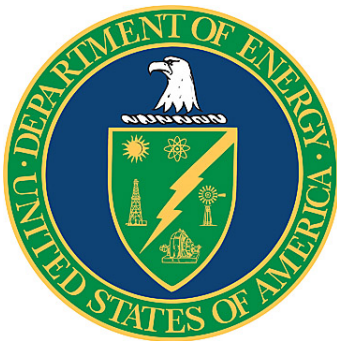


U.S. DEPARTMENT OF ENERGY VOLUNTARY PROTECTION PROGRAM PART IV: ONSITE REVIEW HANDBOOK



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DEPARTMENT OF ENERGY VOLUNTARY PROTECTION PROGRAM

Part IV: Onsite Review Handbook

INTRODUCTION

Part IV, Onsite Review Handbook contains criteria to be used in evaluating the systems, processes, and culture required for initial or continued participation in the Department of Energy (DOE) Voluntary Protection Program (VPP), verifying and calculating rates of injury and illness experience, the Onsite Review report format, and sample questions to be used during onsite interviews. This document should be used in conjunction with the first three DOE-VPP manuals (Part I: *Program Elements*, Part II: *Procedures Manual*, and Part III: *Application Guidelines*). This document is intended to assist onsite review team members and DOE contractors in evaluating safety and health programs, and to serve as guidance for DOE-VPP participants in performing their required annual evaluation. Requests for additional information or any questions may be addressed to a DOE-VPP Coordinator in the Office of Worker Safety and Health Assistance.

The term contractor used throughout this document refers to an applicant to, or a participant in, DOE-VPP. The term subcontractor refers to any organization that is contracted by the applicant or participant to do work at the site under review.

The DOE-VPP Onsite Review Criteria contained in Appendix A provide guidance for evaluating a site's implementation of the program requirements given in Part I: *Program Elements*. The program requirements are in bold italicized type, followed by guidance for ensuring implementation. Part I should be consulted for a complete description of the program requirements. These criteria should be used by team members whenever possible, but are not intended to be all inclusive.

The review criteria are heavily based on performance. During the review, observation of work activities provides the Team with an indicator of the safety culture. The term “work activities” encompasses various types of projects including restoration, maintenance, operations, research and development (R&D), and other work activities that could expose the workers, public, or environment to hazards. Observing work activities will help the reviewer determine if implementation of systems, programs, and practices result in application of adequate controls to protect against the associated hazards. Determination of adequate implementation of the DOE-VPP requirements is at the team members' discretion.

Guidance for calculating Total Recordable Case (TRC) rates and Days Away, Restricted or Transferred (DART) case rates is contained in Appendix B. The Occupational Safety and Health Administration (OSHA) injury/illness records review and the associated calculations should be performed by Onsite Review Team members during the pre-onsite planning visit.

The Sample Interview Questions contained in Appendix C can be used for formal and informal interviews with employees, supervisors, committee members, record keepers, and maintenance personnel. This list of questions is not all inclusive and should be considered a starting point in the interview process. Additional questions should be formulated by the team members based on information provided by interviewees.

The Onsite Review Report Format in Appendix D contains guidelines for writing reports for both pre- and post-approval evaluations. The report format is not fixed. The team can include additional information deemed appropriate.

Appendix A

APPENDIX A. DOE-VPP ONSITE REVIEW CRITERIA PROGRAM ELEMENTS LIST

I. GENERAL

A. *Assurances - The DOE-VPP applicant assures that:*

1. All requirements for DOE-VPP participation will be met and maintained which includes ISMS verification and validation if required by the contracting officer.
2. Employee rights under DOE-VPP are explained to all employees, including new hires.
3. Hazards are corrected, with interim protection provided.
4. Hazard abatement follows the hierarchy of control.
5. Employees with health and safety duties are protected from discriminatory actions.
6. Employees have access to the results of self-audits, appraisals, assessments, and accident investigations upon request.
7. Listed documents are available for DOE's review. (See Part I, I.E.2.g)
8. Documents to verify accomplishment of Merit or Demonstration goals are available for DOE's review.
9. Sites approved for participation annually provide required statistics and annual program evaluation to the HQ DOE-VPP.
 - a. All required assurances are submitted with the application.
 - b. Interviewed employees, including new hires, are aware of participation in DOE-VPP, of their right to express safety and health concerns to DOE, and to be provided results of accident investigations and self-inspections performed by the participant contractor.

FOR POST APPROVAL ONSITE EVALUATIONS ONLY

- c. Participant continues to meet all assurances provided with the original application.

B. *Union Concurrence - Any authorized collective bargaining agent for any employees in applicant operations covered by the application must concur in the application.*

1. All authorized collective bargaining agents for employees involved in operations covered by the application provided signed written statements of concurrence with the application.

FOR POST APPROVAL ONSITE EVALUATIONS ONLY

2. All authorized collective bargaining agents continue concurrence with participation in the DOE-VPP program.

C. 10 CFR 851 and 10 CFR 835 Non-compliance Corrections

No contractor application shall be approved for DOE-VPP unless all hazards designated as non-compliance with applicable worker safety and health regulations have been corrected and cleared through DOE or the DOE-VPP onsite team determines that appropriate assessment was done, appropriate action or interim protective measures have been taken, and where budget considerations have delayed the action desired, that all steps within available resources have been taken to reduce or prevent worker exposure to the hazard.

1. A random sample (selected by DOE-VPP team members) of Non-compliance Corrections indicates that these corrections are well-documented, and where the desired action has not yet been achieved and cleared with DOE, the following has occurred:
 - a. All required actions have been taken and only formal clearance from DOE is missing; or
 - b. Where all required actions have not been taken, appropriate assessment has been done, appropriate interim protections have been provided and all steps within available resources have been taken to prevent or reduce worker exposure to the hazard.

D. Injury/Illness Rates

The contractor must have an average of both DART case rates and TRC rates for the most recent three year period at or below the most recent industry specific average for the nation.

1. NAICS code selection by the contractor is appropriate to the predominant activity. If the contractor is using an alternative method of comparison, review that method and ensure that it adequately represents the sites performance.
2. Injury and illness records for the contractor have been reviewed against first reports of injury/illness, first aid logs and injured worker interviews and are being kept correctly or with only minor discrepancies.
3. Temporary workers supervised by contractor personnel are counted in the calculations for both hours worked and injuries, if any.
4. Calculated rates per 100 workers over the last three full calendar years indicate that the contractor operations have a three year average which is at or below the industry average for the correct North American Industry Classification System (NAICS) code designation; or, if above, the program begun is adequate to bring the average down to the industry average in five years or less.
5. Sites with less than 200,000 employee work hours per year may opt to use data for the best three of the previous four years to minimize the negative impact of normalizing injury and illness statistics. TRC and DART rate averages must use the same three years data.
6. Compiled together, the TRC and DART case rates for all sub-contractor operations for the last complete calendar year are at or below the latest published Bureau of Labor Statistics (BLS) rates for the NAICS code which best matches the predominant activity of sub-contractor operations.

II. MANAGEMENT LEADERSHIP

A. **General Requirement** - *The contractor must demonstrate top level management commitment to occupational safety and health in general and to meeting the requirements of DOE-VPP. Management systems for comprehensive planning must address health and safety. As with any other management system, authority and responsibility for employee health and safety must be integrated with the management system of the organization and must involve employees.*

1. Contractor operations and conditions observed at the site demonstrate a high level of management commitment to safety and health.
2. Contractor employees at all levels indicate a perception of management's high level of commitment to employee safety and health.

B. **Commitment/Policy** - *Includes a clearly stated policy on safe and healthful working conditions which is communicated to employees at all levels so that they can understand the priority of safety and health protection in relation to other organizational values.*

1. A written version of the safety and health policy is easily accessible to all employees.
2. Production managers, supervisors and hourly employees interviewed by the team could explain, in at least general terms, what the safety and health policy is.
3. From interviews with site employees at all levels, it is clear that they understand that safety and health have priority at least equal to other organizational values such as "production" and "quality".

C. **Commitment/Goal and Objectives** - *Includes established and communicated goal for the safety and health program and objectives for meeting the goal so that the desired results and the planned measurements to achieve them are clearly understood.*

1. Written versions of the safety and health program goal and the objectives to achieve it are easily accessible to all employees.
2. Production managers, supervisors and hourly employees interviewed by the team can explain in at least general terms what the current goal and objectives are.
3. Employees at all levels have a clear idea of how the goal and objectives are related to them in their ongoing activities.
4. Established goals and objectives do not discourage or appear to discourage reporting of accidents, injuries, or illnesses by workers.

D. **Commitment/Planning** - *Planning for safety and health must be part of the overall, long term management planning.*

1. Documented planning for contractor operations over the long term clearly includes occupational safety and health considerations.

2. Occupational health, industrial hygiene and safety professional staff interviewed by the onsite team provide credible evidence that they are included in long term planning for contractor operations at the site.

E. Written Safety and Health Program - All critical elements of DOE-VPP, including management leadership, employee involvement, worksite analysis, hazard prevention and control, and safety and health training, must be a part of the written safety and health program.

1. The worker safety and health program is written, approved, and accessible to all employees.

F. Adequacy - All aspects of the safety and health program must be appropriate to the size of the worksite, the complexity of the hazards, and the nature of the industry.

1. Contractor safety and health program is appropriate for the size of the worksite and scope of operations.
2. Contractor safety and health program is appropriate for the complexity of the hazards of the operations at the site.
3. Contractor safety and health program is appropriate to the nature of the operations at the site and addresses all programs required for compliance.

G. Responsibility - Responsibility for all aspects of the safety and health program must be assigned and communicated so that all managers, supervisors and line employees know what performance is expected of them.

1. Responsibilities for safety and health are clearly assigned. Documents are accessible to employees.
2. Interviews with employees at all levels indicate that they clearly understand their safety and health responsibilities.
3. Review of documents, conditions and interviews indicates that there are no gaps or overlaps in responsibilities and that coordination between various groups of health and safety professionals allows the best use of all of these professionals.
 - a. Safety and health responsibilities are adequately delegated to line employees at all levels rather than concentrated on health and safety professionals.
 - b. Interviews with employees at all levels indicate that they clearly understand that safety and health is a line responsibility.
4. There is documented evidence that adequate, clearly assigned safety and health responsibility has been in place for at least 12 months.

H. *Authority and Resources - Responsible personnel must have adequate authority and resources to perform the desired tasks. Documented commitment of necessary resources for workplace safety and health must exist and include staffing, space, equipment, training and promotions. Budget and capital expenditures made for safety and health must also be included.*

1. Any personnel assigned responsibility for safe and healthful operations for any given equipment or process has full authority to shut down operations or equipment and order maintenance.
2. There is no evidence that unsafe conditions or practices in the contractor's operations at the site are occurring because of inadequate or misplaced designation of authority.
3. Safety and health resource staff is adequate in numbers of personnel, training and ability to achieve promotions and financial reward for their efforts equal to those of other staff specialties in contractor's operations at the site.
4. Safety and health resource staff has adequate equipment and space to carry out their responsibilities.
5. Capital expenditures for safe and healthful working conditions and equipment are adequate given the constraints of the contract budget.
6. Where capital expenditures are not adequate due to contract budget restraints, there is documented evidence that the contractor company makes bona fide attempts to improve the capital expenditure budget for improvement of the safety and healthfulness of conditions and equipment.
7. There are no serious preventive maintenance or hazard correction backlogs due to a lack of resources.
8. There is documented evidence that adequate assignment of authority and resources has been in place for at least 12 months.
9. There is evidence that the contractor recognizes the benefit of investing in safety excellence, and is willing to invest its resources in addition to allowable costs under the contract (e.g., assistance with DOE-VPP evaluations at other sites, employee promotions and awards, OSHA Special Government Employee training).

