

**ADVANCED TECHNOLOGIES AND
LABORATORIES INTERNATIONAL, INC.**

INTEGRATED SAFETY MANAGEMENT SYSTEM

***SAFETY CONSCIOUS WORK ENVIRONMENT
SELF-ASSESSMENT REPORT***

WA-ES-12-002

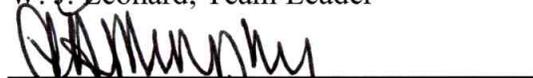


December 2012

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EXECUTIVE SUMMARY

Advanced Technologies and Laboratories International, Inc. (ATL) performed a Safety Conscious Work Environment (SCWE) Self-Assessment as part of their annual Integrated Safety Management System (ISMS) declaration report for fiscal year (FY) 2012, as directed by the Department of Energy (DOE) Office of River Protection (ORP).

The SCWE Self-Assessment was conducted from November 26 through December 12, 2012. This assessment was conducted in parallel with the VPP Self-Assessment which was in progress at the time of receipt of the letter from DOE-ORP directing the performance of a SCWE Self-Assessment. As a result, ATL communicated to DOE-ORP our intention to integrate the SCWE focus areas and some lines of inquiry into the VPP Self-Assessment in order to reduce redundancy and improve efficiency in assessing both the VPP and the SCWE. The results from the VPP Self-Assessment relating to SCWE along with the results from *The 2012 Hanford Organizational Climate and SCWE Survey* were used to complete the ATL SCWE Self-Assessment.

Through the use of LOIs and survey data the assessment team was able to assess the four Focus Areas and related attributes of a SCWE. The assessment team found all four Focus Areas and their associated attributes to be “implemented and effective” within ATL. Based on the results of the information gathered for this self-assessment, the interviews, and review of associated documentation, the ATL Safety Conscious Work Environment can be described as “effectively implemented.” Noteworthy practices were identified, as well as potential opportunities for improvement.

While each of these Focus Areas and attributes were rated as "implemented and effective," ATL recognizes that there were identified areas for improvement. Without continuous improvement in the Safety Culture and a SCWE, trust by the workforce can be lost, resulting in a significant impact on their willingness and freedom to raise issues without fear of retribution.

The data summarized in this report is especially enlightening given the recent stresses and detractors in the work environment (HAMTC Labor Agreement and Negotiations and unknown budget constraints). In spite of these detractors, the workforce perceptions continue to show SCWE improvement.

In July 2012, DOE conducted a Hanford Site Organizational Climate & SCWE Survey (DOE SCWE Survey). Seventy-seven employees participated in the survey which virtually amounts to a 100% participation rate for ATL. The mean scores are based on a five-point scale for which “1” is the lowest possible score (strongly disagree) and “5” is the highest possible score (strongly agree).

ATL’s ratings for the 4 Focus Areas were as follows:

Leadership	4.07
Employee Engagement	4.11
Organizational Learning	4.06
Safety Conscious Work Environment	4.04

The focus areas mean scores for ATL are in the range of 4.04 to 4.11. Ratings above 4.0 indicate organization-wide agreement with the presence of a positive climate within the workplace. Focus area and factor ratings were not significantly higher for ATL than for the overall ORP Site, while one organizational outcome focus area, *Work Environment Assessment*, was rated significantly lower for ATL (3.04 compared to 3.46 for ORP). It's important to note that this factor has only one associated question with which to base the *Work Environment Assessment* rating, "The work environment in my company has improved over the past year." The following factors represent the 5 lowest scores for ATL: *Questioning Attitude* (3.83); *Internal Avenues of Redress* (3.79); *Use of Operational Experience* (3.79); *Alternate Problem Identification Processes* (3.71), and; *Job Characteristics* (3.69).

The following were the five highest rated factors for ATL, with ratings exceeding 4.0: *Personal Commitment to Everyone's Safety* (4.56); *Detection and Prevention of Retaliation* (4.43); *Participation in Work Planning and Improvement* (4.32); *Credibility, Trust, and Reporting Errors and Problems* (4.28), and; *Performance Monitoring Through Multiple Means* (4.26). These results are encouraging given that a Safety Conscious Work Environment (SCWE) is a subset of Safety Culture related to a work environment in which employees feel free to raise safety concerns to management (and/or a regulator) without fear of retaliation.

Assessment results from individual interviews and document reviews validated the survey results, or, in most cases, showed even stronger evidence of an effectively implemented SCWE.

The interviews and DOE SCWE Survey results indicated that ***Focus Area 1 – Leadership*** was effectively implemented at ATL. ***Demonstrated safety leadership*** received a score of 4.14 indicating that management demonstrates their commitment to health and safety; ***Management engagement and time in the field*** received a score of 4.03 which is encouraging given ATL's relatively flat organization and few layers of management; ***Open communication and fostering an environment free from retribution*** received a score of 4.06 and demonstrates that employees feel free to communicate their issues and concerns without fear of retaliation, and; ***Clear expectations and accountability*** received a score of 4.00. See the "Assessment Results" section below for additional detail regarding the Focus Area 1 attributes.

Focus Area 2 – Employee Engagement was considered to be effectively implemented with assessment results indicating that ATL employees routinely demonstrate their personal commitment to everyone's safety. ATL employees have a long-standing history of displaying teamwork and mutual respect. They feel comfortable discussing and reporting both operational and safety concerns. A related VPP survey question from FY 2012 stated "Communications on safety and health issues/topics/subjects in my working group is effective." 93% of ATL employees indicated "Agree" or "Strongly Agree" with this statement. The DOE SCWE Survey results for this attribute received a score of 3.98. This year's VPP Self-Assessment interviews asked the question "Do you feel that there is a mutual respect amongst your coworkers and management?" Most all responses were favorable indicating that employees are respectful of and feel respected by their co-workers. See the "Assessment Results" section below for additional detail regarding the Focus Area 2 attributes.

