



Navarro Research and Engineering, Inc. Legacy Management Strategic Partner

**Report from the Department of Energy
Voluntary Protection Program
Merit Onsite Review Addendum
November 18-21, 2019**



U.S. Department of Energy
Office of Environment, Health, Safety and Security
Office of Health and Safety
Office of Worker Safety and Health Assistance
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**Department of Energy
Voluntary Protection Program
Merit Onsite Review
of
Navarro Research and Engineering, Inc.
Legacy Management Strategic Partner
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Summary:

The Department of Energy's (DOE) Voluntary Protection Program (VPP) Team (Team) from the Office of Environment, Health, Safety and Security (AU) recommends that the Navarro Research and Engineering, Inc., (Navarro) Legacy Management Strategic Partner (LMSP), formerly Legacy Management Support (LMS), continue to participate in DOE-VPP and be elevated to the Star level. Navarro-LMSP has addressed the Merit goals established by the October 2018 DOE-VPP transitional onsite review and made other significant improvements.

Background:

The Office of Worker Safety and Health Assistance (AU-12), within AU, originally conducted a DOE-VPP transitional review of Navarro-LMS October 9-18, 2018. That transitional review identified nine opportunities for improvement, one of which represented a significant breakdown in the safety and health program. That opportunity for improvement became a Merit Goal that Navarro-LMS needed to address before it could be elevated to Star status. The Team determined that Navarro-LMS needed to complete a comprehensive programmatic assessment of its safety and health program and integrate those results with the extent of condition review from the 2018 Grand Junction Disposal Cell event. It also needed to revise the safety and health procedures and forms, incorporate worker feedback on those procedures, identify training on those revisions, train personnel to implement those revisions, and then implement the new procedures. Because completing the actions required more than 90 days, AU admitted Navarro-LMS to DOE-VPP at the Merit level.

After the 2018 transition review, Navarro-LMS changed its name to Navarro-LMSP. Navarro and DOE's Office of Legacy Management (LM) made this change to symbolize DOE-LM's desire to establish a more cooperative working relationship with Navarro.

AU conducts annual reviews of Merit participants to assess the participant's progress toward meeting the Merit goals from the previous assessment, and determine if improvements warrant elevation to Star level. The Team performed the annual Merit review of Navarro-LMSP from November 18-21, 2019. The Team visited the Grand Junction site office, which serves as the central location for Navarro-LMSP's environment, safety, and health staff, conducted interviews with managers and workers, contacted key personnel at other Navarro-LMSP locations, and reviewed documents germane to the required actions.

This report documents the Team's observations and supports the Team's recommendation to elevate Navarro-LMSP from Merit to Star level. It also provides information regarding Navarro-LMSP's actions to address safety culture concerns and the other opportunities for improvement identified in the October 2018 report. It is an addendum to the original report issued January 11, 2019 (Navarro Research and Engineering, Inc., Legacy Management Support Report from the Department of Energy Voluntary Protection Program Onsite Review October 9-18, 2018).

Results

Merit Goal

In 2018, the Team identified nine opportunities for improvement. Of those nine, one represented a significant breakdown in the worker safety and health program that Navarro-LMSP needed to address in order to be elevated to Star level.

Although identified as a single opportunity for improvement, there were three distinct aspects to the goal: program evaluation, procedure revision, and training and implementation. The Team divided this review to address each of these three aspects separately.

Navarro needs to complete the comprehensive programmatic assessment of its safety and health program and integrate those results with the extent of condition review from the Disposal Cell event.

Actions that addressed this aspect began before the 2018 transitional onsite review. Prior to completion of the 2018 transitional onsite review, Navarro-LMSP had already identified a new project manager. After the 2018 transitional onsite review, Navarro-LMSP made several other changes in its senior leadership. Navarro-LMSP hired a new Environment, Safety, Health, and Quality (ESH&Q) manager, a new Safety and Health manager, and reorganized the safety and health organization. The new managers came into the job with broad experience from other DOE contractors and industry. Before the reorganization, Navarro-LMSP had a single safety and health manager with 26 direct reports. The reorganization created a safety and health programs group, a safety and health program assessment manager, and two safety and health field crews. This reorganization provided clearer lines of responsibility and accountability by separating the program management, program implementation, and program assessment functions, and established a manageable scope of responsibility for the affected managers. These changes helped establish the leadership and organization necessary to make the required safety and health program changes.