I. *Line Accountability - Managers, supervisors, and employees must be held accountable for meeting their assigned responsibilities. Accountability must be demonstrated through evaluation of employees at all levels and a functional and operational system for rewarding good and correcting deficient performance must be in place.*

1. Performance evaluations randomly sampled by the team show specific safety and health protection criteria for all line managers, supervisors and hourly employees.
2. Interviewed employees at all levels indicate that safety and health performance impacts decisions made about their pay and/or promotions and that good performance is rewarded and deficiencies are corrected.

3. Performance criteria in performance appraisals are based more on positive action than on numbers of injuries or illnesses.
4. Based on the evidence in documents, site conditions, and employee interviews, lack of accountability is not a contributor to accidents/incidents.
5. Supervisors are held accountable for making sure their own employees are held accountable for following rules and safe work procedures.
6. Performance awards do not discourage or appear to discourage reporting of accidents, injuries, or illnesses by workers.
7. There is documented evidence that adequate accountability for employees at all levels has been in place for at least 12 months.

J. Visible Management Involvement - Top management involvement in safety and health activities must be apparent to all employees. This involvement should include clear lines of communication with employees; setting an example of safe and healthful behavior; ensuring that all workers, including subcontract workers, vendors, and visitors in areas under the contractor's controlled spaces, are provided with a safe and healthful workplace; and top management's accessibility by employees for health and safety concerns.

1. Interviewed employees indicate their opinion or experience that top management is accessible to them for safety and health concerns and can provide examples of such accessibility.
2. There is a documented system for top managers, including the site CEO, to be actively involved in worker safety and health.
3. There is evidence both through written documentation and employee interviews that communication concerning safety and health flows both ways in the organization.
4. There is evidence that management is involved in the safety and health of sub-contract workers, vendors, and visitors.
5. There is conclusive evidence that adequate, visible management involvement in the worker safety and health program has existed for at least 12 months.

K. Site Orientation and General Accountability - Documented programs for orienting and holding accountable all persons operating in contractor-controlled spaces, including but not limited to subcontractor employees, vendors, consultants, students and visiting scientists.

1. Sampling of records indicates that all persons operating in contractor-controlled spaces at the site have received appropriate site orientation.
2. Interviews with a random sample of persons, other than contractor employees, who are operating in contractor-controlled spaces, indicate that they have received adequate orientation and believe themselves to be held accountable for safe and healthful behavior while in those areas.

3. Documentation and interviews provide acceptable evidence that entry and exit from contractor controlled spaces at the site by persons other than contractor employees is adequately controlled.
4. Documents and interviews demonstrate that an adequate program of orienting and holding accountable all persons, other than contractor employees, who operate in contractor-controlled spaces at the site has been in place for at least 12 months.

L. Sub-contract Worker Coverage - The contractor must be able to demonstrate that they have considered the health and safety performance of all sub-contractors during the evaluation and selection process, especially in such operations as construction.

1. There is documented evidence that the safety and health performance of all sub-contractors selected at least during the last 12 months was a major consideration in the selection process.
2. Interviewed sub-contractor employees at all levels believe that their safety and health performance was important in their selection for the sub-contract.

M. Sub-contract Worker Rates and Records - Records of hours worked and injuries and illnesses occurring by subcontractor employees while working in the contractor's controlled spaces must be kept for work done at that DOE site. Rates calculated for such work are expected to be at or below the most appropriate industry average as reported by the most recent BLS publication.

1. Records of hours worked and injury and illness occurrence are kept for all sub-contractor work in the contractor-controlled spaces at this DOE site.
2. A review of the records against first reports of injury/illness, first aid logs and at least a few interviews with injured employees indicates that records are kept correctly with only minor discrepancies.
3. Compiled together, the TRC and DART case rates for all sub-contractor operations for the last complete calendar year are at or below the latest published BLS rates for the NAICS code which best matches the predominate activity of sub-contractor operations.

N. Sub-contract Safety and Health Provisions - Provisions in sub-contracts must: (1) specify authority for the oversight, coordination, and enforcement of safety and health programs by the contractor and there must be documented evidence of this authority; (2) provide for the prompt correction and control of hazards by the contractor in the event that sub-contractors or individuals fail to correct or control such hazards; and (3) specify penalties, including dismissal from the worksite, for willful or repeated noncompliance by sub-contractors or individuals. The contractor must be able to demonstrate that the above contract provisions have been carried out.

1. Required contract provisions are documented in every sub-contract reviewed in a random sample selected by DOE-VPP onsite team members.
2. Documentation and/or interviews provide evidence that hazards occurring in sub-contractor operations in contractor-controlled spaces are corrected promptly.
3. Interviewed sub-contractor personnel in contractor controlled spaces understand the requirements and either know or believe that monetary penalties or dismissal from the site

will occur (and can cite some evidence) if they are involved with willful or repeated non-compliance.

4. There is documented evidence of contractor inspections or other oversight of sub-contractor operations to determine compliance and completion of hazard corrections.
5. There is evidence that an adequate program of sub-contractor control for worker safety and health has been in place for at least 12 months.

O. Safety and Health Program Evaluation - The contractor must have a system for evaluating the operation of the safety and health program to judge the success in meeting the goal and objectives so that those responsible can determine and implement changes needed to improve worker safety and health protection.

1. The system must provide for an annual, written, narrative report with written recommendations for improvements and documented timely follow up.
2. The evaluation must assess the effectiveness of each element and sub-element described in Section II.E of "Part I: Program Elements."
3. The evaluation may be conducted by any competent corporate or site personnel or private sector third party.
4. There is a documented system to produce an annual evaluation meeting the requirements above which has been in place for at least 12 months and has produced at least one written report meeting all the requirements.
5. All areas described in Part I, Section II, are included in the evaluation.
6. The evaluation was carried out by other than government personnel and covers the contractor's operation at this site only.
7. The report contains an analysis of program effectiveness in meeting the overall goal as well as the objectives set annually, and avoids mere description of activities.
8. The report contains written recommendations for improvements to program effectiveness, including, where indicated, improving ineffective activities or starting new programs to achieve the overall goal.
9. The report avoids mere findings of hazards more appropriate to inspections or compliance assessments.
10. There is documentation of timely and appropriate follow up to the written recommendations for program improvements. These are included in new annual objectives as appropriate.
11. An adequate program for safety and health program evaluation has been in effect for at least 12 months.

III. EMPLOYEE INVOLVEMENT

- A. General Requirement - Employees at all levels must be involved in the structure and operation of the safety and health program and in decisions that affect employee health and safety. Employee participation is in addition to the individual right to notify appropriate managers of hazardous conditions and practices.**

1. A combination of interviews, document reviews and tour of site show that management has involved employees at all levels in the structure and operation of the safety and health program and in decisions that affect employee health and safety.

- B. All Contractors except Construction - In non-construction activities, the requirement for employee participation may be met in a variety of ways, as long as the employees have an active and meaningful way to participate in health and safety problem identification and resolution. Examples of acceptable means of providing for employee impact on decision making include, but are not limited to, any combination of the following: (1) safety committees; (2) safety observers; (3) ad hoc health and safety problem-solving group; (4) health and safety training of other employees; (5) analysis of job hazards; and (6) committees which plan and conduct health and safety awareness programs.**

Note: If the contractor utilizes safety and health committees as a major form of employee involvement, also use criteria III.C.19 in evaluating the committees' effectiveness.

1. There is a documented system to involve employees in safety and health program design and implementation, in both safety and health problem identification and resolution.
2. Interviewed hourly employees demonstrate a sense of "ownership" of the safety and health program, speaking more of "we" than "them."
3. There is documentation of employee activities having a substantial impact on the design and operation of the contractor's safety and health program.
4. Interviewed employees at all levels (including top line managers, line supervisors and hourly workers) understand and feel part of the safety and health program.
5. There is evidence of worker ownership of safety such that stopping activities and correcting deficiencies is viewed as a positive action.
6. There is evidence from document review and interviews that there are multiple avenues of employee participation.
7. Management is helpful in providing requested employees for both informal and formal interviews.
8. Interviewed employees at all levels speak with pride about the safety and health program and seem comfortable talking with DOE-VPP onsite team members.
9. Interviewed employees know about and can describe methods for involving employees at all levels and indicate that these methods are effective.

10. There is conclusive evidence from documentation and interviews that systematic employee involvement which meets requirements has been in place and operating effectively for at least 12 months.
11. Interviewed employees clearly understand their rights under 10 CFR 851, and are comfortable exercising those rights without fear of retribution or retaliation.

C. For Construction Contractors - Construction contractors must utilize the labor management safety committee approach to involve employees in the identification and correction of hazardous activities and conditions. This is required because of the seriousness of the hazards, the changing worksite conditions, the expanding and contracting workforce, and the high turnover at a construction site. The contractor must be able to demonstrate that the site has a joint committee for safety and health which has the requirements listed in Part I: Section II.E.2.b.

1. There is documentation that the joint committee has had a minimum of at least one year's experience providing safety and health advice and making periodic site assessments.
2. There is evidence through documentation and employee interviews that at least half of the committee is made up of either:
 - a. bona fide worker representatives who work at the site and, if unionized, are selected, elected or approved by a duly authorized collective bargaining organization; or
 - b. hourly craft workers who are rotated through membership frequently enough that all contractor hourly craft personnel receive experience on the committee over a reasonable period of time, but with terms long enough for development of adequate expertise to be of assistance.
3. Minutes of committee meetings and member interviews provide evidence that minutes are always kept and distributed, and that the committee meets monthly at a minimum.
4. Committee documents and member interviews demonstrate that the following quorum requirements exist and are followed:
 - a. at least half of the committee must be present; and
 - b. representatives of both labor and management must be in attendance.
5. Committee inspection records and member interviews provide evidence that the committee makes regular workplace inspections at least monthly, accompanied by at least one worker representative, and that the committee assessment covers the whole site at least monthly.
6. Documentation and member interviews provide evidence that committee members are allowed to observe or assist in accident investigations, have access to all relevant safety and health data, and have adequate training in hazard recognition.
7. Inspection records indicate that the committee has adequate hazard recognition ability to identify at least common hazards for the type of work being performed.

8. There is conclusive evidence from documentation and interviews that a joint labor-management committee meeting the requirements has been operating effectively for at least the last 12 months.
9. Interviewed employees clearly understand their rights under 10 CFR 851, and are comfortable exercising those rights without fear of retribution or retaliation.

IV. WORKSITE ANALYSIS

A. General Requirement - Management of health and safety programs must begin with a thorough understanding of all hazardous situations and the ability to recognize and correct hazards.

1. A combination of interviews, document reviews, tour of the site and work observations show that management has a system in place to identify and correct hazards and has a thorough understanding of all hazardous conditions and practices.

B. Baseline Surveys - Comprehensive baseline health and safety surveys and analyses must be conducted by qualified medical personnel, industrial hygienists, safety specialists, etc., to identify hazards, analyze those hazards to determine risks, and ensure awareness and minimization of those risks.

1. Identification and analysis of hazards and assessment of risks associated with individual jobs, processes, or operations is conducted and the results included in training and hazard control programs. This includes, but is not limited to, job safety analyses and process hazard reviews, where appropriate.
2. Risk assessments for identified hazards result in appropriate measures to reduce risks to an acceptable level.
3. Are control sets sufficiently analyzed to ensure they do not conflict or introduce additional hazards?
4. Nationally recognized procedures for all sampling, testing, analysis, and assessment must be used, with written records of results maintained.
5. Documents provide evidence that comprehensive surveys (as opposed to routine inspections) covering all contractor-controlled spaces has been done within a time frame appropriate for the risk level of the workplace operations.
6. Documents and interviews provide evidence that these surveys involved experts in safety, industrial hygiene and occupational health (doctors or nurses).
7. There is evidence that the experts used for comprehensive surveys have broad knowledge of their fields of expertise and used proper equipment and nationally recognized procedures to provide an accurate survey.
8. Interviews with occupational health professionals at the site provide evidence that at least some doctors or nurses have surveyed most areas of contractor controlled spaces for hazards due to conditions or work practices.
9. Evidence through documentation or interviews indicates that an adequate system of comprehensive surveys, meeting all the requirements, has been in place for at least 12 months.
10. There is a written system of job hazard analysis which provides for the analysis of all jobs over a given period of time and sets priorities for the most hazardous jobs.