The assessment results for ***Focus Area 3 - Organizational Learning*** indicated that this focus area was effectively implemented. The attribute ***Credibility, trust and reporting errors and problems*** received the highest score in this focus area at 4.28. ATL employees have demonstrated a culture of trust and are constantly encouraged to report issues and concerns. ATL’s Employee Recognition Program provides incentives for reporting both safety and quality issues. ***Effective resolution of reported problems*** received a score of 4.15 from ATL employees during the recent DOE SCWE Survey. ATL’s Assessment Program, in concert with its Corrective Action Management system, CAMPATS, and a concerned, engaged, and committed workforce, all contribute to a robust system that assures issues are sought out and corrected in a timely manner. The attribute ***Performance monitoring through multiple means*** received a score of 4.26. ATL’s commitment to quality is apparent in routine monitoring of QA and Safety metrics. Performance indicators associated with first aid case rates, recordable case rates, and lost workday case rates are all routinely monitored to identify any potential adverse trends requiring corrective action. ***Questioning attitude*** received the lowest score of the attributes measured within focus area 3, with a score of 3.83. Most ATL employees interviewed indicated that an environment exists where people can challenge the traditional ways of doing things. See the “Assessment Results” section below for additional detail regarding the Focus Area 3 attributes.

In the area of SCWE performance metrics, ***Focus Area 4 – SCWE***, the attribute ***Performance Metric insights into SCWE*** was determined to be effectively implemented. ATL has Performance and Contractor Assurance Systems which contain a variety of performance indicators and metrics to continuously monitor the work environment. Metrics are maintained to provide trending for conditions adverse to quality and safety, including environmental performance. These metrics are routinely evaluated by management via the QA Bi-Monthly Report, Quarterly Performance Analysis Report to ORP, and monthly for a variety of other metrics. See the “Assessment Results” section below for additional detail regarding the Focus Area 4 attributes.

During the course of this self-assessment, the following Noteworthy Practices and Opportunities for Improvement were identified and are provided below. Focus Areas are identified in “()” after each Noteworthy Practice and Opportunity for Improvement (e.g., (F1) = Focus Area 1).

Noteworthy practices include:

- Daily turnover meetings between ATL and WRPS are held to review the Plan-of-the-Day and identify any potential laboratory operational impacts requiring attention. (F1)
- Monday morning tailgates are used to provide a safety focus and demonstrate management’s involvement/commitment to safety. (F1)
- Daily turnover meetings between ATL management and their employees are used to communicate any emerging safety issues/concerns, share lessons learned, communicate operational status of the facility, and make daily job assignments. (F2)
- Bi-Weekly Corrective Action Management System meetings with ATL senior management are used to review emerging issues, validate significance screenings, and review/comment on developed corrective action plans. (F3)
- A comprehensive Safety Culture/SCWE Program exists, is implemented throughout the ISMS Programs, and is recognized by ATL employees as effectively implemented. (F4)

Opportunities for Improvement include:

- Improve the quality and effectiveness of employee training. (F1) (CAMPATS ATL-2012-0025)
- Review the lowest scores from the DOE SCWE Survey and consider actions to improve performance. (F2, F3, F4) (CAMPATS ATL-2012-0140)

INTRODUCTION

Advanced Technologies and Laboratories International, Inc. (ATL) performed a Safety Conscious Work Environment (SCWE) Self-Assessment as part of their annual Integrated Safety Management System (ISMS) declaration report for fiscal year (FY) 2012 as required in the Department of Energy (DOE) Office of River Protection (ORP) November 7, 2012 letter 12-SHD-0107, *Fiscal Year 2012 Annual Integrated Safety Management System (ISMS) and Quality Assurance (QA) Effectiveness Review Declaration*. ATL followed the guidance provided in the DOE ORP October 22, 2012 letter 12-SHD-0110, *Direction to Perform a Safety Conscious Work Environment (SCWE) Self-Assessment*. The ATL SCWE Self-Assessment (Worker Assessment) was performed in accordance with ATL-312, Section 9.01, Revision 4, *Performance of Operational Awareness Assessments, Method Assessments, Worker Assessments and Surveillances* (7/30/2012).

The attributes of Safety Culture excellence *italicized* below most clearly support a SCWE at DOE facilities and are the focus for this SCWE Self-Assessment:

Leadership Focus Area 1

- a. *Demonstrated safety leadership*
- b. Risk-informed, conservative decision-making
- c. *Management engagement and time in the field*
- d. Staff recruitment, selection, training, and development
- e. *Open communication and fostering an environment free from retribution*
- f. *Clear expectations and accountability*

Employee Engagement Focus Area 2

- a. Personal commitment to everyone's safety
- b. *Teamwork and mutual respect*
- c. Participation in work planning and improvement
- d. Mindful of hazards and controls

Organizational Learning Focus Area 3

- a. *Credibility, trust and reporting errors and problems*
- b. *Effective resolution of reported problems*
- c. *Performance monitoring through multiple means*
- d. Use of operational experience
- e. *Questioning attitude*

Supplemental Information SCWE Focus Area 4

- a. *Performance Metric insights into SCWE*

ISMS SCWE Self-Assessment Preparation

The ATL SCWE Self-Assessment was conducted in conjunction with the Annual VPP Self-Assessment from November 26 through December 12, 2012. In accordance with the DOE SCWE Self-Assessment Guide, ATL developed the *ATL ISMS Safety Conscious Work Environment Self-Assessment Plan (WA-ES-12-002)*, included as Attachment 1 of this report. The following preparation activities were conducted:

1. The ATL ISMS SCWE Self-Assessment Team Leader identified the assessment team.
2. The Team Leader confirmed that each of the assessment Team Members had been trained in accordance with the ATL-312, Section 9.01, Revision 4, *Performance of Operational Awareness Assessments, Method Assessments, Worker Assessments and Surveillances*.
3. A schedule was developed for completing the VPP and SCWE Self-Assessment activities.
4. Documents were also identified and obtained for review.
5. On October 18, 2012 an All Employee Message was sent out to kick-off the Annual VPP Self-Assessment.
6. The ATL ISMS SCWE Self-Assessment Plan was developed. The Plan provides for the evaluation of each of the Focus Areas and Attribute Lines of Inquiry (LOI), as required by the DOE HQ Guide.

