

# Assessment Guidelines

Version: 19.1 (August 2019)

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The following guidelines are designed to assist Industrial Assessment Center (IAC) Directors and staff in the performance, creation, and delivery of the primary product of the IAC program: the industrial assessment. Details on related topics such as reporting requirements, client eligibility criteria, faculty and staff requirements, and student involvement and responsibilities can be found on other guidelines.

## 1. Scope of Industrial Assessments

1. IAC assessments and the resultant assessment report are expected to reflect the IAC program goals to help eligible manufacturers identify ways to save energy, reduce waste, and improve productivity. Along with this, engineering students are provided with hands-on training in manufacturing plants.
2. Energy savings should be given top priority and significance in the assessment visit and report, consistent with the fact that the program is funded by the United States Department of Energy (DOE).
3. All interactions between an IAC and a client should be conducted with the highest professionalism toward encouraging client confidence in the IAC program and eventual implementation of assessment recommendations. This includes:
  - Recruitment activities
  - Collection of pre-assessment data
  - Performance of the assessment visit
  - Timely delivery of the assessment report
  - Follow-up activities

## 2. Annual Number of Assessments and Assessment Days per Center

1. The annual time frame for performing assessments is September through August.
2. The typical IAC industrial assessment is expected to be conducted in one day.
  - Two-day assessments can be requested for pre-approval from the Technical Field Manager if both of the following criteria are met:
    - Plant area is greater than 500,000 ft<sup>2</sup>
    - Plant energy bill is greater than \$1 million
3. In their Annual Work Plan, Centers propose the number of assessment days and the total number of assessments that they will complete annually and provide justification for their ability to complete the proposed number of assessment days per assessment.
4. The difference between the number of assessments and the number of assessment days in an IAC's Annual Work Plan is used to reflect the IAC's plans to perform multiple day assessments or follow-up visits.
  - The number and justification for each type of day (multiple day assessments vs. follow-up visits) are to be included in an IAC's Annual Work Plan.
  - The criteria and method for approving multiple day assessments is defined under "Program Guidelines for Clients" on the IAC website.
5. Deviations from the Annual Work Plan should be coordinated with the Technical Field Manager and the DOE.

## 3. Performance of an IAC Assessment

1. An assessment needs to conform to the minimum requirements in order to be approved and accepted in fulfillment of a Center's Annual Work Plan.
  - In special cases where minimums cannot be met, approval can be obtained from the Technical Field Manager, but this must be done prior to the assessment visit, not after.
    - In extreme cases, please contact the Technical Field Manager at the time of the assessment to request an exception.
  - Costs incurred by Centers in performing non-qualifying assessments can be charged to IAC contracts, but no additional funds will be available to meet the agreed upon Annual Work Plan.
2. Only approved Directors and Assistant Directors can lead an assessment.
  - Approval to lead must be received by the Technical Field Manager a minimum of 2 weeks prior to the assessment visit.
3. A minimum level of familiarity with each client should be obtained by the assessment team members prior to the performance of an assessment visit.
  - Normally this involves a pre-assessment questionnaire and a year's worth of utility bills shared and analyzed prior to the assessment.
4. The typical IAC assessment visit begins with an introductory meeting between client facility representatives and the full IAC assessment team.

- The scope of the IAC services and the characteristics of the facility including potential safety hazards, processes, and resources used should be discussed prior to the assessment.
  - Full compliance with the minimum safety standards established by the host facility is mandatory.
5. The next stage of a typical IAC assessment visit is a plant tour lead by the most knowledgeable plant representative available.
- The most effective tours have been found to follow the plant production process from the location where raw materials are received through the production process and to the point where the finished goods are shipped.
6. It is highly recommended that IAC team members work in groups when conducting measurements and observing plant processes within a client's facility.
- IAC team members should not venture into a plant individually without assistance from other team members or plant representatives.
7. Assessment teams are expected to spend an entire professional day at the plant.
8. Prior to leaving the facility, a final meeting is required take place. At this meeting, the IAC team will speak with client facility representatives to clarify processes, discuss findings, get input on potential recommendations, and inform the client about next steps.
9. A sufficient number of recommendations need to be identified and reported to the plant. The minimum number of recommendations per report is three. Aim for a total minimum recommendation savings of 5% of the plant's energy bill.
10. It is required that quantitative measurements be made during the assessment. Details of those measurements need to be used as part of one of the recommendations.
- All recommendations should be based on plant data or measurements taken at the time of the assessment.