11. Most jobs performed as part of contractor operations have been subject to a job hazard analysis within the last three years.
12. There is documented evidence that the most hazardous jobs have been analyzed, or the analysis updated, in the last 12 months.
13. Careful onsite team review of sampled analyses indicates that the analyses are detailed (breaking the job into steps, with hazards listed for each step and, for each hazard listed, one or more prevention or control measure is provided), thorough and provide the data needed to change, where needed, job procedures.
14. There is evidence from documents, interviews and work observations that line employees who perform the jobs analyzed were, at a minimum, interviewed during the analysis or actually involved in the analysis.
15. There is evidence from documentation, interviews and work observations that the analyses result in revised job procedures and/or employee retraining.
16. Job hazard analyses, while used to revise procedures, are not themselves used as procedures.
17. Is work defined at the task level such that hazards can be readily identified?
18. When workscope/task are changed, are hazards controls reviewed for impacts?
19. Documentation, interviews and work observations indicate that tools, equipment and other hardware involved in work processes are analyzed for hazards as part of the job analysis.
20. There is documentation demonstrating that process hazard analysis, where required, has been conducted.
21. Documentation indicates that the process hazard analysis took all of the following into consideration:
 - a. materials movement;
 - b. mechanical forces used to change (shape, cut, join, etc.) materials;
 - c. energy (heat, radiation, ionization, magnetic, electrical, laser, etc.) applied to materials;
 - d. mixing and combining effects;
 - e. holding together and containing materials (especially liquids and gasses) under ambient or special conditions; and
 - f. monitoring and instrumentation, covering both personal and environmental factors, whether for batch or continuous process operations.
22. Process flow chart development and use is documented for each process safety analysis sampled.
23. There is documented evidence that any needed changes to the process, equipment, materials, jobs or training was accomplished for each sampled process hazard analysis.

24. There is evidence that, where process safety analysis is required, an adequate system has been in place and implemented over at least the last 12 months.
25. Where contractor operations include work settings with continuous change and/or overlapping operations, such as experimental laboratories, chemical process "turn-arounds" or construction, there is a written system of phase hazard analysis.
26. There is documentation, where phase hazard analysis is applicable, that project phases have been identified and received detailed attention and analysis.
27. Documentation of phase hazard analysis sampled by the onsite team demonstrates that appropriate attention was paid to the proximity of operations occurring simultaneously, whether all operations were under the contractor's control or whether some operations were under a different contractor's control.
28. There is evidence from documentation, interviews and work observations that information derived from any phase hazard analysis was used for improving protection for workers through training, revised work procedures, revised schedules or emergency planning and preparation.
29. There is evidence that, where needed, a written system for phase hazard analysis has existed and been effectively used for at least the last 12 months.

C. Pre-use, Pre-start-up Analysis - Analysis of all planned, new, or newly acquired facilities, equipment, materials, and processes before use to identify hazards, assess risks, and plan for prevention and control. This includes:

- Pre-job planning and preparation for different phases of activities such as experiments.
 - Identification of hazards and assessment of risks associated with individual new jobs, processes, operations is conducted and the results included in training and hazard control programs. This includes, but is not limited to, job safety analysis and process hazard review.
 - For construction, a comprehensive safety and health project design evaluation is required which emphasizes special health and safety hazards of each craft and possible overlapping activity hazards for each phase of construction.
1. A random sample of applicable documents selected by the onsite team members provides evidence of a thorough analysis of new activities and facilities, including new chemicals brought onsite for hazards and risks.
 2. Interviewed personnel, including hourly employees where applicable, involved in analyses can describe the analysis performed (at least generally) and the measures taken to control or eliminate the hazards identified.
 3. Interviews and document review do not find a pattern of employee allegations of uncontrolled hazards in new facilities, equipment, materials or processes.
 4. Evidence through documentation and interviews demonstrates that an adequate system for pre-use, pre-start-up analysis has been effectively used for at least 12 months.

D. *Routine Hazard Control/Compliance Verifications - A system for conducting routine, general hazard control and compliance verifications which follow written procedures or guidance and which result in written reports of findings and tracking of hazard control or compliance correction. The system must identify ineffective or missing controls, introduced hazards, and/or noncompliance items and be conducted at intervals appropriate for the risks of the workplace operations.*

1. For continuous activities, the verifications must occur no less frequently than monthly and cover the whole worksite at least quarterly.
2. During construction, management verifications shall cover the entire worksite at least weekly.
3. Also in construction, verifications by members of the health and safety committee which cover the entire worksite as appropriate, but no less frequently than once per month, are required.
4. A written system for conducting routine inspections meeting the requirements above is readily accessible to all those who conduct such inspections.
5. Where necessary, a written program of routine industrial hygiene monitoring and sampling has been designed which is adequate for the health hazards of the operation, and is compliant with applicable requirements.
6. Written guidance in adequate detail is provided to those who conduct self-inspections and/or routine industrial hygiene (IH) monitoring.
7. Team review of the documentation of the inspections and/or monitoring finds evidence that the written guidance is followed, including frequency requirements.
8. A random sample of inspection reports indicates that findings are reported in writing and that hazard correction is tracked to completion and not just to the assignment of responsibility for correction.
9. A random sample of monitoring records indicates that sample results are used to correct problems.
10. A sample of inspection and/or monitoring reports over a period of time does not show patterns of recurring hazards or noncompliance.
11. The onsite team site tour and work observations do not reveal a pattern of hazards or noncompliance missed or left uncorrected by self inspections or routine monitoring.
12. Interviewed employees indicate that they have seen or taken part in inspections and that they believe them to be effective in correcting ineffective or missing controls and identifying introduced hazards or areas of noncompliance.
13. Where line hourly employees and/or supervisors are conducting the routine general inspections or routine sampling, there is evidence that they have received adequate training in hazard recognition and inspection techniques.

14. Evidence through documentation and/or interviews demonstrates that a system for routine self inspections, meeting all requirements, has been effective for at least the past 12 months.

E. Employee Reports of Hazards - A reliable system for employees, without fear of reprisal, to notify appropriate management personnel in writing about conditions that appear hazardous, and to receive timely and appropriate responses. The system must include tracking of responses and hazard correction.

1. Interviewed employees can explain how they get apparent hazards corrected, including the system for them to report hazards in writing.
2. Interviewed employees provide examples of reported hazards getting corrected in timely manner.
3. Written reports of hazards sampled by the team provide evidence of timely and appropriate management response.
4. Interviewed employees indicate no fear of reprisal for reporting hazards.
5. If maintenance requests or orders are being used as the written system, some means, such as a high visibility code, is used to identify that it is safety related.
6. If maintenance orders or requests are being used, a supplementary written system is being used for hazards which cannot be corrected through maintenance.
7. There is evidence through documentation and/or interviews that management encourages line employees to report apparent hazards.
8. There is evidence through documentation, interviews and the site tour that an effective system for receiving and responding to employee reports of hazards has been in place for at least the last 12 months.

F. Accident Investigations - An accident/incident investigation system which includes written procedures or guidance, written reports of findings and hazard correction tracking, identification of causes, and provisions for preventive or corrective actions. The system shall also include provisions for a narrative report suitable for dissemination to all employees containing root causes, analysis, and lessons learned.

1. Comparison of first reports of injuries, first aid logs, and interviews and the sample of accident/incident reports provides evidence that both accidents and incidents are investigated and result in narrative reports.
2. The written system for incident (no injury involved) investigation produces adequate investigations and reports which include recommendations for recurrence control.
3. A sample of accident/incident investigation reports demonstrates that root cause analysis is conducted, with most reports finding multiple causes rather than fixing blame on the injured worker or the worker most closely involved with the incident.
4. There is evidence from documentation and employee interviews that accident/incident reports and lessons learned meeting the above requirement are disseminated to all employees.

5. Employees interviewed can give examples of accident and incident investigation reports they have seen and read, and the lessons learned from them.
6. There is evidence from documentation, the tour of site conditions and work observations that correction of hazards identified by the accident/incident investigations have been tracked to a completion.
7. There is no evidence that accident/incident investigations may be suffering from the assignment of investigation responsibilities to untrained personnel.
8. There is evidence from documentation, interviews and/or the site tour that an effective accident/incident investigation system has been operating for at least the last 12 months.

G. Trend Analysis - Trend analysis for all data accumulated under the health and safety program (including injury and illness experience, inspections and employee reports of hazards) to identify patterns which may lead to the identification of systematic problems not perceived when looking at isolated incidents.

1. Document review provides evidence that, records concerning injuries, illnesses, and hazards are accurately kept.
2. Records of employee visits to health care providers are kept for analysis even though the care given may not involve an OSHA recordable.
3. There is documented evidence that trend analysis is conducted on safety and health statistics and this analysis results in the identification of potential programmatic weaknesses.
4. Trending analysis is conducted on, at least, injury and illness data, reported incidents, inspection or self assessment reports, and employee reports of hazards.
5. There is evidence from documentation that the trend analyses in all categories use enough data to establish meaningful trends.
6. There is evidence from documentation and employee interviews that the results obtained from the trend analysis of health and safety data contribute directly to the development of health and safety goals and objectives.
7. There is evidence from documentation and employee interviews that the results of trend analysis of health and safety data are available to all employees.
8. There is evidence from documentation that an effective system for trend analysis for all the hazard and injury/illness data collected under the safety and health program has been in operation for at least the last 12 months.

V. HAZARD PREVENTION AND CONTROL

- A. General Requirement - Based on the results of worksite analysis, identified hazards must be eliminated or addressed by the implementation of effective controls. Equipment maintenance, personal protective equipment, disciplinary action when needed, and emergency preparedness must also be implemented where necessary. Safety rules and work procedures must be developed, communicated and understood by supervisors and employees, and followed by everyone in the workplace, to prevent mishaps or control their frequency and/or severity.**

Access to Certified Professionals - Certified Industrial Hygienists, Certified Safety Professionals, Safety Engineers, Fire Protection Engineers, Certified Occupational Physicians and Certified Occupational Nurses must be available, as needed, based on potential risks on the site.

1. There is evidence from documentation, interviews and work observations that all the certified professionals are accessible for use as needed at the site (they do not have to be located at the site).
2. There is evidence that the certified professionals are used in a manner and frequency consistent with the size of the contractor operations at the site and the nature of the risks of the work.
3. Lines of communication and cooperation between the various disciplines involved are open and adequately used.
4. There is evidence that the responsibilities of ES&H subject matter experts are established and understood.
5. There is evidence from documentation, interviews, and work observations that provide effective access to the required certified professionals has been in place for at least the last 12 months.

- B. Methods of Hazard Prevention and Control - Means for eliminating or controlling hazards are to be implemented in the following order:**

- Process and/or material substitution;
 - Engineered controls;
 - Administrative controls, such as work rules or operating procedures that are revised when changes occur in processes or at least annually, fully implemented, i.e. used by employees; and appropriate to the risks of the process; and
 - Personal protective equipment.
1. There is evidence of a policy to eliminate or substitute hazardous materials or processes.
 2. The onsite team site tour and work observations provide evidence that work facilities and spaces are designed to isolate or remove sources of physical hazards such as temperature, noise or pressure.