Methods Used for Performing the Self-Assessment

This assessment was conducted in parallel with the VPP Self-Assessment which was in progress at the time of receipt of the letter from DOE-ORP directing the performance of a SCWE Self-Assessment. As a result, ATL communicated to DOE-ORP our intention to integrate the SCWE focus areas and some lines of inquiry into the VPP Self-Assessment in order to reduce redundancy and improve efficiency in assessing both the VPP and the SCWE. The results from the VPP Self-Assessment relating to SCWE along with the results from *The 2012 Hanford Organizational Climate and SCWE Survey* were used to complete the ATL SCWE Self-Assessment.

Some of the lines of inquiry (LOIs) were developed from the guidance provided in the DOE ORP October 22, 2012 letter 12-SHD-0110, *Direction to Perform a Safety Conscious Work Environment (SCWE) Self-Assessment, Attachment 1: SCWE Self-Assessment Lines of Inquiry* and other LOIs were used from the VPP Self-Assessment that correlated with the focus areas identified and were used by the team to perform this assessment. Additionally, *The DOE Hanford Site Organizational Climate & Safety Conscious Work Environment (SCWE) Survey* results were used in their entirety which ensured that data was available to assess all of the focus areas and related attributes.

Face-to-face interviews:

Semi-structured interviews were conducted in which the main questions to be discussed were defined based on the LOIs.

Review of key Safety Culture related processes:

The Assessment team reviewed the following types of documentation. Specific documentation reviewed included, but was not limited to:

- Employee Concerns Program and Differing Professional Opinions policies and procedures
- HR related policies and procedures relative to harassment and retaliation
- ISMS Description
- Procedures and policies related to stop work authority
- HGET VPP Safety Culture Survey
- DOE Hanford Site Organizational Climate & Safety Conscious Work Environment (SCWE) Survey
- Management Review Assessment Report
- Performance measures/indicators

The DOE HQ guidance did not require a pass/fail determination with regard to each attribute within a focus area; however, an informal evaluation of the level of implementation and effectiveness of the expectations described in each attribute was a means to guide the team when drawing conclusions and making recommendations for the four focus areas. The evaluation summaries are based on the stages that an organization goes through in developing a mature Safety Culture, as described in Attachment 11 of the ISMS Guide (derived from the IAEA's Safety Culture Maturity Model). They represent a way to benchmark the implementation and effectiveness of a Safety Culture.

<i>DOE Guidance - Chose the summary evaluation that best describes the level of Implementation and Effectiveness for each attribute.</i>	
Implemented and Effective (I&E)	Evidence demonstrates that the expectations described in the attribute are routinely demonstrated in a repeatable, reliable manner. Processes are aligned with outcomes and performance is monitored to ensure that desired results are achieved.
Partially Implemented or Partially Effective (PI/E)	Evidence demonstrates that the expectations described in the attribute are not routinely demonstrated in a repeatable, reliable manner. Processes are partially in alignment with outcomes and performance is not monitored to ensure desired results are achieved.
Not Implemented or Not Effective (NI/E)	Insufficient evidence -or- evidence demonstrates that the expectations described in the attribute are not being met. Processes are substantially misaligned with outcomes and performance is not repeatable or not being achieved.

ASSESSMENT RESULTS

The following provides the results of the Advanced Technologies and Laboratories International, Inc. (ATL) Safety Conscious Work Environment (SCWE) Self-Assessment as part of the annual Integrated Safety Management System (ISMS) Declaration Report for fiscal year (FY) 2012.

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Through the use of LOIs and survey data the assessment team was able to assess the four Focus Areas and related attributes of a SCWE. The assessment team found all four Focus Areas and their associated attributes to be “implemented and effective” within ATL. Based on the results of the information gathered for this self-assessment, the interviews, and review of associated documentation, the ATL Safety Conscious Work Environment can be described as “effectively implemented.” Noteworthy practices were identified, as well as potential opportunities for improvement.

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The data summarized in this report is especially enlightening given the recent stresses and detractors in the work environment (HAMTC Labor Agreement and Negotiations, unknown budget constraints, and potential for layoffs). In spite of these detractors, the workforce perceptions continue to show SCWE improvement.

In July 2012, DOE conducted *The Hanford Site Organizational Climate & SCWE Survey* (DOE SCWE Survey). Seventy-seven employees participated in the survey which virtually amounts to a 100% participation rate for ATL. The mean scores are based on a five-point scale for which “1” is the lowest possible score (strongly disagree) and “5” is the highest possible score (strongly agree).

ATL’s ratings for the 4 Focus Areas were as follows:

Leadership	4.07
Employee Engagement	4.11
Organizational Learning	4.06
Safety Conscious Work Environment	4.04

The focus areas mean scores for ATL are in the range of 4.04 to 4.11. Ratings above 4.0 indicate organization-wide agreement with the presence of a positive climate within the workplace. Focus area and factor ratings were not significantly higher for ATL than for the overall ORP Site, while one organizational outcome focus area, *Work Environment Assessment*, was rated significantly lower for ATL (3.04 compared to 3.46 for ORP). It’s important to note that this factor has only one associated question with which to base the *Work Environment Assessment* rating, “The work environment in my company has improved over the past year.” All organizational outcome focus areas, with the exception of Organizational Trust, scored lower than 4.0 within ATL. The following factors represent the 5 lowest scores for ATL: *Questioning Attitude* (3.83); *Internal Avenues of Redress* (3.79); *Use of Operational Experience* (3.79); *Alternate Problem Identification Processes* (3.71), and; *Job Characteristics* (3.69).

