

January 12, 2017

John M. Giddens, SAFER Chairman
SAFER Steering & Equipment Committee
Pooled Equipment Inventory Company – PIM
Post Office Box 1295
Birmingham, AL 35201-1295

SUBJECT: NUCLEAR REGULATORY COMMISSION VENDOR INSPECTION OF THE
PHOENIX NATIONAL SAFER RESPONSE CENTER REPORT
NO. 99901013/2016-201

Dear Mr. Giddens:

On November 28 to December 1, 2016, the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection at the Pooled Equipment Inventory Company (PEICo) SAFER facility in Phoenix, AZ. Pooled Inventory Management (PIM), as agent for PEICo, and under contract to support the Strategic Alliance for FLEX Emergency Response (SAFER) program (hereafter referred to as PEICo/PIM), supports the nuclear industry by warehousing and maintaining SAFER FLEX equipment in support of the mitigation strategies required by NRC Order EA-12-049, "Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events." The purpose of the limited-scope inspection was to assess PEICo/PIM's conformance with the provisions of Nuclear Energy Institute (NEI) 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," as endorsed by the NRC.

This technically focused inspection evaluated PEICo/PIM's implementation of activities associated with the storage, maintenance, procurement, testing, and FLEX equipment deployment during an emergency to U.S. operating nuclear plants. The enclosed report presents the results of this inspection. This NRC inspection report does not constitute NRC endorsement of your overall program.

Based on the results of this inspection, the NRC inspection team found the implementation of your SAFER program met the requirements imposed on you by NRC licensees. No findings of significance were identified.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request that such material is withheld from public disclosure, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your

claim (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Sincerely,

/RA/

Terry W. Jackson, Chief
Quality Assurance Vendor Inspection Branch-1
Division of Construction Inspection
and Operational Programs
Office of New Reactors

Docket No.: 99901013

Enclosure:
Inspection Report 99901013/2016-201
and Attachment

claim (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Sincerely,

/RA/

Terry W. Jackson, Chief
Quality Assurance Vendor Inspection Branch-1
Division of Construction Inspection
and Operational Programs
Office of New Reactors

Docket No.: 99901013

Enclosure:
Inspection Report 99901013/2016-201
and Attachment

DISTRIBUTION:

ASakadales
KKavanagh
JBurke
MHalter
TBrown
jmgidden@southernco.com
NRO_DCIP_Distribution
ConE_Resource

ADAMS Accession No.: ML17012A186 *via e-mail NRO-002

OFFICE	NRO/DCIP/QVIB-1	NRO/DCIP/QVIB-1	NRO/DCIP/QVIB-1
NAME	JJimenez	NSavvoir*	TJackson
DATE	01/12/17	01/11/17	01/12/17

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF NEW REACTORS
DIVISION OF CONSTRUCTION INSPECTION AND OPERATIONAL PROGRAMS VENDOR
INSPECTION REPORT**

Docket No.: 99901013

Report No.: 99901013/2016-201

Vendor: POOLED EQUIP INVENTORY CO (PEICO)
Barnhart Crane & Rigging
8100 W Buckeye Rd. (MC85)
Phoenix, AZ 85043

Vendor Contact: John M. Giddens, SAFER Chairman
jmgidden@southernco.com
205-992-7924

Nuclear Industry Activity: Pooled Inventory Management (PIM), as agent for PEICo, and under contract to support the SAFER program, is responsible for the storage, maintenance, and testing of the SAFER FLEX equipment used by NRC licensees in the event of a beyond design basis accident in accordance with NRC Order EA-12-049 and NEI 12-06.

Inspection Dates: November 27, 2016 – December 1, 2016

Inspectors: Jose G. Jimenez NRO/DCIP/QVIB-1 Team Lead
Nicholas Savvoir NRO/DCIP/QVIB-1

Approved by: Terry W. Jackson, Chief
Quality Assurance Vendor Inspection Branch-1
Division of Construction Inspection
and Operational Programs
Office of New Reactors

Enclosure

EXECUTIVE SUMMARY

PEICo – SAFER FLEX Equipment
99901013/2016-201

The U.S. Nuclear Regulatory Commission (NRC) conducted a vendor inspection to verify Pooled Inventory Management (PIM), as agent for the Pooled Equipment Inventory Company (PEICo), and under contract to support the Strategic Alliance for FLEX Emergency Response (SAFER) program, (hereafter referred to as PEICo/PIM) implemented an adequate program that complies with NRC Order EA-12-049 and the implementation of NEI 12-06 as endorsed by the NRC.