3. Most tools and equipment used by workers are designed to minimize risk of injury.
4. Most work stations are designed to relieve body stress and remove ergonomic hazards.
5. Ventilation is adequate for both general building ventilation and removal of toxic contaminants.
6. The site tour and work observations provide evidence that hazards are adequately controlled.
7. Any hazards not addressed by substitution or engineering controls are addressed by adequately designed administrative controls such as work rules, operating procedures or personal protective equipment.
8. Operating procedures sampled by the onsite team provide evidence that procedures are updated when processes change or on a designated schedule appropriate for the type of work being performed.
9. Standardized hazard controls are developed and used in an appropriately graded approach based on project/work complexity, performance frequency, and hazard analysis results.
10. Knowledge, skills, and abilities of the work force are considered when selecting the form of control employed.
11. There is evidence that hazard controls balance efficiency production while ensuring acceptable hazard mitigation or elimination.
12. The onsite team site tour, interviews and work observations provide evidence that operating procedures and work rules are fully implemented and used by employees.
13. From documentation, interviews, the site tour and work observations there is evidence that where personal protective equipment is needed and required, it is used properly.
14. There is no evidence from interviews, documentation, the site tour or work observations that personal protective equipment, work practices or physical hazard controls make workers' jobs less safe or too difficult to perform.
15. If respirators are used, an adequate respirator program is in place and implemented.
16. There is evidence from the work observations tour, documentation and interviews that an effective program of implementing the best feasible prevention or control for the hazards of the site has been in place for at least the last 12 months.

C. Positive Reinforcement and Discipline - Procedures for positive reinforcement exist. Consistent and fair disciplinary action for employees and managers who break or disregard safety rules, safe work practices, materials handling, or emergency plans. Procedures must be written, communicated to employees and used.

1. Interviewed employees can give examples of positive reinforcement received from supervisors or higher levels of management for good work practices.
2. Interviewed employees indicate that they know and understand the disciplinary system.

3. Interviewed employees indicate that discipline is both fair and consistent.
4. Documentation of disciplinary actions, where taken, provides evidence of fair and consistent use for all levels of employees.
5. There is evidence that an effective system of positive reinforcement for following site rules and procedures has been in place for at least the last 12 months.
6. There is evidence that a fair and consistent disciplinary system for employees at all levels has been in place for at least the last 12 months.

D. Preventive/Predictive Maintenance - Ongoing monitoring and preventive/predictive maintenance of workplace equipment to maintain it in a safe operating condition.

1. The schedule for maintenance of equipment is based upon the manufacturers' recommendations, is revised to reflect actual experience with equipment and is planned to avoid any equipment breakdown.
2. Maintenance request and repair records are routinely analyzed to determine breakdown timing and to revise schedules as needed.
3. New equipment is routinely added to the maintenance schedule.
4. There are written or computerized records of maintenance performed which demonstrate that the schedule is followed appropriately, and if there are maintenance backlogs, the information is tracked and relayed to the responsible line organization.
5. Equipment viewed by the team during the site tour has documented maintenance following an appropriate schedule.
6. Interviews with maintenance workers indicate that schedules are important and that those responsible are held accountable for ensuring that the appropriate work is done.
7. Interviews with employees do not provide evidence of poor maintenance, and do not indicate that production is a priority over preventive maintenance.
8. There is evidence from documentation, interviews, the site tour and work observations that an effective program of preventive/predictive maintenance has been in place for at least the last 12 months.

E. Tracking Systems - A system for initiating and tracking hazard correction in a timely manner.

1. A sample review of documents from self-assessments or inspections, employee reports of hazards, accident/ incident investigations and any other system for identifying hazards provides evidence that hazard correction tracking is clear and easy to follow from discovery to complete correction.
2. A sample review of documents, interviews, the site tour and work observations provide evidence that hazard corrections are successfully tracked to completion.
3. Documentation and interviews provide evidence that affected employees are kept informed on hazard status and control during tracking process.

4. There is evidence from documentation and interviews that effective tracking systems have been in place for all reported hazard correction for at least the last 12 months.

F. Emergency Preparedness - Emergency response procedures list requirements for personal protective equipment, first aid, medical care, or emergency egress and are written and communicated to all employees. Procedures should include provisions for emergency telephone numbers, exit routes, and training drills, including at least annual evacuation drills.

1. There is documentation that adequate procedures are in place for natural disasters that could occur at the site.
2. There is documentation that adequate procedures are in place for man-made disasters including any hazards of the workplace with emergency potential; proximity to air, rail or shipping operations; or possible terrorist activities.
3. Based on a comparison of the written procedures and what has been seen and heard during the site tour, employee interviews, and work observations, it is clear to the team that the emergency procedures provide for all likely types of emergencies given the nature of the work of the site and its geographical location.
4. Documentation and employee interviews provide evidence that written procedures meeting the above requirements are accessible to all employees.
5. Employees interviewed know precisely what to do (and not do) and where to go in various cases of emergency.
6. Any sub-contractor personnel, consultants, and any visitors in contractor-controlled spaces know precisely what to do, and where to go in various cases of emergency when interviewed by the team.
7. There is evidence from documentation and/or interviews that a site evacuation drill is practiced at least annually.
8. There is evidence from documentation and interviews that annual evacuation drills are critiqued, and improvements implemented if needed.
9. The team observed clearly marked evacuation routes on their site tour and work observations.
10. There is evidence from documentation and/or interviews that site emergency planning and practice includes coordination with and use of employee first responders, onsite or contract occupational health professionals, and community emergency organizations.
11. There is evidence that emergency preparedness has been operating effectively for at least the last 12 months.

G. *Medical Program* - A medical program which includes timely access to the services of licensed physicians. In addition to services required by any applicable federal and/or state regulations, physicians and nurses shall assist in such hazard analysis activities as job hazard analyses and comprehensive surveys, in early recognition and treatment of illness and injury and in limiting the severity of harm. Personnel trained in Cardio Pulmonary Resuscitation (CPR) and first aid should be available to all persons working in contractor-controlled spaces during all shifts.

1. Medical records of onsite or contract medical service sampled by the team are clear and complete, and case management accounts for patient status from time of initial visit, through corrective referral, until individual is restored to full duty on the job or is separated from the organization.
2. There is evidence from documentation and interviews that contract or onsite medical services follow standardized protocols.
3. Interviewed employees who have received physicals and/or medical testing, report that tests and results were explained to them.
4. There is evidence from documentation and interviews that all work shifts are covered with employees trained in first aid and CPR.
5. There is evidence from documentation, interviews, the site tour and work observations that ergonomic surveys involving occupational health professionals have been done and that, where needed, workstations, equipment and/or procedures are ergonomically improved.
6. There is evidence from documentation and interviews that at least one physician or nurse has been involved in a comprehensive survey in the contractor-controlled operations within the last two years.
7. There is evidence from documentation and interviews that medical personnel have been involved in job safety analysis, process safety analysis, and accident/incident investigations as needed during at least the last 12 months.
8. There is evidence from documentation and interviews that the onsite or contract medical services perform trend analysis on the reasons for medical visits over a period of time which allows enough data to establish patterns or trends.
9. There is evidence from the site tour and interviews that the medical program has adequate equipment and personnel, including employees trained in first aid and CPR, and access to licensed physicians and nurses.
10. There is evidence from documentation and interviews that cooperation and coordination between the onsite or contract medical services and other safety and health professional resources is adequate.
11. There is evidence from the site tour, documentation and interviews that there has been an effective medical program, meeting all the requirements above for at least the last 12 months.

VI. SAFETY AND HEALTH TRAINING

A. General Requirement - Training is necessary to implement management's commitment to prevent exposure to hazards. Managers, supervisors, and employees must know and understand the policies, rules and procedures established to prevent exposure to hazards.

B. Safety and Health Training for Managers - Managers understand their safety and health responsibilities as described under Part I. Program Elements, Section II.E.1 "Management Leadership" and know how to effectively carry them out.

1. Evidence from documents and interviews shows that all managers at the site receive training annually about their safety and health responsibilities that is appropriate for their position and background.
2. Managers interviewed are able to describe their safety and health responsibilities.
3. Employees interviewed report that top line managers understand their safety and health program responsibilities.
4. Evidence from documents and interviews demonstrates that an effective program of training managers in their safety and health responsibilities has been in place for at least the last 12 months.

C. Safety and Health Training for Supervisors - Supervisors understand their responsibilities and how to carry them out effectively. Their responsibilities include: (1) understanding the hazards associated with the job and the potential effects on employees; (2) understanding how to ensure through teaching and enforcement that employees follow the rules, procedures and work practices for avoiding or controlling exposure to the hazards; and (3) knowing how to make sure everyone understands what to do in emergencies.

1. Evidence from documentation and interviews shows that supervisors receive training on their responsibilities for worker safety and health as required above.
2. Supervisors interviewed are able to describe the hazards associated with jobs under their supervision and the potential adverse effects on employees.
3. Supervisors interviewed can explain how they use teaching and enforcement to ensure that employees follow rules, practices, and procedures aimed at preventing or controlling hazard exposures.
4. Supervisors interviewed can explain how they ensure that all of the employees they supervise understand what to do in emergencies.
5. Employees interviewed indicate that supervisors know and understand their safety and health duties.
6. Evidence from document review and interviews indicates that an effective safety and health training program for supervisors has been in place for at least the last 12 months.

D. *Employee Safety and Health Training - Employees, through training and enforcement, are made aware of hazards and the safe work procedures to follow in order to protect themselves. Training includes use of personal protective equipment where required, why it is required, its limitations, how to maintain it, and what to do in emergency situations.*

1. A sample of training documentation and interviews provides evidence that all training required by standard or DOE order is being carried out systematically and thoroughly.
2. A sample of training documentation and interviews provides evidence that useful safety and health training beyond that required by standard or DOE order has been systematically planned and presented in an effective manner.
3. Employees interviewed report that they are taught how to protect themselves and others from the hazards of their jobs while they are taught their jobs.
4. Employees interviewed report that regular, effective follow up safety and health training is given.
5. Employees interviewed can explain the hazards of their jobs and how they help protect themselves and others.
6. There is evidence from the work observation, site tour, documentation and interviews that where personal protective equipment is required, employees understand the need for it, and demonstrate that they know how to use and maintain it.
7. Employees interviewed can explain precisely what they must do in several different types of emergencies.
8. Employees interviewed report that safety and health training seems adequate to help them understand how to protect themselves and others.
9. There is evidence from documentation, interviews, work observation and the site tour that an effective program of safety and health training for employees has been in effect for at least the last 12 months.

VII. GENERAL ASSESSMENT OF SITE SAFETY AND HEALTH CONDITIONS

- A.** *The site tour and work observations reveal that an effective safety and health program, appropriate to the size of the site and the nature of the hazards has been implemented by the contractor.*
- B.** *Review of documentation, interviews, the site tour and work observation does not turn up any major patterns of problems as yet unaddressed by the implemented program.*

Appendix B

APPENDIX B. TRC RATE AND DART CASE RATE VERIFICATION AND CALCULATIONS

Careful review of the OSHA 300 Log is important because injury/illness experience is a qualification for approval into the DOE-VPP and will be used in evaluating a site's DOE-VPP performance and effectiveness. The injury and illness data from the most recent three calendar years will be reviewed by the Onsite Review Team. For new operations with less than three years of data, the experience for the actual period of operation (with a minimum of 12 months) is used for the calculations.

1. Review the OSHA 300 Logs for the most recent complete 3 year period (or the life of the worksite if less than three years but at least 12 months) to see that the logs have been properly maintained for the entire period.
 - a. The dates of entry should be reasonably continuous. If major gaps of time appear, they should be discussed with the record keeper.
 - b. The classification of injuries should be consistent with the Bureau of Labor Statistics (BLS) definition of recordable injuries. This can be determined by reviewing the description provided on the form and discussing the criteria used for determining recordability with the record keeper.

NOTE: It is essential that, for construction operations, the application record review and rate calculations include all construction employees involved in the operations including all construction subcontractor employees.