The following were the five highest rated factors for ATL, with ratings exceeding 4.0: *Personal Commitment to Everyone’s Safety* (4.56); *Detection and Prevention of Retaliation* (4.43); *Participation in Work Planning and Improvement* (4.32); *Credibility, Trust, and Reporting Errors and Problems* (4.28), and; *Performance Monitoring Through Multiple Means* (4.26). These results are encouraging given that a Safety Conscious Work Environment (SCWE) is a subset of Safety Culture related to a work environment in which employees feel free to raise safety concerns to management (and/or a regulator) without fear of retaliation.

Assessment results from individual interviews and document reviews validated the survey results, or, in most cases, showed even stronger evidence of an effectively implemented SCWE. Individual interviews (49) were conducted with:

- 18 Bargaining Unit Employees
- 20 Administrative and Professional Staff
- 11 Managers/Supervisors

A summary of the DOE SCWE Survey results for the Focus Areas and related Attributes is provided below and further discussed throughout this section of the assessment report:

	<u>DOE SCWE Survey</u>
• Leadership	4.07
➤ Demonstrated Safety Leadership	4.14
➤ Management Engagement/Time in the Field	4.03
➤ Open communication and fostering an environment free from retribution	4.06
➤ Clear expectations and accountability	4.00
• Employee Engagement	4.11
➤ Teamwork and Mutual Respect	3.98
• Organizational Learning	4.06
➤ Credibility, trust and reporting errors and problems	4.28
➤ Effective resolution of reported problems	4.15

- Performance monitoring through multiple means 4.26
- Questioning Attitude 3.83
- SCWE 4.04

Leadership Focus Area 1:

The interviews, DOE SCWE Survey results, and HGET VPP Safety Culture Survey data indicated that **Focus Area 1 – Leadership** was effectively implemented at ATL.

Demonstrated safety leadership

Demonstrated safety leadership received a score of 4.14 indicating that management demonstrates their commitment to health and safety. Demonstrated safety leadership is continuously observed throughout ATL. The first line managers set the example for others in demonstrating consistent safe work practices. They have a clear understanding of their work activities and their performance objectives. Their commitment to safety is evident in the time spent in the lab areas, mentoring and reinforcing safe analytical operations. Managers ensure that their employees have the required technical and safety training they need to work safely and ensure that appropriate hazard controls (engineered, administrative, and PPE) are in place/provided to protect the worker. One issue identified this past year was that ATL’s training program required updating as a result of a discrepancy found when a Chemist was assigned to perform work for which they did not possess a completed qualification card. Extensive investigation and root cause analysis was performed which identified several opportunities for improving ATL’s Training Program. These actions are being tracked in ATL’s corrective action management system (CAMPATS). ATL’s Environment, Safety, and Health Program Lead plays a key safety leadership role in identifying hazards and controls as part of their involvement with the analytical work teams in the hazards analysis process. One key statement from the Safety Culture survey was “Your manager demonstrates a commitment that all accidents can be prevented.” This attribute received one of the highest scores at 4.152 indicating strong agreement.

Management engagement and time in field

Management engagement and time in the field received a score of 4.03 which is encouraging given ATL’s relatively flat organization and few layers of management. Management engagement and time in field was viewed as a very strong attribute, especially as applied to our first line managers. The Safety Culture survey statement was “Senior management (above your manager) visits your workplace.” results were somewhat neutral as might be expected since ATL has a relatively flat organizational structure, with most first line managers reporting directly to the Lab Manager. Additionally, the Safety Culture survey didn’t permit distinguishing between different management/program levels whereas the VPP survey did. The VPP survey statement was “Management is visible in the workplace.” Response to this question as it applied specifically to line managers was extremely favorable with 92% indicating either agree or strongly agree. Management spends every morning conducting a turnover with their staff and communicating assignments and expectations for the day. They follow up by their presence in the field,

performing oversight of analytical operations, as well as providing mentoring and feedback on performance.

Open communication and fostering an environment free from retribution

Open communication and fostering an environment free from retribution received a score of 4.06 and demonstrates that employees feel free to communicate their issues and concerns without fear of retaliation. ATL employees have continuously demonstrated that an environment exists for open communication free from retribution. The previous DOE VPP Onsite Review Team noted that employees felt comfortable communicating safety concerns and other issues directly to their management, the HAMTC Safety Representative, or the ATL Environment, Safety, and Health Program Lead. A recommendation was provided to develop a method for employees to submit safety issues anonymously. This has been completed with the implementation of a new Safety Logbook. ATL also has a more formalized process for communicating employee concerns and differing professional opinions as described in ATL-312, Section 2.03, *Employee Concerns Program*. It should be noted that while many safety issues have been reported and tracked to closure, no employee concerns or differing professional opinions were issued in the past year. Finally, ATL has a zero tolerance policy for retaliation against employees who raise concerns as described in ATL-POL-008, *Zero Tolerance for Retaliation*.

Clear expectations and accountability

Clear expectations and accountability received a score of 4.00. ATL employees demonstrate leadership in the performance and management of analytical services and testing activities through clear expectations and accountability. Employee performance appraisals are conducted annually in accordance with ATL-312, Section 2.23, *Performance Appraisal Process*. Previously established expectations are evaluated and clear expectations are determined for the coming year. ATL-MP-1007, *ATL Job and Organizational Descriptions* further identifies the specific expectations for the various employee positions. Roles and responsibilities for the position titles are further identified in administrative and technical procedures.