After the 2018 transitional onsite review, Navarro-LMSP received an “Unsatisfactory” rating on its Performance Evaluation Monitoring Plan (PEMP) for safety and health from LM. At the time, the LM Director was considering terminating the contract. This rating became a significant event for Navarro-LMSP that has been a driver for improvement over the past year. The new Navarro-LMSP project manager worked closely with DOE-LM leaders, including the DOE-LM Director and Deputy Director, and convinced them that Navarro-LMSP was committed to correcting the issues and conditions that led to the unsatisfactory rating. Navarro-LMSP recognized this commitment required improvements in safety culture, comprehensive evaluation, visible leadership, worker engagement, and organizational learning. Navarro-LMSP went beyond the individual actions identified in response to the DOE-VPP assessment and the PEMP evaluation, and developed a comprehensive Integrated Safety Management (ISM) Continuous Improvement Plan (CIP). Prior to this plan, many Navarro-LMSP personnel believed that ISM was not a contract requirement. This belief existed because neither the previous contract, nor the original Navarro-LMS contract issued in 2015, included DOE’s Acquisition Regulation 970-5223-1, *Integration of Environment, Safety, and Health into Work Planning and Execution*. DOE added the regulation to the Navarro-LMS contract very early after issuing the contract, but many employees were unaware of the change. The ISM-CIP represented a visible commitment

by Navarro-LMSP to ISM. The new managers embraced ISM not only as a requirement, but also as a good business practice.

The development of the ISM-CIP was an extensive effort across organizational boundaries and included reviewing data, reviewing open corrective actions, holding discussions between LM and Navarro, brainstorming sessions with focus teams, and reviewing metrics. The ISM-CIP addressed the findings from the 2018 Grand Junction Disposal Cell site event, the DOE-VPP transitional onsite review, and the PEMP evaluation. Actions in the ISM-CIP included Safety Conscious Work Environment (SCWE) training, increased manager field presence, organizational realignment, safety culture baseline surveys, work planning and control procedure revisions, and reinvigorating conduct of operations. Navarro-LMSP completed most of the actions in the ISM-CIP, and the remaining actions are in the monitoring phase to determine if the actions are effective.

These collective assessments and actions integrated the various corrective actions and provided Navarro-LMSP with the information it needed to improve the safety and health program. Navarro-LMSP has revised its assessment processes to perform periodic assessments, identify any developing issues or gaps in its safety and health program, and identify corrective actions before the program deteriorates and contract performance suffers. Personnel performing these assessments have become accustomed to issuing findings. The new ESH&Q manager rejected several assessments that downplayed identified deficiencies, and required the assessors to identify findings. Navarro-LMSP now uses these assessments and associated findings to drive continuous improvement. These actions meet and exceed this aspect of the Merit goal.

[Navarro needs to] revise the S&H procedures and forms, incorporate worker feedback on those procedures.

The initial review/revision of procedures started in September 2018 with the review/revision of the lockout/tagout procedure. Shortly thereafter, the effort expanded to include the confined space procedure. As identified in the 2018 transitional onsite review, Navarro-LMSP had issued these procedures without incorporating worker feedback or training workers on the changes. After the transitional onsite review, Navarro-LMSP initiated a formal procedure recovery effort to revise its safety and health procedures and address the Merit Goal.

In January 2019, the Navarro-LMSP Corporate Contractor Assurance Manager assumed the role for managing the effort to revise its safety and health procedures, which included releasing the completed procedure revisions for training and use. Navarro-LMSP issued a 90-day *Interim Process Directive*, IP-19-07, which identified roles and responsibilities, policy, and over 30 safety and health procedures included in the review and revision process. Subsequent *Interim Process Directives*, IP-19-09 and IP-19-17, updated and continued the review and revision process.

To increase worker involvement in the procedure review and revision process, the procedure recovery effort established working groups that consisted of representatives from affected organizational units. Navarro-LMSP assigned each procedure listed in the *Interim Process Directives* one of the following action criteria for working groups to complete the review and revision process: (1) review for global changes; (2) review for global changes and develop training; (3) review with working group for usability, archive, update procedure and training; (4) review with working group for usability and develop training; or (5) revision in progress.