2. Verify that DART Case rate entries are recorded properly by reviewing the applicants' OSHA 301 Forms or their substitute (workers' compensation or insurance reports of injury/illness). Compare these injury/illness report forms with OSHA 300 Log entries to assess the accuracy of classification (DART case rate versus TRC rate) and the thoroughness of log maintenance. Another verification source is the infirmary or first aid station log.
3. If possible errors or omissions are found, discuss them with the record keeper to determine whether changes in the OSHA 300 Log entries are needed. Once agreement is reached, any necessary changes can be made. Experience to date indicates that employers may over-record as often as they may under-record. If there is any indication of deliberate under-recording of injuries/illnesses, additional employee interviews should be done to determine employee views of how injuries/illnesses are handled. Determination that deliberate under-recording of accident/injury or illness data is presently taking place is evidence of bad faith on the part of the applicant or participant.
4. TRC rates are calculated based on the verified OSHA 300 Log, including any changes.
 - a. For each of the three most recent complete years of data the Total Recordable Case (TRC) rate is calculated using the following formula:

$$\text{TRC Rate} = \frac{\# \text{TRC's } [\text{Col (H)} + \text{Col (I)} + \text{Col (J)}] \times 200,000}{\# \text{employee hours worked}}$$

- b. For each of the three most recent complete years of data, the DART case rate is calculated using the following formula:

$$\text{DART Case Rate} = \frac{\text{\#DART cases [Col (H) + Col (I)]} \times 200,000}{\text{\# of employee hours worked}}$$

NOTE: Employee hours should reflect all full and part time workers, including seasonal, temporary (including temporary contract workers if supervised by company personnel), administrative, supervisory and clerical.

5. Also, calculate the rates for the current year to ensure they are in line with the previous years.
6. To calculate the three year average rates, sum the TRC's (or the DART cases) for the three year period and use the same formula, dividing by the sum of the hours worked over the three year period. Compare the three year average rate to the most current published BLS injury/illness rates for that industry. The NAICS code used for comparison in the construction industry should be the NAICS code that describes the type of construction at that site.
7. For sites with less than 200,000 employee hours per year, use the best three of the previous four year data. Both TRC and DART rate calculations should use the same year's data.

Appendix C

APPENDIX C. SAMPLE INTERVIEW QUESTIONS

These questions are intended for the DOE reviewer's use in employee interviews. Before you begin, state that employee responses shall be kept confidential. Explain your purpose in being at the site and state that responses will not be the sole determinate of company approval or disapproval. The length of each interview should be 20 to 30 minutes. Some first line supervisors must be interviewed to document the results of training. Please note that in some categories there are alternate questions depending upon whether the interview is done at a pre-approval review or post-approval re-evaluation.

- I. Use of Interview Questions.** The reviewers shall assure each interviewee that responses will be treated confidentially and that the answers they give will not by themselves be responsible for approval or denial of participation in the program.
 - A. Record Responses.** The interviewer will use the list of questions to guide the interview. The list may also be used to jot down responses.
 - B. Suitability.** Not every question listed need be asked and other questions may be substituted or added based on the Onsite Review Criteria and professional judgment. The list of questions is only a guide and the interviewer is required to pursue any additional matters necessary to adequately assess the contractor.
 - C. Other Relevant Information.** The interviewer's perception and the discussion, and of any relevant matters not indicated on the list of questions should also be recorded.
- II. Evaluating Responses.** Professional judgment is essential in assessing the successful implementation of a safety and health program. In evaluating employee perceptions of worksite conditions and the safety and health program, it is important to be mindful that the small number of interviews that time permits only enables the reviewer to obtain general impressions rather than draw conclusions which carry the weight of a valid statistical sample.
 - A. Factors Impacting Responses.** Many factors may enter into the response that an individual employee may give, for example:
 - 1. Individual employees may have personal agendas to follow in responding to questions.
 - 2. Contract talks or an organizing campaign may be causing temporary antagonism between the employer and employees.
 - 3. Employees fearful of layoffs or plant shut downs may not want to say anything which could be perceived as having an adverse effect on the contractor.
 - B. Pattern.** The reviewer should look for patterns in employee responses. Patterns which are supported by information obtained in other employee interviews, by document review, or by observation should carry the most weight. No team determinations should be made on the basis of one employee interview.

INTERVIEW QUESTIONS FOR EMPLOYEES

A. Background.

1. How long have you worked here?
2. What is your job here? How long have you had this job?
3. Where did you work before? How did it compare with here in terms of safety?
4. Are you a union member?
5. How do you perceive the relationship between the union(s) and company management? Does it affect safety on your job? Can you give examples?
6. What happens if an employee disobeys a company safety rule? Do you know of anyone this has happened to?
7. Is top management involved with worker safety and health? How do you see this? Can you give examples?

B. Orientation and Training.

For pre-approvals:

1. Did you receive safety and health training when you began to work here?
 - a. How soon after you began to work did you receive the training?
 - b. How long did it last and what did it cover?
2. If you did not get training when you were first hired (or transferred to a new job), have you received any basic safety and health training since that time? If so, please describe.
3. Do you receive regular safety and health training?
 - a. If so, how often?
 - b. How long does it last?
 - c. Who is responsible for this?
4. What protective equipment have you used?
 - a. Have you been trained in the use of this equipment?
 - b. If so, in your opinion, was the training adequate?

For post-approvals:

1. Have you received safety and health training since date of last DOE-VPP onsite visit?

2. If so:
 - a. How frequently?
 - b. How long did it last?
 - c. Was it helpful? Describe how?

C. Employee Involvement.

1. What do you know about the committee (or other employee participation method) for safety and health?
 - a. When did you become aware of it?
 - b. Do you know any hourly workers involved in this activity? If yes, please name the members you know.
 - c. Do you know how the employees were selected? If yes, describe.
 - d. (For 2nd or 3rd shift workers) Is your shift represented in this activity? Do you know who your representative is?
 - e. Do employees make inspections? If so, do they appear to be thorough in their approach?
 - f. What other things do they do?
 - g. Would you say this activity is very effective, somewhat effective, or not effective? Why?

D. Hazard Protection.

1. What kinds of safety and health hazards are you potentially exposed to?
2. What protection is provided to you? How do you help protect yourself?
3. Do you think that management has a good understanding of the hazards? Have they provided an adequate program of protection for you?
4. Have you ever seen any industrial hygiene surveying or monitoring where you work? (Interviewer may have to describe what the worker would have seen.)
 - a. If so, was it just once or are they routine?
 - b. If just once, was it a response to a specific problem? If a specific problem, what was it?
 - c. If routine, how often?
5. Has the company had you examined by a physician? If so, was it just at the start of work here or is it done periodically?
 - a. If routine, how often?

- b. If not routine and not for start of employment, what was the reason?
 - c. Did the examination seem thorough?
 - d. Did anyone explain what was being done and why? If so, who?
 - e. Were the results of the examination provided to you? Did anyone explain them? If so, who?
- 6. What kind of personal protective equipment do you use? If any, is it readily available when needed?
 - 7. If respirators are used, who is responsible for cleaning and repair? How is it done? Have you been trained in its use? If so, was the training adequate in your opinion? If not, explain.
 - 8. If you see a condition or situation that seems hazardous to you, what do you do?
 - a. If you cannot correct it yourself, what do you do?
 - b. Is the response timely, appropriate?
 - c. If management feels that you are mistaken about the severity of the hazard, do they explain this to your satisfaction?
 - d. If not, please give examples.
 - 9. What kinds of emergency situations are possible here? What is your responsibility in times of emergency? How often do you practice it?

E. VPP Participation.

- 1. What has management told you about the DOE-VPP program?
- 2. Have you been told what your rights are under the DOE-VPP? If so, can you tell me what they are?
- 3. Have you been told what your rights are under DOE? If so, can you tell me what they are?
- 4. Would you feel comfortable making a safety or health complaint to management? To DOE?
- 5. Have you noticed any change in safety and health conditions here since the site's approval into the DOE-VPP program? (and/or since the last evaluation?) If so, describe?
- 6. Do you support the company's participation in DOE-VPP?

F. General.

- 1. Have you ever seen the log of Injuries and Illnesses or a summary of the log? If so, did it seem to agree with your knowledge of accidents and illnesses here?
- 2. How does this workplace compare to others where you have worked in terms of safety and health? Worse? About the same? Better? Much better?

3. Is employee turnover high?
 - a. If so, why?
 - b. If so, how long does it take a new employee to learn to work safely alone?
4. Is there anything else you think we should know about the safety and health program here?

INTERVIEW QUESTIONS FOR SUPERVISORS

Explain your purpose in being at the site. Please note that there are additional questions at the end which are to be used only in post-approval interviews.

A. General.

1. How long have you worked here?
2. Where else have you worked? How did the safety and health program(s) compare to this one?
3. When did you become a supervisor?

B. Hazards.

1. What kinds of hazards are you and/or your employees exposed to?
2. How has management provided protection from those hazards?
3. What do you do when you discover a hazard in your area?
4. What do you do when an employee reports a hazard in your area?
5. What do you do when an employee reports a hazard in an area not under your control?

C. Training.

1. What kind of safety and health training have you received since becoming a supervisor?
2. Describe your role in ensuring that your employees understand and follow the safety and health rules?
3. Do you provide employee training in safe work procedures? (If so, please describe.)
4. What kind of emergency drills do you run for employees? How often? What is your role in the drill?

D. Accountability and Enforcement.

1. What methods do you use to provide positive reinforcement of rules and safe work practices?
2. How often do you use at least the first step of your disciplinary system? What is the most frequent offense?
3. How are you held accountable for ensuring safe and healthful working conditions in your area?

E. General.

1. In your opinion, is adequate supervision provided for night and weekend operations?

2. Is maintenance satisfactory, particularly on toxic release prevention equipment?
3. Do you have contract employees working in your area? If yes, how do you address any safety and/or health problems relating to or created by them? Examples?

For post-approvals:

1. What changes have you seen since the DOE-VPP approval? Are they connected in any way to the DOE-VPP approval?
2. Are you satisfied with being in DOE-VPP?

INTERVIEW QUESTIONS FOR SAFETY AND HEALTH COMMITTEE MEMBERS

For sites where a joint management/employee safety and health committee is not the method of employee participation, interview employees who are involved in the method of participation used and adapt the questions to fit that method. Before you start, explain your purpose in being at the site. Assure committee members that their responses will not be the sole determinate of company approval or disapproval. Please note that there are additional questions at the end for post-approvals.

A. General.

1. How long have you worked for this company?
2. How long have you served on the committee?
3. How are committee members chosen?
4. Does the committee have a written charter?
5. What is the total number of committee members? (For construction or other sites with a joint labor management committee):
 - a. Number of management representatives?
 - b. Number of employee representatives?
6. How often does the committee meet?
 - a. In view of the committee's workload, is this number of meetings too many? Just about right? Too few?
 - b. How are members notified of scheduled meetings?
7. How many of the committee members usually attend meetings? All? Most? About half? Less than half? Is there a quorum requirement?
 - a. Are members encouraged to attend the meetings?
 - b. What happens if you miss a meeting?
8. Are committee meetings held on company time?
9. Are there safety and health professionals on the committee? If so, do these people take the time to explain technical points when they arise?
10. Does the committee have access to the OSHA Log of Injuries and Illnesses?
11. What other safety and health records has the committee been able to review?
12. Does the committee base inspections on this data?
13. Are written minutes taken and distributed? Do non-committee members have ready access to the minutes?

B. Inspections.

1. How often does the committee do whole site inspections?
2. If inspections cover only part of the workplace, how many safety and health inspections are needed before the entire workplace has been inspected?
3. Do you normally participate in the inspection process? What area do you inspect?
4. How many safety and health inspections have you made in the past year?
5. Do you consider this an adequate number?
6. Does the committee bin, trend or otherwise evaluate findings from inspections?
7. In terms of keeping the workplace safe, do you consider the inspections very useful? Somewhat useful? Not useful? How would you change or improve them if you could?
8. What role (if any) does the committee play in accident investigations?
9. Have you seen industrial hygiene inspections at your worksite? (Make sure the employee knows what you are asking about you may need to describe what he/she would have seen going on.) Have you accompanied or participated in any of these inspections?
10. Can you describe the committee's role (if any) in the handling of reports of safety and health problems from workers?
11. If the committee oversees the process for employee reports of safety and health problems, does it verify that hazard correction occurs on valid concerns?
12. Have you ever accompanied a DOE Occupational Safety and Health assessment, or OSHA inspection?
13. How would you compare committee inspections with DOE's? OSHA's? Are the results similar? Explain.