The vendor inspection of PEICo/PIM focused on the SAFER program as it applies to supporting the beyond design mitigation efforts including procurement, maintenance, testing, and storage of equipment to be relied upon an emergency.

The NRC inspection team observed a selection of maintenance and testing activities during the week. The NRC inspection team reviewed the SAFER program, which included purchase orders, the technical evaluation process for selection of equipment to purchase, receipt inspection reports, certificates of compliance, test reports, and corrective actions. The NRC inspectors also observed PEICo personnel conducting tests of various FLEX equipment.

During the course of this inspection, the NRC inspection team implemented Inspection Procedure (IP) 43006, "Inspection of the implementation of mitigation strategies order regarding the use of the National SAFER Response Centers (NSRC)." The information below summarizes the results of this inspection.

SAFER Program

The NRC inspection team concluded that PEICo/PIM is implementing the SAFER program in accordance with NRC Order EA-12-046 and NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEICo/PIM is implementing its policies and procedures associated with the SAFER program. No findings of significance were identified.

Procurement Control

The NRC inspection team concluded that PEICo/PIM is implementing the necessary procurement controls in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEICo/PIM is implementing its policies and procedures associated with the procurement activities. No findings of significance were identified.

Test, Maintenance and Measuring & Test Equipment (M&TE) Control

The NRC inspection team concluded that PEICo/PIM is adequately implementing its test, maintenance and M&TE program in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEICo/PIM is implementing its policies and procedures associated with the all the maintenance activities. No findings of significance were identified.

Handling, Storage, and Deployment

The NRC inspection team concluded that PEI Co/PIM is implementing its handling, storage, and deployment activities in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEI Co/PIM is implementing its policies and procedures associated with the handling of SAFER equipment. No findings of significance were identified.

Corrective Actions

The NRC inspection team concluded that PEI Co/PIM is implementing its corrective action program in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEI Co/PIM is implementing its policies and procedures associated with the corrective action program. No findings of significance were identified.

REPORT DETAILS

1. SAFER Program

a. Inspection Scope

The NRC inspection team reviewed PEIco/PIM's policies and implementing procedures that govern the overall implementation of the SAFER program including storage, maintenance, procurement, testing, and deployment activities. The NRC inspection team evaluated PEIco/PIM's SAFER program process which includes the development of procedures governing all activities including determination of procurement technical specifications, vendor selection, receipt inspection, periodic maintenance, adequate testing, adequate storage, and development of training for on-site staff and staff activated during an emergency. Specifically, the scope of the inspection was an in-depth review of all the documents used to implement the program, how procurement activities comply with NEI 12-06 and the FLEX equipment identified to be necessary to support licensee mitigation efforts. The NRC inspection team reviewed a smart sample of all the set of FLEX equipment stored at the Phoenix National SAFER Response Center (NSRC) facility to verify that the control processes were effectively implemented throughout the various stages from procurement to storage and the eventual emergency deployment if activated.

The attachment to this inspection report lists the individuals interviewed and documents reviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified

c. Conclusions

The NRC inspection team concluded that PEIco/PIM is implementing the SAFER program in accordance with NRC Order EA-12-046 and NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEIco/PIM is implementing its policies and procedures associated with the SAFER program. No findings of significance were identified.

2. Procurement Controls

a. Inspection Scope

The NRC inspection team reviewed PEIco/PIM's policies and implementing procedures of its procurement activities to verify compliance with the requirements of NEI 12-06. Specifically, the NRC inspection team reviewed PEIco/PIM's equipment specification development process, purchase orders, receipt inspection reports and compared the information with observations in the warehouse of the equipment stored in the different redundant bins. The NRC inspection team focused on key elements of the process including verification of equipment specifications with observations of testing and inspection activities; including any additional requirements identified by PEIco/PIM.

