's effectiveness, such as reviews by regulatory

engineers and higher authorities, environmental quality reports, cost-effectiveness reports, press reports, etc. If the entry is a permitted facility, a letter from the cognizant regulatory agency describing compliance during the period December 31, 2022 to December 31, 2024 is required. *OPERATIONS/MANAGEMENT* entries should include a reasonable representation of operating data for the project using either excerpts from actual data management systems or submittals to regulatory agencies. Any cost-effectiveness reports should include the planned cost-effectiveness as well as the actual cost-effectiveness.

- □ **Presentations** – include references to conference presentations, papers, etc., about the project.
- □ **Engineering License** – where appropriate. A copy of the current certificate of professional registration/license for the environmental engineer in responsible charge of the effort or similar document showing the license is current. If the laws governing the project or program do not require the entered work to be performed under the direction of a licensed professional engineer or scientist, this requirement is waived. In lieu of the license copy, complete and submit the license waiver form.
- □ **Digital Photos** – a key feature of the Awards ceremony is presentation of the entries selected for Awards. To ensure that your entry is properly presented, you are requested to supply ten color digital photographs accompanied by a descriptive caption for each photo. High resolution images may be requested from winning entries.
- □ **Research Reports** – Entries for the RESEARCH categories must include a supplemental report describing the research findings together with graphs or charts.
- □ **Project Summary** – A paragraph under 200 words describing project. May be used for social media etc. Graphic representation may be added to the project summary. It could be a photograph or a pictorial representation of the project.

If you have been selected as a winner, you will also need to submit a 30" x 30" photo which highlights key project features. This panel will be displayed at in-person Academy events. We also need a digital version submitted as a standard-size Powerpoint presentation that can be featured as part of our virtual events, including our AAEES Webinar series.

SPECIAL NOTES

- □ Integration of text and digital photographs is particularly important – the digital photos and words together must tell a meaningful story.
- □ Graphs and charts should be simple and informative.

ENTRY FEE

For all categories, except University Research, the entry fee is $500 per entry. For those entries where the person in responsible charge is an AAEES Board Certified Individual or AAEES Member, the entry fee is $350.

For University Research, the entry fee is $100. If the person in responsible charge is an AAEES Board Certified Individual or AAEES Member, the $100 University Research fee is waived.

AAEES Patrons receive two complimentary entries into the competition. To learn more about the AAEES Patrons Program, go to https://www.aaees.org/patronsprogram.

JUDGING CRITERIA

The Academy is a multi-disciplined environmental engineering and science organization dedicated to quality in the practice of the profession. Accordingly, judging will be based on the following criteria:

General Considerations

Judging of each entry is to be based on the criteria listed below:

1. Demonstration of a comprehensive, integrated **approach** that considers all appropriate environmental media as determined by the subject area.

2. **Quality** as evidenced by the scientific discipline, consequences, and proven performance.

3. **Originality and innovation**, representing the application of creativity, new knowledge, a new application of existing knowledge, or an innovative mix of existing knowledge.

4. The **complexity** of the problem addressed.

5. The extent the project **contributes to** or offers the prospect of contributing to **social, public and environmental health or economic advancement**.

Overall Qualitative Ratings Scale

- □ **Outstanding**: Excellent and important topic, novel creative approach, well designed and carried out, important results. No deficiencies.
- □ **Very good:** Good topic, design, implementation. Minor deficiencies.
- □ **Good**: Average content and application. Acceptable but not distinguished.
- □ **Fair**: Adequate but some flaws or not an important topic.
- □ **Not acceptable** due to technical problems and important flaws in one or more aspects.

HINTS FOR A SUCCESSFUL ENTRY

Each year, many inquiries are received from prospective entrants seeking to learn how to create a successful entry. While such calls are welcomed to address specific, project-related questions, a few simple hints provided below might save you time and increase your chances of winning.

Understand the Rules -- First, read the entry guidelines carefully and thoroughly. Then, ensure that the materials submitted satisfy all listed requirements. A checklist has been provided to help you.

Judging Criteria -- In composing the project description, clearly address each of the five judging criteria. Since it is against these criteria the project is judged, the entries which focus individually on each criteria and clearly and concisely describe how the entry measures against those criteria improve their chances for winning ***(don't make the judges assume)***.