Workers confirmed that Navarro-LMSP solicited feedback and resolved comments to their satisfaction. Workers also believed that the new procedure revision process was more effective than the original effort.

After making extensive revisions to its safety and health program procedures, Navarro-LMSP contracted with an outside firm to perform a compliance assessment of its safety and health procedures. The assessment identified some noncompliant conditions that Navarro-LMSP corrected. That assessment ensured those procedures were fully compliant with required rules and standards.

[Navarro needs to] identify training on those revisions, train personnel to implement those revisions, and then implement the new procedures.

Since the 2018 transitional onsite review, Navarro-LMSP revised its training development process. The Learning Development Department (LDD) uses the Learning and Development Needs Assessment (LMS/POL/S15034, *Training Policies and Procedures Manual*, Form LMS 2109), to evaluate training and development opportunities on new and existing content, and determine which type of training meets the business and learner's needs. If personnel have completed similar training, the LDD determines if this similar training is acceptable using the Training Equivalency Evaluation (LMS/POL/S15034, Form LMS 2177). In addition, project managers (PM) provide LDD with project or activity evaluations (PAE) or job safety analysis (JSA). PMs use the PAE to plan complex or higher-risk activities. LDD uses the PAE or JSA to create a training matrix that reflects required training for personnel assigned to a task and the status of required training. LDD provides this matrix back to the PM and uses the matrix to assign required training. PMs then use the matrix to ensure personnel meet training and qualification requirements before performing work.

Navarro-LMSP also implemented the Job Analysis and Training Review (JATR) process. The JATR approach uses a standardized form that identifies potential hazards associated with each job position and recommends training for that position. This process creates a set of core training requirements for each job position within Navarro-LMSP. Additional training can be added based on specific needs identified by the direct supervisor (i.e., forklift training) or facility-specific training for the position.

Navarro-LMSP primarily relied on formal training and required reading as the means of training personnel, but since 2018 has added "practical briefings" as an additional training method. These briefings are an alternative to the very informal required reading or the resource-intensive formal training courses. Practical briefings include the purpose of the briefing, training objectives, and necessary briefing points. Qualified subject matter experts (SME) or managers present the briefings to a small group of workers. The briefings provide additional detail, such as "why" a process was changed, establish a forum to ask questions, and ensure workers do not miss critical points that might have been skipped over in a required reading process.

As part of the procedure recovery effort, managers identified those personnel who would become the SMEs to train others. LDD and the SMEs revised or developed training and identified the most effective method of training for each of the new or revised procedures. LDD then identified personnel requiring training using Learning and Development Needs Assessments, JSAs, JATRs, or PAEs, and then completed that training on each of the new procedures.

The procedure recovery effort improved the process to identify required training, identified personnel with sufficient experience to provide the training, provided tools and resources to

deliver the revised training, and ensured managers and personnel implemented the new procedures.

Navarro-LMSP has taken other actions to address cultural concerns that became evident after the 2018 transitional onsite review, and the other opportunities for improvement in the 2018 transitional onsite review.

In addition to the actions already identified, Navarro-LMSP revised its work control processes and procedures, implemented new training techniques (discussed later), began holding frequent All-Hands/Town Hall meetings, initiated SCWE training, and initiated daily standup telecons between sites. These changes led to Navarro-LMSP receiving an *Excellent* interim rating on its most recent PEMP evaluation of the safety and health program. During the course of making these improvements, Navarro-LMSP has also had its most productive contract performance year to date. Simultaneously, Navarro-LMSP has had a reduction in injury rates, demonstrating that safe work performance leads to efficient and effective work performance. Another indicator of the improved culture is that Navarro-LMSP has seen an increase in incident and condition reporting that it attributes to the increased willingness of its workers to report without fear of reprisal.

One of the most significant changes resulting from these efforts to improve has been Navarro-LMSP's relationship with its customer and its workforce. Under the leadership of the LM Director and the Navarro-LMSP Program Director, DOE-LM and Navarro-LMSP now treat each other as strategic partners, which prompted the name change from Legacy Management Support to Legacy Management Strategic Partner. This name change symbolizes the cooperative relationship rather than the adversarial relationship that existed in 2018.

Other Opportunities for Improvement

While the Team's primary focus was reviewing the action taken to address the specific Merit Goal from the 2018 transitional onsite review, the Team observed improvements related to the other opportunities for improvement identified in the 2018 transitional onsite review.