The NRC inspection team reviewed PEI/Co/PIM's purchase order of the Steam Generator/ Reactor Pressure Vessel Makeup Pump to verify procurement requirements were met and documented correctly. The NRC inspection team observed the Steam Generator/ Reactor Pressure Vessel Makeup Pump to ensure throttle capability and recirculation flow (minimum flow line) such that delivered flow can be controlled to a minimum value. The NRC inspection team verified each unit was equipped with a vernier throttle control capability for stabilizing the engine at a given RPM. The NRC inspection team also observed the use of duplex and parallel designed in-line strainers and filters (e.g., fuel oil or lube oil). The NRC inspection team also observed online monitoring, cleaning and replacement while in operation of the fuel filters, water separators, and oil filters. The NRC inspection team identified bypass features for the oil pressure along with instructions in the operation manual that were acknowledged by PEI/Co/PIM personnel. The NRC inspection team verified flow rate indicators and pressure gauges on pump suction and discharge lines, pump drains were routed to a single manifold for ease of manipulation, and pump suction heights were met per the technical specifications in the procurement documents. Additionally, the NRC inspection team verified that the engines supplied were Tier-3 diesel engines per design requirements and specifications. The NRC inspection team also verified that the whole pump housing system was fully enclosed with compartment heater and removable panels to meet operational ambient temperature and protective shielding design requirements in accordance with Hale pumps system description as explained by PEI/Co/PIM engineers. The NRC inspection team verified each unit is equipped with dual marine-grade, 12 volt batteries to meet design criteria. In addition, the NRC inspection team observed that each unit was equipped with dual, diesel-fired, blower heaters and a diesel fired, self-circulating, engine coolant heater.

The specification requirements verified during the inspection for the activities described above were described in NERRC101A001 No. 201324 Rev 2:

- 3.2.4- diesel fuel
- 3.2.7- batteries and oil heaters
- 3.2.14- bypass feature
- 3.2.15- strainers and filters
- 3.3.4- pump suction height
- 3.3.6- throttle and recirculation
- 3.3.8- flow rate and pressure
- 3.3.9- pump drains
- 3.4.1- ambient temperature
- 3.4.2- environmental shielding

The attachment to this inspection report lists the documents reviewed and personnel interviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that PEI/Co/PIM is implementing the necessary procurement controls in accordance with NEI 12-06. Based on the limited sample of

documents reviewed, the NRC inspection team also determined that PEI/Co/PIM is implementing its policies and procedures associated with the procurement activities. No findings of significance were identified.

3. Test, Maintenance and Measuring & Test Equipment (M&TE) Control

a. Inspection scope

The NRC inspection team reviewed PEI/Co/PIM's policies and implementing procedures for the testing, maintenance, and M&TE program specified in Section 12.2 of NEI 12-06 to ensure provisions and processes established for periodic maintenance, testing, and calibration of off-site equipment were comparable and consistent with that of similar Nuclear sites FLEX equipment. The NRC inspection team discussed the test, maintenance, and M&TE program with PEI/Co/PIM management and technical staff and reviewed various samples of activities during the week and documentation for activities in the last year.

The NRC inspection team observed annual maintenance on one of five Hale manufactured, steam generator/ reactor pressure vessel makeup pumps (H03127). PEI/Co contracts Barnhart Crane and Rigging to handle equipment, house and perform maintenance at the NSRC. Maintenance was performed per Work Instruction-2-04C, Version 3, November 18, 2016. The Barnhart maintenance personnel followed warnings, cautions, and notes per the work instruction. In addition, Barnhart recorded and verified values with PEI/Co/PIM engineering. The NRC inspection team reviewed environmental operational temperature limits to verify that maintenance checks met the specifications of the installed Switch gage temperature indicator gage. The NRC inspection team also reviewed the process for identification of potential deficiencies with equipment operation. The inspectors reviewed actions taken by PEI/Co/PIM personnel when they discovered the presence of paint discoloration during a pre-check for general cleanliness, damage, corrosion, infestations and degradation which was later characterized and documented as a potential exhaust leak issue.