Integrated Projects identify how the project addresses all three environmental media, as appropriate. For example, if the entry is principally a water supply project, describe its contribution to air quality and how it protects the land, if appropriate. *Integrated design, in the context of this competition, is not just an architecturally pleasing structure.*

Quality -- The Academy desires to recognize those projects where the discipline, users or 'client' is expressly satisfied with the work and where defined performance objectives have been met. In addressing **Quality**, the harder evidence provided that the project's objectives have been realized, the better. Documented client comments and third-party testimonials are excellent mechanisms.

Performance objectives vary with each category. Examples of performance benchmarks for each follow:

Scientific Research and University Research -- The primary proof of performance and value is the novelty and creativity that is evidenced and the advancement of science and technology in that field of study. The testimony of peers regarding the adequacy and relevancy of the research as well as the advance(s) it provides, and ultimately the consensus of the judging committee experts.

Planning -- Proof of performance is primarily indicated by documentation or the results and that the plan recommendations are being implemented.

Design – Proof of performance for an engineering or construction project is evidenced by several attributes:

- Project completed on time
- Project completed for budgeted amount
- Proof that performance promised is, in fact, delivered, e.g., if a treatment plant is expected to achieve certain removals then proof of such performance is needed.

Operations/Management -- There is a wide range of engineering and science projects that can be entered. Successful operation and management of a facility or program needs to have evidence of its success. Typifying the kind of evidence, the Academy seeks includes:

- Statements from regulatory officials regarding ongoing compliance by a facility,
- Public testimony that program management has achieved specified goals or requirements
- Media accounts documenting specific accomplishments
- Awards for the project from others

Small Projects -- Small projects are limited as dollar amount -- $5 million in capital cost or $500,000/year in annual cost -- but are not limited in scope; that is, a Small Project can be only research, planning, design or O&M or it can be a combination of two or more of these project phases. In the case of single-focus Small Projects, the proof of performance criterion provided (above) is to apply in the same manner. For combinations, the last fully complete definable phase in the work entered should be used to judge quality. For example, if the work submitted is primarily planning, then there should be evidence that the plan is being implemented.

Complexity -- Often complexity is associated with scale, i.e., the larger the project, the more complex. While there is considerable truth in that proposition, it is not necessarily true. To guard against prejudicing the chances of small projects in this regard, the Small Projects category was created.

Within the context afforded by the size discrimination according to project category, describe the complexity of the specific engineering challenge(s) presented.

Social, Public Health and Environment, and Economic Advancement -- These project attributes may be either proven or potential; they may apply to a limited group of people, to the nation, or to the world. Some areas to assess include:

Public Health and Environmental benefits risk reduction

- □ Actual cost savings in construction or O&M
- □ Enhanced cost-effectiveness
- □ Improved quality of life

Environmental benefits should include:

- Mitigating climate change.
- Economic advancement attempts to include sustainable growth that benefits all communities.
- Improved quality of life that includes fair access to resources, healthy environments, and includes all individual voices during the decision making process.

The **Innovation** of the entry should be clearly distinguished from standard or conventional practices.

Digital Photographs – The winning entries need a well-coordinated set of digital photographs and descriptive captions to carry through the quality image.

To view a list of E3S winners from past years, please go to https://www.aaees.org/e3scompetition.

ENTRY CHECKLIST

Is your entry complete??

- ☐ Entry form – Make sure all blanks are completed.
- ☐ Entry fee – Can be paid online with the submission link provided.
- ☐ Release Letter – Your entry must contain a letter from the project owner allowing entry in the competition and publication of results. Even if you are the owner, a release letter is required to avoid misunderstanding.
- ☐ Entrant Profile – A brief description of the entrant, the entrant's role in the project and names of others who assisted in the project, if any – 250 words maximum.
- ☐ Project Description – A description of the project that addresses the judging criteria -- 1,000 words MAXIMUM.
- ☐ Testimonial Letter – A letter or letters that indicate the owner's objectives were satisfied and the degree of satisfaction.
- ☐ Presentations - Include references to conference presentations, papers, etc., about the project
- ☐ License or License Waiver Form – Copy of certificate showing license is current for professional engineer or science in charge of project – or completed waiver form establishing that a license is not required.
- ☐ Digital Photographs – Ten digital photographs and captions.
- ☐ Short Project Summary – 200 words maximum. (Written in third person)
- ☐ Combine all files into a single pdf before uploading your entry.

Deadline – All entries must be uploaded on or before December 31, 2024.