2018 Opportunity for Improvement: [Navarro-LMSP] should ensure managers conduct visits throughout the year rather than clustering the visits in the month prior to the end of the fiscal year.

The 2018 transitional onsite review identified that Navarro-LMSP expected managers to make two site visits per year, and those visits tended to cluster around the last month of the fiscal year in order to meet PEMP goals. Navarro-LMSP reinforced the need for more frequent senior management site visits, and is now tracking those visits. A quarterly performance assurance report issued in November 2019 identified a total of 70 management visits conducted between October 1, 2018, and September 30, 2019, a significant increase over the 42 management assessments conducted in fiscal year 2018. Senior managers conducted site visits throughout the year, not just at the end of the fiscal year. Navarro-LMSP is also establishing a fiscal year 2020 metric that monitors performance of management visits. The proposed goal will be at least one management visit per quarter, per manager.

2018 Opportunity for Improvement: [Navarro-LMSP] should incorporate more advanced safety concepts into its safety message campaigns to stimulate interest and participation among its workforce.

The 2018 transitional onsite review identified that many workers were not engaged with safety campaigns or messages. Those workers believed the campaigns and safety messages were not giving them any new information, consisted of repetitive messages, and had little added value. The Team recommended that Navarro-LMSP could create more employee interest by finding topics that challenged its educated and experienced workforce, and incorporating more advanced safety concepts into its safety messages and campaigns to stimulate interest and participation among its workforce.

Navarro-LMSP has incorporated more advanced safety topics into its monthly safety meetings, such as Safety Culture, SCWE, Human Performance Improvement, and Behavior-Based Safety. Incorporating these topics has helped make the monthly safety meetings more engaging by stimulating discussion between participants. In addition to selecting advanced topics in safety meetings, Navarro-LMSP incorporated integrated safety management system (ISMS) participation activities in its 2019 annual VPP campaign. The VPP campaign is using video clips from various blockbuster movies to deliver safety messages. Monthly safety meetings also include activities for attendees to identify and mitigate hazards resulting in more interaction, thus supporting ISMS and DOE-VPP concepts. Navarro-LMSP also introduced self-produced videos to present some of the safety topics. The videos have been engaging and resulted in positive feedback from meeting attendees

2018 Opportunity for Improvement: [Navarro-LMSP] should consider developing Employee Safety Team (EST) sub-teams for its populated locations to ensure representation of all groups at those locations.

2018 Opportunity for Improvement: Navarro-LMSP] should consider supporting local EST sub-teams by creating employee participation promotions, in addition to the company-wide initiatives, to better address each individual site's needs.

Since 2018, Navarro-LMSP has established employee safety committees (ESC) at each occupied LM site with 10 or more employees. Occupied LM sites with less than 10 employees continue to have representation on the EST and conduct employee activities on the local level.

Navarro-LMSP conducted a 4-day Safety Summit at the Pinellas site in Florida that included up to four participants from each site. Monthly safety meetings, ESCs, and an employee engagement recognition program where employees can receive safety awards up to \$300, all contribute to improved employee engagement and participation in the safety and health program.

2018 Opportunity for Improvement: Navarro-LMSP should consider revisiting the JATR approach to reinforce its commitment to excellence, improve training process consistency, and implement a systematic approach to training.

In 2018, Navarro-LMSP had identified that it needed a more systematic approach to training to ensure all personnel consistently obtained and maintained necessary qualifications and skills. The Training manager developed the JATR process to meet this need, but Navarro-LMSP senior managers rejected that approach.

As discussed in the Training section for the Merit Goal, Navarro-LMSP included the JATR approach to training. In addition to using this approach to identify training requirements for revised safety and health procedures, Navarro-LMSP is almost finished completing JATRs reviews for each employee's position. This approach is efficiently defining training and qualification requirements for all personnel.

Conclusions

At the end of calendar year 2018, Navarro-LMSP recognized a need to make significant changes in its organization, processes, procedures, and improve the safety culture of its workforce. The relationships between Navarro-LMSP and its workforce, and its customer, had degraded to the point of almost losing its contract with DOE-LM. Both the workforce and DOE-LM did not believe Navarro-LMSP was responsive to issues and concerns, and that Navarro-LMSP cared more about milestone delivery than quality and safety.