The NRC inspection team reviewed measurement and test records for draft commander gauges. The draft commander is used as a water source for maintenance. During maintenance testing, the NRC inspection team verified steam generator/ reactor pressure vessel hoses met the required pressure ratings. The NRC inspection team also reviewed Areva quality control surveillance reports which initially verified functionality and performance testing for the five PEI/Co steam generator/ reactor pressure vessel makeup pumps. All of the instrumentation used in the activities observed were adequately calibrated.

The attachment to this inspection report lists the individuals interviewed and documents reviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that PEICo/PIM is adequately implementing its test, maintenance and M&TE program in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEICo/PIM is implementing its policies and procedures associated with the all the maintenance activities. No findings of significance were identified.

4. Handling, Storage, and Deployment

a. Inspection Scope

The NRC inspection team reviewed PEICo/PIM's handling, storage, and deployment policies and procedures to verify conformance with NEI 12-06. The inspectors observed a PEICo/PIM's storage area in the Phoenix warehouse. Specifically, the NRC inspection team observed how FLEX equipment is stored, cataloged, and tagged out of service, and tracked for easy deployment to the correct NRC licensee that request the equipment. The NRC inspection team discussed the conduct of the warehouse operations for all the handling activities with PEICo/PIM's management.

The NRC inspection team performed walk downs of the different storage sections to verify the FLEX equipment described in the emergency deployment procedures and the bill of lading matched the different transportation pallets. The procedures reviewed adequately provided guidance for the easy identification of equipment location and, for licensee-specific equipment, it properly identified the necessary FLEX equipment. PEICo/PIM personnel in charge of handling the equipment was interviewed and demonstrated they were knowledgeable of the different storage and deployment procedures. The NRC inspectors verified that the storage facility would provide the necessary protection of the equipment and also meet the availability requirements in accordance with the mitigation strategies requirements. All samples of equipment verified for storage condition were adequately preserved and maintained. The NRC inspectors verified that all the documentation at the Phoenix facility for deployment of equipment when called upon during an emergency was up to date and reflected the current conditions of the warehouse.

The attachment to this inspection report lists the documents reviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusions

The NRC inspection team concluded that PEICo/PIM is implementing its handling, storage, and deployment activities in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEICo/PIM is implementing its policies and procedures associated with the handling of SAFER equipment. No findings of significance were identified.

5. Corrective Action Program (CAP)

a. Inspection Scope

The NRC inspection team reviewed PEIco/PIM's policies and implementing procedures for the CAP to ensure prompt identification, correction, and verification of effectiveness in accordance with the requirements of NEI 12-06. The NRC inspection team discussed and reviewed a sample of PEIco/PIM's corrective actions, including nonconformances with PEIco/PIM's quality assurance manager and technical staff. The NRC inspection team verified implementation of PEIco/PIM's nonconformance report process (NCR) during maintenance activities throughout the week. The NRC inspectors verified that PEIco/PIM adequately identified possible deficiency trends through operating experience and previous NCRs to ensure proper corrective actions were taken when required. As an example, NRC inspectors reviewed corrective action report (CAR) 16-40, which required preventative maintenance to be incorporated into work order steps for the lubrication of priming pumps. This action was completed to better align maintenance requirements of the pump with its intended use. Although the pumps are considered to be self-lubricating per specifications, the manual describes how the system can be converted to a lubricating system by installing separate lubricant and discharge tanks using an antifreeze/water mixture as the lubricant. Also, the NRC verified non-conformance NCR-207 which described test hoses stenciled in error with underrated pressure rating were captured in the nonconformance program to ensure future vendor supplied hoses met required design criteria. The NRC inspectors reviewed the CAP program to verify that PEIco/PIM staff adequately documented the necessary evidence from PEIco/PIM's sub-supplier that indicated the hoses were rated to the specifications in the purchase order even though the markings were incorrect. The NRC verified that all other examples referenced in the attachment properly characterized deficiency and when applicable identified and implemented corrective action in accordance with PEICO/PIM's procedures.