ATL applies a just-culture philosophy when it comes to discipline to ensure appropriate accountability for performance. ATL-312, Section 2.15, *Employee Discipline* provides a process for investigating and evaluating unacceptable work behaviors, standards, and practices and a progressive discipline approach to ensure consistency in holding employees accountable for their performance. A Safety Culture survey statement was “Workplace rules and standards are known, understood, and applied consistently.” The average rating for this question was very favorable at 3.98 or Agree. A related VPP Survey statement was “Compliance with safety rules and requirements within ATL is enforced fairly and consistently.” The rating average for this question was again very favorable. The results of these surveys indicate that employees feel they are being treated fairly and consistently when it comes to holding them accountable.

Employees are viewed as our most valued resource; they are recognized in accordance with ATL-312, Section 2.25, *Employee Recognition*, for exhibiting safe behaviors that are indicative of ATL’s Safety Culture, as well as for their contributions to excellence in the QA program. The recent VPP Survey statement “I am satisfied with the recognition/incentive program in my

group/area.” Employee response was favorable, with 71% of employees indicating that they agreed or strongly agreed. A Safety Culture survey statement was “Efforts to improve safety are encouraged, recognized, and responded to”. The rating average for this question was also very favorable at 4.082 indicating strong agreement.

Employee Engagement Focus Area 2:

The interviews, DOE SCWE Survey results, and HGET VPP Safety Culture Survey data indicated that ***Focus Area 2 – Employee Engagement*** was effectively implemented at ATL with assessment results indicating that ATL employees routinely demonstrate their personal commitment to everyone’s safety. ATL employees have a long-standing history of displaying teamwork and mutual respect. They feel comfortable discussing and reporting both operational and safety concerns. A related VPP Survey question from FY 2012 stated “Communications on safety and health issues/topics/subjects in my working group is effective.” 93% of ATL employees indicated “Agree” or “Strongly Agree” with this statement. The DOE SCWE Survey results for this attribute received a score of 3.98. This year’s VPP Self-Assessment interviews asked the question “Do you feel that there is a mutual respect amongst your coworkers and management?” Most all responses were favorable indicating that employees are respectful of and feel respected by their co-workers.

Organizational Learning Focus Area 3:

The assessment results for ***Focus Area 3 - Organizational Learning*** indicated that this focus area was effectively implemented.

Credibility, trust and reporting errors and problems

The attribute ***Credibility, trust and reporting errors and problems*** received the highest score in this focus area at 4.28. ATL strives to foster a culture of trust, between management and technical staff, and between all staff regardless of organizational role. This is accomplished in a variety of ways. It’s important for staff to know that management always has the staff’s best interest and welfare at heart. This is primarily accomplished through a constant commitment to safety, backed up by actions. In addition, management encourages staff to proactively identify and report concerns, and validates that encouragement by actively resolving identified concerns. Staff knows that there is never a risk of retaliation for any issue raised, all concerns will be taken seriously, and that sincere efforts will be made to resolve concerns that can be resolved.

There are a number of avenues staff have for identifying issues. ATL’s corrective action management system, CAMPATS, is available to all staff. Staff may identify concerns to their supervisor or manager, HAMTC Safety Representative, or members of the Environment, Safety, and Health organization. ATL recently implemented a mechanism for staff to report issues anonymously using a Safety Log Book. Staff also has the Employee Concerns Program at their disposal as yet another route to reporting issues.

ATL’s Employee Recognition program provides incentives for reporting safety and quality issues. Staff receive credit in the way of ‘points’ towards gift cards for identifying safety issues,

initiating an issue in CAMPATS, and suggesting alternate approaches to improve safety and quality.

Effective resolution of reported problems

The attribute *Effective resolution of reported problems* received a score of 4.15 from ATL employees during the recent DOE Survey.

ATL's Assessment Program, in concert with its Corrective Action Management system, CAMPATS, and a concerned, engaged, and committed workforce, all contribute to a robust system that assures issues are sought out and corrected in a timely manner. More significant or recurrent errors are more carefully evaluated (e.g., causal analysis, extent of condition) and relevant actions taken to prevent future recurrence. Only staff who have received formal training in causal analysis can action-plan issues that have been screened as 'Resolution Required' (i.e., considered a significant impact to safety and/or quality).

The Assessment Program includes at its apex the all-encompassing Management Review. The Management Review provides yet another approach to seek out and identify organizational weaknesses, as well as obstacles to accomplishing the company's and project's goals and objectives. ORP has recognized that the thoroughness and output from the Management Review have been instrumental in achieving quality improvements within ATL.

Effectiveness of the corrective action process is accomplished in a variety of ways. Core management meets every other week to evaluate new issues and newly developed action plans. The Senior Quality Manager evaluates randomly selected closed issues as part of the bi-monthly QA Report to Management. Issues that are considered to significantly impact safety and/or quality are assigned an action to conduct a follow-up assessment for effectiveness.

In addition, there are a number of CAMPATS metrics that are trended. Metrics and trends routinely monitored include timeliness of corrective action planning and closure. Trending provides an important pathway for identifying emerging issues, and applying preventive action to avoid unintended events.

Performance monitoring through multiple means

The attribute *Performance monitoring through multiple means* received a score of 4.26. ATL monitors operational performance in a variety of ways, by a variety of organizational roles. The breadth of this monitoring, as well as results of these processes, is provided below:

- Assessments: ATL has a comprehensive assessment program that examines performance from multiple perspectives. Assessments may be planned per the annual schedule or conducted ad hoc, e.g., to evaluate a potential emerging issue. They may be structured with a higher level of formality (e.g., Independent Assessment) or less formal (e.g., surveillance); they may be conducted by QA, by management, or by workers (e.g., in the case of the VPP annual self-assessment). Line managers are responsible for periodic operational awareness assessments in the way of room owner inspections, in which identified issues are addressed

on the spot. The apex of the assessment program is the Management Review, a high-level annual performance evaluation in which all managers representing all levels of management actively participate. Additional performance information is acquired via a variety of external assessments, including proficiency testing exercises.