C. Training.

1. Have you been trained specifically to work on the committee? If so, can you describe the work?
2. Who provided the training?
3. Did your training prepare you for committee work?
4. Did your training include information on safety hazards? Health hazards?
5. Since your initial training, have you received supplementary "refresher" training? Describe briefly.
6. How would you change or improve the training, if you could?

D. Communication.

1. Do you think the committee has had an effect on employee awareness of safety and health problems? If so, describe.
2. Does the committee have authority to correct safety and health concerns? Please give examples.
3. Has the committee made suggestions to management for safety and health improvements? If yes, give examples.
4. How are these communicated to management?
5. Do you think that the company has been responsive to suggestions the committee has offered? Give examples.
6. If the company does not accept recommendations, does it explain why? Give an example.
7. Have there been any disagreements between employees and management about safety and health issues? If so, how are they resolved?
8. Would you say that the company has been supportive of the time you spend on committee business?

E. Improvements.

1. Do you think that the committee functions or operations can be improved? If yes, how?
2. What else do you think the committee can do to improve safety and health conditions?

F. Overall Assessment.

1. As a whole, how would you rate the effectiveness of the committee?

G. Other.

1. Have you ever seen the Log of Injuries and Illnesses or a summary of the log? If so, did it seem to agree with your knowledge of accidents and illnesses here?
2. How does this workplace compare to others where you have worked in terms of safety health? Worse? About the same? Better? Much better?
3. Is employee turnover high?
 - a. If so, in your opinion, why?
 - b. Also if so, how long does it take a new employee to learn to work safely alone?
 - c. Are there company provisions for working alone?
4. Is there anything else you think we should know about the safety and health program here?

For post-approvals:

1. Has the role or the amount of activity of the committee changed since DOE-VPP approval?
If so, how?
2. Are you pleased with DOE-VPP participation? Why? Why not?

INFORMAL EMPLOYEE INTERVIEW TOPICS

A. For Pre-approval.

1. Safety and health orientation for new employees.
2. Ongoing safety and health training provided.
3. Awareness of the joint committee and its functions (where applicable).
4. Safety rules and enforcement.
5. Safe work practices.
6. Freedom to point out safety or health hazards.
7. Awareness of an internal safety and health complaint procedure.
8. Responsiveness of management in correcting hazards.
9. Emergency procedures.
10. Comparison of the safety/health conditions at this workplace in relation to others.
11. Visibility of top management involvement.

B. For Post-approval.

1. Questions from the list above, as applicable.
2. Awareness of VPP program participation rights, including right to receive upon request results of self-inspections or accident investigations.
3. Satisfaction with VPP.
4. Knowledge of any changes since last DOE onsite visit.

QUESTIONS FOR RECORDKEEPERS

This questionnaire is an abbreviated version of one designed by the BLS to determine the level of understanding of safety and health recordkeeping requirements. Use your discretion in choosing questions that could help you determine the level of understanding of recordkeeping at a DOE-VPP applicant site.

1. Who is responsible for recordkeeping?
2. (If multi-contractor site ask) Is your recordkeeping centralized? Computerized? Do you have data entry capability into the CAIRS database?
3. Is your recordkeeping computerized?
4. Do you have a completed Log and Summary of Occupational Injuries and Illnesses, OSHA No. 300, for the last three calendar years?
5. Do you have a completed supplementary record for each case entered on the log?
6. After an injury or illness occurs, how long does it take to enter it on the log?
7. In keeping the records, which of the following do you use? Instructions on the OSHA forms, BLS guidelines, trade association guidelines, insurers' guidelines, or other?
8. Who decides whether or not a case is recordable?
9. Are decisions made consistently in borderline cases? For those cases not specifically covered by recordkeeping rules and where the case could be classified as either recordable or non-recordable, is the default action recordable or non-recordable?
10. How do you determine whether or not a case is work related?
11. Do you record any cases on the OSHA forms that are not compensable under workers' compensation?
12. Has your management ever changed a recordability decision you made? If yes, describe the case and why its recordability was changed.
13. Does management regularly question or challenge your recordability decisions?
14. How do you distinguish between an injury and an illness?
15. How do you distinguish between medical treatment and first aid?
16. When does a case involve DART case rates?
17. What constitutes restricted work activity?
18. If you need assistance in making recordkeeping decisions, how is it obtained?
19. Has your company ever submitted a request for an interpretation of recordkeeping requirements to the Office of Corporate Safety Analysis to determine a case's recordability?

QUESTIONS FOR MAINTENANCE PERSONNEL

These questions were developed for OSHA VPP use at establishments using or producing high hazard chemicals. Use questions at your discretion to determine the quality of preventive/predictive maintenance at DOE-VPP applicant or participant sites.

1. Is there a scheduled preventive maintenance program? How is it carried out?
2. Does it include:
 - a. Critical instrumentation and controls?
 - b. Pressure relief devices and systems?
 - c. Metals inspection?
 - d. Environmental controls, scrubbers, filters, etc.?
3. Does the design, inspection and maintenance activity include procedures to preclude piping cross connections between potable water systems and non potable systems?
4. How are these procedures carried out and how are systems monitored and inspected to find any cross connections?
5. Do maintenance personnel participate in safety committees and other safety functions?
6. Is there a priority system for safety/environmental related maintenance items? Is it being followed?
7. Does the preventive maintenance program include onsite vehicles, sprinkler systems, detection/alarm equipment, fire protection and emergency equipment?
8. Do you have input concerning safety and maintainability for new equipment and machinery purchases?
9. Do you have an inventory of spare parts critical to safety and environmental protection or a system in place to acquire these parts when needed?

APPENDIX D

APPENDIX D. ONSITE REVIEW REPORT FORMAT

I. PURPOSE OF THE REPORT.

- A. **For pre-approval.** The report provides information to Chief Health, Safety & Security Office (HS-1) verifying the application information submitted by contractors applying for participation in DOE DOE-VPP and documenting the qualifications of the site for the DOE-VPP. If the site is approved, the report will be publicly available along with the application and will provide baseline data for re-evaluation purposes. Additional information on the Onsite Review Report can be found in Part II: Procedures Manual: section IV.B.3.i addresses preparation of the draft report, and section V.C. addresses the report's finalization and concurrence.
- B. **For post-approval evaluation.** When the report format is used for post-approval evaluations, the report provides evaluation of the continuing qualification for DOE-VPP and determination, where possible, of the impact of DOE-VPP on the site safety and health program and other important aspects of employment. The completed report, when approved by HS-1, will become part of the public file.

II. GUIDELINES.

- A. To allow the use of one format for both pre-approval reviews and post-approval re-evaluation, certain sections of the format are marked “**For pre-approval reviews and Merit re-evaluations,**” Other sections of the report are marked for use “**Only for post-approval evaluation.**” These portions of the report are only used as relevant for the type of report being prepared.
- B. The sections should be concise and provide an adequate representation of the items covered.
- C. Sources of information for the report will be available from the application, documentation reviewed at the site, conditions observed by team members during the onsite tour, and employee and site representative interviews. Statements made in the report should refer specifically to one or more of these sources of information so the reader is aware of what evidence was relied on to support statements made.
- D. Compare each aspect of the site program to each DOE-Star requirement. For post-approval Merit evaluations, provide specific information on progress made toward achieving the Merit goals. Include information not specifically referred to in the interview guidelines or the format but relevant to the subject.
- E. “**Opportunities for Improvement**” should be clearly identified within the text of the report. After the opportunity is discussed, it should be called out in a “text box” within the body of the report, and included in the table at the beginning of the report.
- F. For post-approval re-evaluations, focus on the current functioning of the safety and health program and changes since initial approval or the last evaluation.

III. SAMPLE DOE-VPP ONSITE REVIEW REPORT

FOREWORD

The Department of Energy (DOE) recognizes that true excellence can be encouraged and guided but not standardized. For this reason, on January 26, 1994, the Department initiated the DOE Voluntary Protection Program (VPP) to encourage and recognize excellence in occupational safety and health protection. This program closely parallels the Occupational Safety and Health Administration (OSHA) VPP. Since its creation by OSHA in 1982 and DOE in 1994, VPP has demonstrated that cooperative action among Government, industry, and labor can achieve excellence in worker safety and health. The Office of Health, Safety and Security (HSS) assumed responsibility for DOE-VPP in October 2006. Assessments are now more performance based and are enhancing the viability of the program. Furthermore, HSS is expanding complex-wide contractor participation and coordinating DOE-VPP efforts with other Department functions and initiatives, such as Enforcement, Independent Oversight, and the Integrated Safety Management System (ISMS).

DOE-VPP outlines areas where DOE contractors and subcontractors can surpass compliance with DOE orders and OSHA standards. The program encourages a “stretch for excellence” through systematic approaches, which emphasize creative solutions through cooperative efforts by managers, employees, and DOE.

Requirements for DOE-VPP participation are based on comprehensive management systems with employees actively involved in assessing, preventing, and controlling the potential health and safety hazards at their sites. DOE-VPP is designed to apply to all contractors in the DOE complex and encompasses production facilities, laboratories, and various subcontractors and support organizations.

DOE contractors are not required to apply for participation in DOE-VPP. In keeping with OSHA and DOE-VPP philosophy, participation is strictly voluntary. Additionally, any participant may withdraw from the program at any time. DOE-VPP consists of three programs with names and functions similar to those in OSHA’s VPP: Star, Merit, and Demonstration. The Star program is the core of DOE-VPP. This program is aimed at truly outstanding protectors of employee safety and health. The Merit program is a steppingstone for participants that have good safety and health programs, but need time and DOE guidance to achieve true Star status. The Demonstration program, expected to be used rarely, allows DOE to recognize achievements in unusual situations about which DOE needs to learn more before determining approval requirements for the Merit or Star program.

By approving an applicant for participation in DOE-VPP, DOE recognizes that the applicant exceeds the basic elements of ongoing, systematic protection of employees at the site. The symbols of this recognition provided by DOE are certificates of approval and the privilege to display flags showing the program in which the site is participating. The participant may also choose to use the DOE-VPP logo on letterhead or on award items for employee incentive programs.

This report summarizes the results from the evaluation of [Contractor Name] during the period of [Inspection Dates], and provides the Chief Health, Safety and Security Officer with the necessary information to make the final decision regarding its application for participation in DOE-VPP as a Star site.

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Appendix A

ABBREVIATIONS AND ACRONYMS

EXECUTIVE SUMMARY

General. Summarize the review team's findings in terms of the qualifications required for DOE-VPP, the accuracy of the information provided in the application and any special aspect of this site which should be considered by the Chief Health, Safety & Security Office in making a decision. All statements should be supported by information in the body of the report.

The summary usually includes one or two paragraphs of descriptive information specific to the site covering the following:

1. Management Commitment;
2. Employee Involvement;
3. Worksite Analysis;
4. Hazard Prevention and Control; and
5. Safety and Health Training.

Recommendation

Close with the recommendation of the team to the Chief Health, Safety & Security Office for or against approval into the program applied for, or to an alternative program, if appropriate. When making a recommendation for Merit, please include the number of years or participation recommended. Remember to add at least one year to the number of years agreed upon to accomplish the goals.

Contingency. When approval or re-approval can only be recommended after the applicant has taken steps to meet remaining requirements, include a statement that approval is contingent on accomplishing the items on the attached list within a specific 90-day period, starting at the end of the onsite visit. Write the report as though the site is recommended for approval. Avoid any conditional phrases so the report will not have to be rewritten. When the contingent items are completed, delete the contingency statement and the list from the report before forwarding to the HS-1.