In response, Navarro-LMSP and the contract team initiated a major improvement effort that continues as of this assessment. Navarro-LMSP's actions to improve leadership, revise its safety and health procedures using workforce involvement, and improve its SCWE and safety culture have had a dramatic effect. Navarro-LMSP has simultaneously improved its safety and health and its contract performance. These actions meet or exceed the identified Merit goal. Navarro-LMSP now demonstrates the continuous improvement and quest for excellence expected of a DOE-VPP Star level participant. The Team recommends that Navarro-LMSP continue to participate in DOE-VPP and be elevated to the Star level.

This Merit onsite review did not identify any additional opportunities for improvement because Navarro-LMSP is continuing extensive improvements derived from the 2018 transitional onsite review and the ISM-CIP. The current contract expires in June 2020. Rather than identify new opportunities for improvement, Navarro-LMSP should continue the actions it is taking to prepare the workforce for any future contractor transition.

Attachment 1

INJURY INCIDENCE CASE RATES

Injury Incidence Case Rates - (Navarro-LMSP– *CAIRS Organization [See note below])					
Calendar Year	Hours Worked	Total Recordable Cases (TRC)	TRC Incidence Rate per 200,000 hours	Days Away, Restricted or Transferred (DART) Cases	DART Case Rate per 200,000 hours
2016	699,833	3	0.9	0	0.0
2017	703,483	3	0.9	2	0.6
2018	701,088	1	0.3	0	0.0
3-Year Totals	2,104,404	7	0.7	2	0.2
Bureau of Labor Statistics (BLS-2018) average for NAICS** 562 All other professional, scientific, and technical services			4.2		2.9

Injury Incidence Case Rates - (Navarro-LMSP Subcontractors – *CAIRS Organization [See note below])					
Calendar Year	Hours Worked	TRC	TRC Incidence Rate per 200,000 hours	DART Cases	DART Case Rate per 200,000 hours
2016	26,627	0	0.0	0	0.0
2017	105,967	0	0.0	0	0.0
2018	183,917	0	0.0	0	0.0
3-Year Totals	316,511	0	0.0	0	0.0
Bureau of Labor Statistics (BLS-2018) average for NAICS** 562 All other professional, scientific, and technical services			4.2		2.9

*Computerized Accident/Incident Reporting System

** North American Industry Classification System

Note: The Team used the following CAIRS Organization codes to determine the Injury Incidence Case Rates:

Site Contractors	Site Subcontractors
3260605 Navarro-LMSP- LM/EM Work	3260606 Navarro-LMSP Subs - LM/EM Work
3260615 Navarro-LMSP– LM	3260616 Navarro-LMSP Subs – LM
3260625 Navarro-LMSP– Misc. LM/EM Work	3260626 Navarro-LMSP– Misc. Subs LM/EM Work

Discussion

Navarro-LMSP employs approximately 448 workers and 101 service subcontractors. For the 3 years prior to this assessment (2016 to 2018), Navarro-LMSP experienced seven recordable cases, resulting in a 3-year Total Recordable Case (TRC) rate of 0.7. During the same period, Navarro-LMSP had only two Days Away, Restricted, or Transferred (DART) cases, resulting in a DART rate of 0.2. Navarro-LMSP has had one recordable case and no DART cases for the current year to date. The recordable cases Navarro-LMSP experienced for the years 2016-2018 involved strains, a debris in the eye, a contusion, and an avulsion of a fingernail. The 2019 injury was a laceration requiring a couple of sutures. Employees do not fear reprisal for reporting and acknowledge managers encourage the reporting of injuries, incidents, or first-aid cases.

The site maintains complete and accurate recordkeeping logs, including the Occupational Safety and Health Administration's (OSHA) 300 Log and 300A Summary. The 300A summary meets the requirements of the recordkeeping standard, is accessible to all personnel, and available throughout the calendar year. The injury and illness record-keeper documents all work-related injuries in the DOE CAIRS database. Personnel are well versed in recordkeeping, OSHA 300 Logs, and CAIRS requirements. Navarro-LMSP's TRC/DART rates are 85/93 percent respectively less than the Bureau of Labor and Statistics (BLS) comparison industry average for its North American Industry Classification System (NAICS) code and meet the expectations for continued DOE-VPP participation.