- Issue identification and corrective action: All staff have access to ATL’s corrective action management system (CAMPATS), and are encouraged to either initiate issues directly into the system or notify their supervisors if they identify issues or have safety or quality concerns.
- Monitoring of key metrics: Key operational metrics that are critical to performance (e.g., holding times and turn-around times) are routinely tracked and maintained on the company’s intranet homepage. Those and additional performance metrics (e.g., report reissue rate, analytical performance on proficiency testing samples, etc.) are monitored and reported in the monthly performance report to ORP; still others (e.g., corrective action metrics) are evaluated and reported in the bi-monthly QA Report to Management. Safety and Health metrics are also monitored and reported on a monthly basis.
- Trend analysis: ATL trends many of the key performance metrics described above so that performance changes will be recognized and addressed. Other relevant activities include periodic evaluations of trends emerging from operational awareness assessments and corrective action activities (e.g., causal analysis codes, keywords, timeliness of action planning and action closure). Identified trends get additional attention and evaluation, and may result in an assessment to gather more information to better understand the identified trend.
- Communication and Feedback: Performance information is also collected via informal conversation between management and technical staff. ATL staff has a myriad of opportunities for exchanging performance information. Daily morning meetings provide the technical staff with critical facility information before work begins, and also reinforces management’s commitment to safe work practices. The daily meeting also provides an opportunity for workers to inform managers of issues and concerns. Additional avenues of communication exist through periodic program lead meetings and all-hands meetings. Core management meets every other week, and the Core CAMPATS team meets every other week to discuss recently initiated issues. All of these meetings provide ample opportunity for bidirectional flow of information, which is considered another critical pathway toward effective performance monitoring.

Questioning attitude

Questioning attitude received the lowest score of the attributes measured within Focus Area 3, with a score of 3.83 in the DOE SCWE Survey. Most ATL employees interviewed indicated that an environment exists where people can challenge the traditional ways of doing things. ATL encourages a questioning attitude, and provides opportunities for frank discussions to elicit concerns, suggestions and feedback. Open dialogue between technical staff and management is encouraged, and ATL technical staff is not shy about providing it. Personnel interviewed were asked: “Has ATL established an environment where people can challenge the traditional ways of doing things?” Six employees responded with half indicating affirmative. Others were not as

favorable; however the population of responses did not yield any definite conclusions. Other personnel were asked: “Is it safe to express differing opinions within ATL?” Again, a similar response was provided to this question, with half indicating that they could express differing opinions. The last question asked in this area was: “Is it safe to express differing opinions within your workgroup?” This response was somewhat more favorable with 4 or 6 indicating “Yes”, one indicating “Sometimes”, and one indicating “Not really.”

SCWE Metrics Focus Area 4:

In the area of SCWE performance metrics, *Focus Area 4 – SCWE*, the attribute *Performance Metric insights into SCWE* was determined to be effectively implemented. ATL has Performance and Contractor Assurance Systems which contain a variety of performance indicators and metrics to continuously monitor the work environment. Metrics are maintained to provide trending for conditions adverse to quality and safety, including environmental performance. These metrics are routinely evaluated by management via the QA Bi-Monthly Report, Quarterly Performance Analysis Report to ORP, and monthly for a variety of other metrics. ATL monitors the following SCWE related performance indicators:

- Employee Concerns Program and Differing Professional Opinions Data
- HGET VPP Safety Culture Survey Data
- DOE Hanford Site Organizational Climate & Safety Conscious Work Environment (SCWE) Survey Data
- First Aid Case Rate
- Recordable Case Rate
- Lost Workday Case Rate
- QA Performance Metrics
- Environmental Management System Metrics

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the information gathered for this self-assessment, including interviews and documentation reviews, the ATL Safety Conscious Work Environment was found to be “effectively implemented” with no further in-depth assessment of Safety Culture needed.

The SCWE related processes, including the Employee Concerns Program, which includes the Differing Professional Opinions process, were found to be effectively implemented. A review of the contract incentives and performance measures found that they achieve balanced priorities and contain some Safety Culture elements, including: Environmental Stewardship and Compliance, including maintaining applicable permits and safety authorizations; Early identification of issues and concerns through a proactive assessment and evaluation program; Number and seriousness of any non-compliances, infractions, or violations and the timeliness and quality of related reporting responses, and; Properly manage chemicals and support the 222-S Steward’s implementation of waste minimization and pollution prevention practices.

During the course of this self-assessment, the following Noteworthy Practices and Opportunities for Improvement were identified and are provided below. Focus Areas are identified in “()” after each Noteworthy Practice and Opportunity for Improvement (e.g., (F1) = Focus Area 1).