TABLE 1: OPPORTUNITIES FOR IMPROVEMENT

Opportunity for Improvement	Page

I. INTRODUCTION

- A. Include the date of the onsite review or post-approval evaluation. **For post-approval evaluations** note the approval date and the program to which the site was approved as well as the dates of any subsequent evaluations.
- B. Indicate the information on which the report is based; e.g., review of the submitted application and the documentation onsite, types and numbers of personnel interviewed as well as the type of interviews (formal or informal) and the areas toured at the site. **For post-approval reviews**, include office file notes and reports written for earlier onsite visits.
- C. Provide a description of the work site and activities. Usually, this will require one or two paragraphs at most. Include the number of workers.
- D. **For post-approval reviews** describes any significant changes which have occurred in production processes and facilities since the DOE pre approval review or the last evaluation.
- E. Include a statement about the appropriateness of the NAICS code. If there is uncertainty, consult the NAICS Manual.
- F. **For pre-approval** note whether all required assurances have been received.
- G. Indicate any collective bargaining agent involvement and note collective bargaining agent agreement to cooperate in DOE-VPP.
- H. Include a statement about DOE-VPP interaction history. Provide summary information about the general status of any outstanding OSH corrections needed. Where there have been delays in corrections provide information about whether those delays are legitimate and describe the adequacy of interim protections established. Provide any evidence that would indicate an inability to interact with DOE in a cooperative manner.
- I. Describe innovative or outstanding aspects of the safety program, if any. **For post-approval reviews** describe any program changes made that are particularly impressive (highlights and/or success stories that would be appropriate for the Secretary of Energy and/or the Approval Letter.)
- J. **For post-approval evaluations**, provide the following information:
 - 1. Top level manager's assessment of the value of VPP participation;
 - 2. If unionized, union leadership's assessment of the value of VPP participation;
 - 3. A summary, from interviews and interactions with hourly and non-supervisory personnel, of employees' assessment of VPP participation;
 - 4. Any improvements noted in morale, absenteeism, productivity, or quality control during this period; and
 - 5. The onsite review team's overall impression of the progress this workplace has made as a program participant.

II. INJURY INCIDENCE CASE RATE

Injury Incidence Case Rate (Contractor)					
Calendar Year	Hours Worked	Total Recordable Cases (TRC)	TRC Incidence Rate	DART* Cases	DART* Case Rate
e.g. 20XX					
e.g. 20XX					
e.g. 20XX					
Three Years					
Bureau of Labor Statistics (BLS Most Recent) average for NAICS** Code #					
Injury Incidence Case Rate ([Contractor Name] subcontractors)					
Calendar Year	Hours Worked	Total Recordable Cases (TRC)	TRC Incidence Rate	DART* Cases	DART* Case Rate
e.g. 20XX					
e.g. 20XX					
e.g. 20XX					
Three-Year Total					
Bureau of Labor Statistics (BLS Most Recent) average for NAICS** Code #					

* Days Away, Restricted or Transferred

** North American Industry Classification System

TRC Incidence Rate, including subcontractors:

DART Case Rate, including subcontractors:

NOTE: For construction applicants/participants, all data including hours worked and injuries must be combined for all sub-contractors as well.

- A. For post-approval evaluations compare the current rates with the rates calculated for pre-approval and/or the last evaluation. Provide the percentage change in the rates since last evaluation or pre-approval review. Describe the factors which influenced this result and your assessment of the possibility for any potential problems concerning the rates or the three year averages between now and the next evaluation.
- B. Note whether there are any temporary workers at the project under the applicant/participant's control and, if so, whether the log and the calculation of rates includes them. This is required even if they are hired through a service to provide temporary employees, as long as they are provided direction and control by the contractor.
- C. Note whether the review of the log supports the information provided in the application. If not, please explain.
- D. Note whether the OSHA 301's or the Workers' Compensation first reports of injury/illness generally support the data in the log. If not, explain.
- E. Where there is any other injury/illness data kept at the site such as the nurse's or first aid station log, note whether those data support the OSHA log. If not, explain.
- F. If any employees were interviewed concerning injury/illness records, note whether their answers generally support the log. If not, explain.
- G. Note whether the person(s) responsible for keeping the log understand the requirements for recording TRC's and DART cases. If not, please explain.
- H. Note whether the person(s) responsible for keeping the log vouch for the accuracy of the entries. If not, please explain.
- I. Provide the team's judgment as to whether the log overstates, understates or generally reflects safety and health conditions under this contractor's control. Please explain.

III. MANAGEMENT LEADERSHIP

Management leadership is a key element of obtaining and sustaining an effective safety culture. The contractor must demonstrate senior level management commitment to occupational safety and health in general and to meeting the requirements of DOE-VPP. Management systems for comprehensive planning must address health and safety requirements and initiatives. As with any other management system, authority and responsibility for employee health and safety must be integrated with the management system of the organization and must involve employees at all levels of the organization. Elements of that management system must include: (1) clearly communicated policies and goals; (2) clear definition and appropriate assignment of responsibility and authority; (3) adequate resources; (4) accountability for both managers and workers; and (5) finally, managers must be visible, accessible, and credible to employees.

(Headers are provided in the template for organization purposes only, and should be omitted for clarity in the written report. The order in which each area is presented should be modified by the team leader to ensure a clear, concise, logical discussion of the team observations.)

A. Policy and Goals

Provide a description of the evidence seen that established policies and results-oriented goal and objectives for worker safety have been communicated to all employees. **For pre-approval reviews and DOE Merit re-evaluations** describe the evidence seen that the establishment and communication have been adequate for at least one year.

B. Written Program

For pre-approval reviews and Merit re-evaluations: note whether all aspects of the safety and health program are in writing. If some are not, note whether the team is recommending a waiver on the requirements for a formal, written program on the basis that the contractor has a small operation which makes written formality unnecessary. If such a recommendation is made, note the evidence seen by the team that indicates that the objectives of a formal written program are being met by alternative means.

For Star re-evaluations: note any changes to the status of the written program, the results and your assessment of the value or problems resulting from the changes.

C. Responsibility

For pre-approval reviews and Merit re-evaluations where responsibility has been the subject of a Merit goal: provide a description of the manner in which the written program clearly assigns responsibilities for workplace safety and health at every level of the organization.

Describe evidence that top level line managers understand their safety and health responsibilities as set out in Part I. *Program Elements*, Management Leadership.

Note whether or not the assignment of responsibility is adequate and evidence seen by the team that all employees know and understand their responsibilities, that none overlap and that no areas have “fallen between the cracks.”

For pre-approval reviews and Merit re-evaluations: note whether adequate assignment of responsibility has been in place for at least 1 year and describe the evidence that this judgment is based on.

D. Authority and Resources

Provide evidence that appropriate authority and resources have been provided to enable the fulfillment of assigned responsibility. For resources, describe in summary the adequacy of budget, personnel (including size of staff, training, and appropriate promotions), space, equipment, and capital expenditures for occupational safety and health.

For pre-approval reviews and Merit re-evaluations: note whether adequate authority and resources have been in place for at least 1 year and describe the evidence this judgment is based upon.

E. Line Accountability

Describe the evidence you saw of how the evaluation of general industry line managers/ supervisors/ employees holds them accountable for safety and health. If evaluation is not the method of accountability, please describe the method used and evidence that it is effective. If not effective, explain why and what evidence you are basing your determination on. In construction, describe the evidence you saw that contractors and subcontractors are held accountable.

For pre-approval reviews and Merit re-evaluations: describe the evidence seen that an adequate system has been in place for at least one year.

F. Management Visibility

Describe evidence seen that top management is involved in worker safety and health concerns. Provide a summary of any relevant information from employee interviews about the visibility of management involvement in safety and health.

For pre-approval reviews and Merit re-evaluations: describe the evidence found that consistent top management involvement has been occurring for at least one year.

G. Subcontractor Programs

For pre-approval reviews: describe the documented programs for orienting and holding accountable all persons operating or entering in contractor-controlled spaces such as sub-contractor employees, vendors, consultants, students, and visiting scientists.

Describe the evidence seen demonstrating:

- The adequacy of the system used to take into account the safety and health program and record of the potential subcontractor during or before the bidding and selection process;
- The adequacy of contract provisions specifying authority to provide for oversight, coordination and enforcement, including the means to provide prompt correction and control of hazards which sub-contractor personnel have failed to provide and the authority to dismiss from the site any sub-contractor or subcontractor personnel for willful and repeated non-compliance; and
- **For pre-approval reviews and Merit re-evaluations** describe the evidence seen that adequate programs of selection and oversight have been in place for at least one year.

Provide TRC rate information for the combined activities of all sub-contractors under the contractor's control at this DOE site. Compare the average for the last three complete calendar years to the latest

industry average published by BLS for the industry to which the most predominant sub-contractor activity belongs.

H. Annual Self-Evaluation

Describe the evidence found that the annual evaluation covers all aspects of the safety and health program which are required for DOE-VPP Star approval. Describe the written guidance for annual self-evaluation of the whole safety and health program.

For pre-approval reviews and Merit re-evaluations: provide information about the form of the evaluation, taking particular care to note whether or not it is a narrative report with written recommendations.

Describe evidence seen by the team that actions taken to follow up recommendations have been documented and whether or not that action was adequate and timely.

Critique the effectiveness of the annual self evaluation in terms of real analysis of possible program problems or areas needing improvement. Provide particular attention to the depth of the analysis in order to discourage simple descriptions of activities.

For pre-approval reviews and Merit re-evaluations: describe evidence seen by the team that an adequate self evaluation system has been in place for at least one year.

IV. EMPLOYEE INVOLVEMENT

Employees at all levels must continue to be involved in the structure and operation of the safety and health program and in decisions that affect employee health and safety. Employee involvement is a major pillar of a strong safety culture. Employee participation is in addition to the individual right to notify appropriate managers of hazardous conditions and practices. Managers and employees must work together to establish an environment of trust where employees understand that their participation adds value, is crucial, and welcome. Managers must be proactive in recognizing, encouraging, facilitating, and rewarding workers for their participation and contributions. Both employees and managers must communicate effectively and collaboratively participate in open forums to discuss continuing improvements, recognize and resolve issues, and learn from their experiences.

Describe the “atmosphere” found during employee interviews. In particular, note management's degree of assistance in providing access for random employee interviews. Note also whether or not most employees interviewed spoke with pride and a sense of ownership about the safety and health program. Provide examples of this evidence without providing identifying information.

Where pride and ownership were not apparent, provide information about the employees' comfort level in speaking with interviewers (once again with no identifying information) and/or about any factors besides safety and health which might affect employee comfort such as unionization efforts for non-union contractors, union contract disputes for unionized contractors, or business difficulties.

Provide information about the extent of employee knowledge about the safety and health program and their roles and responsibilities. Note whether their impressions generally matched those of the team.

Describe information about the extent of employee knowledge about the employee participation program(s). Note whether their impressions of the effectiveness of employee participation generally matched those of the review team.

Describe the method(s) used to ensure meaningful employee participation, the kind of impact on decision making achieved by employee participation, the evidence that the team has seen demonstrating that impact.

For pre-approval reviews and Merit re-evaluations: describe the evidence seen by the team that the method has been in place at least one year.

For construction contractors: describe how the contractor's joint labor-management committee meets the stipulated requirements.

V. WORKSITE ANALYSIS

Management of health and safety programs must begin with a thorough understanding of all hazards that might be encountered during the course of work, and the ability to recognize and correct new hazards. There must be a systematic approach to identifying and analyzing all hazards encountered during the course of work, and the results of the analysis must be used in subsequent work planning efforts. Effective safety programs also integrate feedback from workers regarding additional hazards that are encountered, and include a system to ensure that new or newly recognized hazards are properly addressed. Successful worksite analysis also involves implementing preventive and/or mitigating measures during work planning to anticipate and minimize the impact of such hazards.

A. Change analysis

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the system for the analysis of planned, new, newly acquired facilities, equipment, materials and/or processes to identify hazards and evaluate risks before use begins.
2. Describe the evidence seen by the team that the system is used effectively.
3. **For pre-approval reviews and Merit re-evaluations:** describe evidence seen or heard by the team that the system has been in place for at least one year.