The attachment to this inspection report lists the individuals interviewed and documents reviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusions

The NRC inspection team concluded that PEIco/PIM is implementing its corrective action program in accordance with NEI 12-06. Based on the limited sample of documents reviewed, the NRC inspection team also determined that PEIco/PIM is implementing its policies and procedures associated with the corrective action program. No findings of significance were identified.

6. Entrance and Exit Meetings

On November 28, 2016, the NRC inspection team discussed the scope of the inspection during an entrance meeting with Mr. John Giddens, SAFER Chairman, and members of PEICo/PIM management and technical staff. On December 1, 2016, the NRC inspection team presented the inspection results and observations during an exit meeting with John Giddens, SAFER Chairman, and members of PEICo/PIM management and technical staff.

ATTACHMENT

1. ENTRANCE/EXIT MEETING ATTENDEES

Name	Title	Affiliation	Entrance	Exit	Interviewed
Mark Olson	President	PEICo	X	X	
Randy Ebright	Director	AEP/USA	X	X	X
Martin Trum	AREVA SAFER Manager	AREVA USA	X	X	X
Jonna Potter	PIM Material analyst	PIM/SNC	X	X	X
John Giddens	SAFER EC Chairman	SNC	X	X	X
David Crawley	SAFER Project Manager	SAFER/PIM	X	X	X
Stan Piedra	PIM QA Manager	PIM	X	X	X
Randy Mundy	PIM Program Manager	PIM	X	X	X
Rebecca Rutherford	PIM Project Manager	PIM	X	X	X
Mark Boggs	PIM Inventory & Facility Manager	PIM		X	
Terry Jackson	Branch Chief	NRC		X	
Jose Jimenez	Reactor Operations Engineer	NRC	X	X	
Nicholas Savvoir	Reactor Operations Engineer	NRC	X	X	

2. INSPECTION PROCEDURES USED

IP 43006, "Inspection of the implementation of mitigation strategies order regarding the use of the national SAFER response centers (NSRC)."

3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>STATUS</u>	<u>TYPE</u>	<u>ITAAC</u>	<u>DESCRIPTION</u>
N/A	N/A	N/A	N/A	N/A

4. LIST OF ACRONYMS USED

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
ADAMS	Agencywide Documents Access and Management System
CAP	corrective action program
CAR	corrective action report
CFR	Code of Federal Regulation
COC	Certificate of Conformance
FLEX	Flexible Company Strategies
IP	inspection procedure
M&TE	measuring and test equipment
NCR	nonconformance report
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
NSRC	National SAFER Response Centers
PEICo	Pooled Emergency Inventory Company
PIM	Pooled Inventory Management
PO	purchase order
QA	quality assurance
SAFER	Storage Alliance for FLEX Emergency Response

DOCUMENTS REVIEWED

Programmatic Procedures

PRP 7.4 "Program Manager Organization, Authorities and Responsibilities", Revision 8 dated June, 2011

PRP 10.0 "Preparation and Review of Procurement Specification and Request for Bid (RFB)" revision 10

PIM Policy and Procedure (PPM) 7-7 "Corrective Action" revision 7, dated June 4, 2012

PEICo Quality Assurance Manual revision 3, dated April 1, 2014

AREVA N-51-9199717-014 "National SAFER Response Center Equipment Technical Requirements" revision 145, dated February 10, 2016

PPM 4-7 "Specification Preparation and Revision" revision 6, dated April 25, 2014

PPM 2-0 "Organizational Structure and Responsibilities" revision 11, dated September 23, 2015

PPM 6-7 "Purchase Order Development and Review" revision 16, dated April 12, 2016

PPM 7-7 "Corrective Action Program" revision 7, dated June 4, 2012

AP-1 "Indoctrination and Training" revision 5, dated May 20, 2015

AP-7 "PIM Storage Facility Procedure Controls" revision 4

PIM –Q7 “Equipment Maintenance Certification” revision 5, dated May 20, 2015

MI-0 “Maintenance and Storage Instructions for Equipment” revision 2, dated June 17, 2016