Noteworthy practices include:

- Daily turnover meetings between ATL and WRPS are held to review the Plan-of-the-Day and identify any potential laboratory operational impacts requiring attention. (F1)
- Monday morning tailgates are used to provide a safety focus and demonstrate management’s involvement/commitment to safety. (F1)
- Daily turnover meetings between ATL management and their employees are used to communicate any emerging safety issues/concerns, share lessons learned, communicate operational status of the facility, and make daily job assignments. (F2)
- Bi-Weekly Corrective Action Management System meetings with ATL senior management are used to review emerging issues, validate significance screenings, and review/comment on developed corrective action plans. (F3)
- A comprehensive Safety Culture/SCWE Program exists, is implemented throughout the ISMS Programs, and is recognized by ATL employees as effectively implemented. (F4)

The SCWE-related Opportunities for Improvement identified as a result of this self-assessment are as follows:

- Improve the quality and effectiveness of employee training. (F1) (CAMPATS ATL-2012-0025)
- Review the lowest scores from the DOE SCWE Survey and consider actions to improve performance. (F2, F3, F4) (CAMPATS ATL-2012-0140)

ATL ISMS SCWE Self-Assessment Document Review List

DOE ORP November 7, 2012 letter 12-SHD-0107, *Fiscal Year 2012 Annual Integrated Safety Management System (ISMS) and Quality Assurance (QA) Effectiveness Review Declaration*
DOE ORP October 22, 2012 letter 12-SHD-0110, *Direction to Perform a Safety Conscious Work Environment (SCWE) Self-Assessment*

DOE G 450.4-1C, *Integrated Safety Management System Guide*
DOE-0343, *Stop Work*
ATL-POL-008, *Zero Tolerance for Retaliation*
ATL-POL-009, *Workplace Harassment*
ATL-MP-1002, *Quality Assurance Program Description (QAPD)*
ATL-MP-1007, *ATL Job and Organizational Descriptions*
ATL-MP-1009, *Integrated Environmental, Safety, and Health Management System Description for the 222-S Laboratory Analytical Services and Testing Contractor (ISMS)*
ATL-MP-1012, *ATL Procedure Compliance Expectations*
ATL-MP-1020, *Assessment Program*
ATL-MP-1033, *Assurance System Description*
ATL-MP-1037, *Worker Safety and Health Program*
ATL-312, Section 2.03, *Employee Concerns Program*
ATL-312, Section 2.23, *Performance Appraisal Process*
ATL-312, Section 2.25, *Employee Recognition*
ATL-312, Section 9.04, *ATL Corrective Action Management*
ATL-312, Section 9.11, *ATL Corrective and Preventive Action Analysis and Trending*
ATL-312, Section 9.18, *Performance of Management Reviews*
ATL-312, Section 10.05, *Lessons Learned*

HGET VPP Safety Culture Survey Data
DOE Hanford Site Organizational Climate & SCWE Survey Data
VPP Self-Assessment LOIs
VPP/SCWE Self-Assessment Interview Results Spreadsheet
SCWE Self-Assessment LOIs
First Aid Case Rate Metric
Recordable Case Rate Metric
Lost Workday Case Rate Metric
QA Performance Metrics
Environmental Management System Metrics

ATL ISMS SCWE Self-Assessment Interview List

Chemical Technologists (18)
Administrative and Professional Staff (20)
Managers/Supervisors (11)

ATTACHMENT 1

**ADVANCED TECHNOLOGIES AND
LABORATORIES INTERNATIONAL, INC.**

INTEGRATED SAFETY MANAGEMENT SYSTEM

SAFETY CONSCIOUS WORK ENVIRONMENT

SELF-ASSESSMENT PLAN

WA-ES-12-002

DECEMBER 2012

ATL ISMS Safety Conscious Work Environment

Self-Assessment Plan

WA-ES-12-002



December 2012

Approved: Original signed by
W. J. Leonard, Team Leader

Date: 12/2/12

1.0 Purpose & Scope

Advanced Technologies and Laboratories International, Inc. (ATL) is performing a Safety Conscious Work Environment (SCWE) Self-Assessment as part of their annual Integrated Safety Management System (ISMS) declaration report for fiscal year (FY) 2012 as required in the Department of Energy (DOE) Office of River Protection (ORP) November 7, 2012 letter 12-SHD-0107, *Fiscal Year 2012 Annual Integrated Safety Management System (ISMS) and Quality Assurance (QA) Effectiveness Review Declaration*. ATL is following the guidance provided in the DOE-ORP October 22, 2012 letter 12-SHD-0110, *Direction to Perform a Safety Conscious Work Environment (SCWE) Self-Assessment*. The ATL SCWE Self-Assessment (Worker Assessment) is being performed in accordance with ATL-312, Section 9.01, Revision 4, *Performance of Operational Awareness Assessments, Method Assessments, Worker Assessments and Surveillances (7/30/2012)*.

This assessment was conducted in parallel with the VPP Self-Assessment which was in progress at the time of receipt of the letter from DOE-ORP directing the performance of a SCWE Self-Assessment. As a result, ATL communicated to DOE-ORP our intention to integrate the SCWE focus areas and some lines of inquiry into the VPP Self-Assessment in order to reduce redundancy and improve efficiency in assessing both the VPP and the SCWE. The results from the VPP Self-Assessment relating to SCWE along with the results from *The 2012 Hanford Organizational Climate and SCWE Survey* were used to complete the ATL SCWE Self-Assessment.

The results of the ATL SCWE Self-Assessment will be reported in a stand-alone report due to DOE-ORP by January 15, 2013.

The attributes of safety culture excellence *italicized* below most clearly support SCWE at DOE facilities:

Leadership Focus Area 1

- a. *Demonstrated safety leadership*
- b. Risk-informed, conservative decision-making
- c. *Management engagement and time in the field*
- d. Staff recruitment, selection, training, and development
- e. *Open communication and fostering an environment free from retribution*
- f. *Clear expectations and accountability*

Employee Engagement Focus Area 2

- a. Personal commitment to everyone's safety
- b. *Teamwork and mutual respect*
- c. Participation in work planning and improvement

- d. Mindful of hazards and controls

Organizational Learning Focus Area 3

- a. *Credibility, trust and reporting errors and problems*
- b. *Effective resolution of reported problems*
- c. *Performance monitoring through multiple means*
- d. Use of operational experience
- e. *Questioning attitude*