B. Comprehensive surveys

1. For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program: describe the system for comprehensive surveys for both health and safety and whether it involves the use of appropriate safety, industrial hygiene and occupational medicine professionals.
2. Describe the evidence that the team has seen that the system is used effectively.
3. **For pre-approval reviews and Merit re-evaluations:** describe evidence seen and/or heard that the system has been in place for at least one year.

C. Routine inspections

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the system for routine, general hazard control verifications.
2. **Note** whether or not construction hazard assessments are conducted at least weekly and all others are conducted at least monthly. Note also the frequency with which the whole area of contractor operations is covered. Provide the team's judgment as to whether the frequency is adequate. If the review team found uncontrolled hazards or inadequate or ineffective hazard controls that should have been found during site inspections, please note.
3. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** indicate the clarity and quality of written instructions, guidance or procedures for routine, general inspections.

4. **Describe** the quality of the written inspection reports and the system of tracking missing or ineffective hazard controls to completion.
5. **For pre-approval reviews and Merit re-evaluations:** describe the evidence seen by the team that an adequate general hazard assessment system with written reports and correction tracking has been in place for at least one year.

D. Hazard analyses

1. Job Hazard Analysis (JHA) or Job Safety Analysis (JSA):

- a. For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program describe the system(s) used for conducting hazard analyses, including job hazard analysis or job safety analysis. Provide information on how the analyses are used in the preparation and revision of job procedures and training.
 - b. Describe evidence that the team has seen that the analysis and use of the analysis is effective.
 - c. For pre-approval reviews and Merit re-evaluations: describe evidence that the system for analyzing job safety has been in place for at least one year.
2. Process Safety Analysis where complex processes and highly hazardous materials are used:
- a. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the system used for process safety analysis.
 - b. Describe the evidence which the team has seen that the system is used effectively.
 - c. **For pre-approval reviews and Merit re-evaluations:** describe evidence seen and/or heard that the system has been in place for at least one year.
3. Phase Hazard Analysis where construction or other phased operations are part of the contractor's activities:
- a. For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program: describe the system of phase hazard analysis used.
 - b. Describe the evidence the team saw that the system is effective.
 - c. For pre-approval reviews and Merit re-evaluations: describe the evidence the team saw that the system has been in place for at least one year.

E. Employee reports of hazards

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the method(s) used by employees to bring their safety and health concerns to management's attention. Describe

protection for employees who report concerns. Describe whether or not there is a formal, written system which can track hazard reports.

2. **Provide** information about encouragement of employees to report their concerns. Provide information from employee interviews about overall impressions of the reliability, adequacy and timeliness of response to their reports of concern. Provide information from both employee interviews and document reviews, about evidence that correction of hazards discovered through employee reports are tracked to completion.
3. **For pre-approval reviews and Merit re-evaluations:** describe the evidence seen by team members that an adequate formal, written system with protection for employees and tracking of hazard correction has been in place for at least one year.

F. Accident/incident investigations

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the accident/incident investigation system including the circumstances that trigger investigation by someone other than the supervisor of the area where the accident/incident occurred and the definition used for “incident.” Describe the written procedures for investigation and their adequacy.
2. **Provide** evidence from document reviews and employee interviews that the investigations are aimed at a comprehensive analysis of all possible root causes and not at fixing blame. Provide evidence from employee interviews and document review that each investigation results in a written narrative with root causes and analysis and then is provided to all employees.
3. **For pre-approval reviews and Merit re-evaluations:** describe the evidence seen by the team that an adequate accident investigation system meeting all Star requirements has been in place for at least one year.

G. Trend analysis

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the system used to analyze accumulated data from injury and illness experience and hazard identification to determine the existence of patterns that were not evident as each accident/incident, illness or hazard was investigated or identified.
2. **Describe** the evidence seen by the team that trend analysis is being used effectively to identify patterns of problems and make adjustments to systems.
3. **For pre-approval reviews and Merit re-evaluations:** describe the evidence seen by the team that a complete and effective trend analysis system has been in place for at least one year.

VI. HAZARD PREVENTION AND CONTROLS

Once hazards have been identified and analyzed, they must be eliminated (by substitution or changing work methods) or addressed by the implementation of effective controls (engineered controls, administrative controls, or Personal Protective Equipment (PPE)). Equipment maintenance processes to ensure compliance with requirements and emergency preparedness must also be implemented where necessary. Safety rules and work procedures must be developed, communicated, and understood by supervisors and employees. These rules/procedures must also be followed by everyone in the workplace to prevent mishaps or control their frequency/severity.

A. Access to certified professionals

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the access of the contractor to Certified Industrial Hygienists, Certified Safety Professionals or Certified Safety Engineers, and Certified Occupational Physicians or Certified Occupational Health Nurses; the arrangements for their use at the contractor operations at the site; what they are used for and how often.
2. **Provide** the judgment of the team as to the evidence of adequacy of access to certified professionals.

B. Methods of hazard control

1. Describe the evidence seen by the team that the contractor has attempted to prevent or control hazards by process or material substitution where feasible; by engineering controls where substitution is not feasible; by administrative controls where complete engineering control remedies are not feasible, including adequate and appropriate work rules and operating procedures which are updated as needed.
2. Describe the adequacy of the hazard communication program.
3. Describe evidence seen and heard by the team that supervisors understand the hazards associated with the job performed by their employees and their role in ensuring that those employees understand and follow rules and practices designed to protect them.
4. Describe evidence seen and heard by the team that employees understand the hazards associated with their jobs and the need to follow rules set to protect them.
5. Provide the judgment of the team as to the effectiveness of the methods of hazard control.

C. Work Rules, Procedures and PPE

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the safe work rules and safe work procedures. Describe the personal protective equipment program.
2. Where PPE is required, describe evidence seen and heard by the team that employees understand why it is necessary, that they understand its limitations, how to maintain it, and how to use it properly. Where respirators are used, provide information about the quality of the respirator program.

3. Describe evidence from interviews, site walk-throughs and elsewhere that employees are aware of the rules, work procedures and any PPE requirements.
4. **For pre-approval reviews and Merit re-evaluations** describe evidence seen by the team that the following have been in place for at least one year:
 - a. Effective method(s) for determining the best hazard control system;
 - b. Adequate safe work rules and safe work procedures; and
 - c. Adequate PPE program(s).

D. Positive reinforcement

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the method(s) used for positive reinforcement of safety rules and safe work procedures.
2. Provide information about the evidence seen by the team that positive reinforcement is used effectively.
3. **For pre-approval reviews and Merit re-evaluations** describe the evidence seen by the team that the implemented system of positive reinforcement has been in place for at least one year.

E. Disciplinary System

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the written disciplinary system and the method for ensuring that all employees know and understand it.
2. Provide general evidence both from interviews with employees and documentation that the system is both understood and applied as written, consistently and fairly.
3. **For pre-approval reviews and Merit re-evaluations:** describe the evidence seen by the team that a disciplinary system meeting Star requirements has been in place for at least one year.

F. Preventive/Predictive Maintenance

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the system for ongoing monitoring and preventive maintenance of workplace equipment, including methods for determining frequency of routine maintenance and replacement.
2. Describe information from interviews and the team walk through concerning the adequacy of the preventive maintenance program and its impact on worker safety and health.
3. **For pre-approval reviews and Merit re-evaluations:** describe the evidence that this system has been in place for at least one year.

G. Tracking systems

1. Provide a summary of information about the overall adequacy of tracking systems for correction/control of hazards discovered through all hazard analysis systems.
2. Note whether the team's review of injury and illness, industrial hygiene monitoring, and medical records kept indicate that required records are being kept appropriately. If the contractor has gone beyond standard requirements for records where safety, industrial hygiene and/or health professionals felt it desirable, please describe. Give a general summary of the quality of injury/illness, industrial hygiene and medical recordkeeping at this site, being sure to include strengths and weaknesses, objective facts, and subjective perceptions.
3. **For pre-approval reviews and Merit re-evaluations:** describe evidence seen by the team that effective tracking system(s) have been in place for at least one year.

H. Emergency procedures

1. Provide information describing the adequacy of emergency procedures for the contractor's operations at the site, including requirements for PPE, if any, first aid, medical response, emergency egress and emergency drills including at least annual evacuation drills.

Provide evidence seen or heard by the team that evacuation drills practiced at least annually. Provide evidence seen or heard by the team that all employees understand their role in all likely types of emergencies and have had a chance to practice them.

Include a summary discussion of any relevant findings and corrective actions from other emergency management assessments performed by DOE.

2. **For pre-approval reviews and Merit re-evaluations** describe evidence seen or heard by the team that emergency procedures that meet Star requirements have been in place for at least one year.

I. Medical Programs

1. **For pre-approval reviews, and any post-approval re-evaluations where there is a related goal or there has been a change to this part of the program:** describe the medical program including the availability of physician and other occupational health professionals services, first aid and CPR; medical hazard analysis; early recognition and treatment of illnesses and injuries and limitation of severity of harm; and special programs such as audiograms and other medical tests. Determine if the content of worker health evaluations, including new employment or job transfers were determined under the direction of a licensed physician and include the establishment of a medical baseline as well as fitness for duty determinations.
2. Provide the judgment of the team as to the effectiveness and adequacy of the medical program available for contractor operations at the site in terms of the size, nature of hazards and location of the site.
3. **For pre-approval reviews and Merit re-evaluations:** describe evidence seen and heard by the team that these programs have been in place at least one year.

VII. SAFETY AND HEALTH TRAINING

Managers, supervisors, and employees must know and understand the policies, rules, and procedures established to prevent exposure to hazards. Training for health and safety must ensure that responsibilities are understood, personnel recognize hazards they may encounter, and they are capable of acting in accordance with management expectations and approved procedures.

Provide a brief summary describing safety and health training programs used at the site.

Describe evidence that an adequate program is in place to identify training requirements for each employee and that this training is accomplished prior to the employee's exposure to workplace hazards.

Describe the methods to ensure that employees are retrained as required.

Describe the methods to ensure that new employees, visitors, vendors, and temporary workers receive safety orientation adequate for the hazards of the site.

Discuss the safety and health training program in place for management.

Discuss the adequacy of the program in place to track training completion.

Discuss how training programs are evaluated and updated, and how employees are involved in this process.

Describe evidence seen and heard by the team that sub-contractor management and employees are adequately trained in their responsibilities under the safety and health program.

For pre-approval reviews and Merit re-evaluations: describe evidence seen by the team that a safety and health training program meeting Star requirements has been in place for at least one year.

VIII. CONCLUSIONS

Discuss the impact of any pattern of problems noted in the OSHA 300 log and whether the site has taken adequate steps to reduce those injuries or illnesses.

Characterize the housekeeping and general conditions noted during the tour of the site in terms of the norms for the predominant activity of contractor operations at the site. Note agreements for improvements.

Provide a succinct assessment of the overall adequacy of the safety and health program to provide a safe and healthful workplace at this site.

Close with the recommendation of the team to HS 1 for or against approval into the program applied for, or for approval into an alternative program, if appropriate. When making a recommendation for Merit, please include the number of years recommended as well. Remember to add at least one year to the number recommended to accomplish the agreed-upon goals.

Contingency: When approval or re-approval can only be recommended after the applicant has taken steps to meet remaining requirements, include a statement that approval is contingent on accomplishing the items on the attached list within a specific 90 day period, starting at the end of the onsite visit. Avoid any conditional phrases so that the report will not have to be rewritten. Write the report as though the site is recommended for approval. When the contingent items are completed, delete the contingency statement and the list from the report before forwarding to HS 1.

APPENDIX A**ONSITE VPP AUDIT TEAM ROSTER****Management**

[NAME]

Chief Health, Safety and Security Officer

Office of Health, Safety and Security

[NAME]

Deputy Chief for Operations

Office of Health, Safety and Security

[NAME]

Director

Office of Health and Safety

Office of Health, Safety and Security

[NAME]

Director

Office of Worker Safety and Health Assistance

Office of Health and Safety

Review Team

Name	Affiliation/Phone	Project/Review Element