Supplemental Information SCWE Focus Area 4

- a. *Performance Metric insights into SCWE*

Team Members

Team Leader:	William Leonard, Manager, ATL Environment, Safety, and Health
Team Member:	Teresa Murphy, ATL HAMTC Safety Representative
Team Member:	Melissa Garcia, ATL Project Administrator
Team Member:	Jimalee Painter, ATL Chemical Technologist
Observer:	Mark Reiss, ATL Deputy Laboratory Manager
Observer:	Joe Sondag, DOE ORP 222-S Facility Representative
Observer:	Courtney Blanchard, DOE-ORP VPP Champion

2.0 Methodology

Some of the lines of inquiry (LOIs), described in Attachment 1, were developed from the guidance provided in the DOE ORP October 22, 2012 letter 12-SHD-0110, *Direction to Perform a Safety Conscious Work Environment (SCWE) Self-Assessment, Attachment 1: SCWE Self-Assessment Lines of Inquiry* and other LOIs were used from the VPP Self-Assessment that correlated with the focus areas identified and were used by the team to perform this assessment. Additionally, *The DOE Hanford Site Organizational Climate & Safety Conscious Work Environment (SCWE) Survey* results were used in their entirety which ensured that data was available to assess all of the focus areas and related attributes.

Team members are to document their interview results on the VPP Self-Assessment Interview Results spreadsheet.

3.0 Review of key Safety Culture related processes:

The Assessment team will review the following types of documentation. Specific documentation to be reviewed includes, but not limited to:

- Employee Concerns Program and Differing Professional Opinions policies and procedures
- HR related policies and procedures relative to harassment and retaliation
- ISMS Description
- Procedures and policies related to stop work authority
- HGET VPP Safety Culture Survey
- DOE Hanford Site Organizational Climate & Safety Conscious Work Environment (SCWE) Survey
- Management Review Assessment Report
- Performance measures/indicators

4.0 Schedule

The performance period for this Assessment is from November 26, 2012 to December 12, 2012. The Team Leader will issue an approved report no later than January 15, 2013.

5.0 Final Report

The team leader will develop a report to document the results of the Assessment. This will be reported to DOE-ORP and ATL Management.

Team members will be asked to sign the report, showing they concur with the report. The Team Leader will transmit the report to DOE-ORP. The following paragraphs describe the final report format and provide a brief discussion of the material to be included in each section.

Title and Signature Page(s) - The cover and title page state the subject, and the date of the assessment. A signature page will be provided. The final report will include a signature from the Team Leader.

Executive Summary - The summary is a synopsis of the review, strengths and weaknesses identified, and conclusions drawn. The executive summary will include:

- a. a brief synopsis of the assessment which provides information concerning the team's assessment evaluation;
- b. a discussion of noteworthy practices and opportunities for improvement, and
- c. whether contract incentives and performance measures achieve balanced priorities and include safety culture elements, and
- d. a conclusion regarding the effectiveness of SCWE-related processes and whether noted opportunities for improvement indicate a need for a further, more in-depth assessment of safety culture, and
- e. The team's recommendations for improvement.

Introduction - The introduction will provide information related to the team composition, use of the LOI's, and a summary of the review process and methodologies used in the self-assessment.

Assessment Results - The report will present both a summary level discussion of the self-assessment results as they pertain to the three ISM safety culture Focus Areas and the supplemental review Focus Area, along with an analysis as it pertains to each of the SCWE-related attributes under each focus area. The attribute-level analysis will include the team's summary evaluation of the level of implementation and effectiveness for each attribute.

Conclusions and Recommendations - This section summarizes the team's overall interpretation of the self-assessment results. It will include a discussion concerning the effectiveness of SCWE-related processes, (including but not limited to ECP and DPO) and whether contract incentives and performance measures achieve balanced priorities and include safety culture elements. This section will also include an overview of SCWE-related opportunities for improvement, the team's recommendations for improvement, and the team's conclusion as to whether a further, more in-depth assessment of safety culture is needed.

Attachment 1

LOI/Question Table

Leadership Focus Area 1

1. Demonstrated safety leadership

LOI: Do you perceive management to be committed to employee safety and health?

LOI: What priority is given to worker safety and health?

LOI: Are you aware of any safety and health goals or objectives for ATL?

LOI: What are your safety and health responsibilities?

LOI: Is safety and health a line management function or is it a function of the safety and health committee?

LOI: Do you have Stop Work Authority?

LOI: How are you held accountable to work safely?

2. Management engagement and time in the field

LOI: Do you feel that First Line Management is accessible and visibly active on safety and health issues?

LOI: Do you feel that Top Management is accessible and visibly active on safety and health issues?

LOI: What do you believe is the most positive thing that management does for worker safety?

3. Open communication and fostering an environment free from retribution

LOI: What is management's reaction when issues or concerns are reported?

LOI: Is there a fear of reprisal when reporting issues or concerns?

LOI: Are you encouraged by management to report issues or concerns?

4. Clear expectations and accountability

Employee Engagement Focus Area 2

1. Teamwork and mutual respect

LOI: When you see a "problem" in your workplace do you correct it/report it/or leave it for the next person?

LOI: Do you feel that there is a mutual respect amongst your coworkers and management?

LOI: Do you feel your workload is reasonable?

LOI: Are priorities or work objectives changed so frequently that you have trouble getting your work done?

Organizational Learning Focus Area 3

1. *Credibility, trust and reporting errors and problems*
2. *Effective resolution of reported problems*
3. *Performance monitoring through multiple means*
4. *Questioning attitude*

LOI: Has ATL established an environment where people can challenge the traditional ways of doing things?

LOI: Is it safe to express differing opinions within ATL?

LOI: Is it safe to express differing opinions within your workgroup?

Supplemental Information SCWE Focus Area 4

1. *Performance Metric insights into SCWE*

LOI: Has the work environment at ATL improved over the past year?