CP-9 “Measuring and Test Equipment Control and Calibration” revision 4, dated December 17, 2012

Procurement Documents

Purchase Order (PO) 201308 dated September 26, 2013

PO 201315 dated March 6, 2014

PO 201316 dated March 6, 2014

PO 201409 dated March 11, 2014

PO 201310 dated October 28, 2013

PO 201306 dated August 9, 2013

PO 201349 dated March 19, 2014

PO 201324 Steam Generator/ Reactor Pressure Vessel Makeup Pump

Specification NERRC101A001 No. 201324 Rev 2

Specification no. 201308S01 revision 2, dated September 11, 2013

Specification no. 201310S02 revision 5, dated October 20, 2015

Specification no. 201306S01 revision 2, dated August 1st, 2013

Approval of Specifications Equipment Committee Voting Record June 28, 2013 (201307S01 V1, 201308S01 V1, 201324S01 V1)

Equipment/Material Receiving Inspection Report (E/M RIR) No. 14-70 dated July 1, 2014

E/M RIR No. 14-198 dated September 16, 2014

E/M RIR No. 14-095 dated July 14, 2014

E/M RIR No. 14-086 dated September 24, 2014

E/M RIR No. 14-113 dated August 20, 2014

E/M RIR No. 14-159 dated September 18, 2014

E/M RIR No. 14-007 dated March 28, 2014

E/M RIR No. 14-159 dated September 18, 2014

E/M RIR No. 14-017 dated April 22, 2014

Test, M&TE, and Maintenance Documents

Preventive Maintenance Work Order (PMWO) P102390 "Light Tower-394" dated November 17, 2016

PMWO P102392 "Light Tower-398" dated November 17, 2016

PMWO P102430 "Mobile Boration Tank 4-1967" dated November 17, 2016

PMWO P102432 "Mobile Boration Generator 4-1968" dated November 17, 2016

PMWO P102436 "Ventilation Fan-2505" dated November 28, 2017

PMWO P102385 "Low Pressure Medium Flow Pump -2302" dated November 17, 2016

PMWO P102382 "Low Pressure High Flow Pump -2043n" dated November 17, 2016

Work Instruction-2-04C version 3, November 18, 2016

Temperature Switch gage A20 and A25 Series sect. 10-95026 rev. November 8, 2014

Areva Quality Control Surveillance Report February 24-28, 2014; Surveillance Report # 9219769-000

Thuemling Instrument Group: Span Calibration Certificate LFS310-600-PSI-G-QC Catalog No. 6124906 S/N: S46547; August 28, 2014

Thuemling Instrument Group: Span Calibration Certificate LFS310-160-PSI-G-QC Catalog No. 6107167 S/N: S37315; August 8, 2014

Thuemling Instrument Group: Span Calibration Certificate LFS310-30"Hg-VAC-QC-G Catalog No.6124906 S/N: S43735; September 2, 2014

Hold Tag #1018 QC Hold Test Equipment-201444 November 8, 2016

Equipment/Material Receiving Inspection Report 14-08: March 10, 2014

Bills of lading for the 1-18 FedEx Custom Critical Trailers

Email from Kochek Co Inc President to PEICO December 3, 2014 (PO: 45060)

Email from Hale Pumps Director of Engineering to PECIo December 1, 2016

MI-2-02 "High Pressure Injection Pump" revision 5, dated September 19, 2016

CP-10 (MI-2-06) "Batteries" revision 1, dated September 29, 2016

MI-2-10 "4160VAC Turbine Generator" revision 4, dated November 11, 2016

MI-2-20 "Standard Hose & Mechanical Connection Modules" revision 2, dated September 29, 2016

MI-2-04 "HALE Pumps" revision 4, dated October 19, 2016

Non-conformances and Corrective Actions

CAR #15-62 closed on November 11, 2015
CAR #16-40 closed on August 25, 2016
CAR #16-54 closed on December 1, 2016
CAR 15-04 closed on March 27, 2015
CAR 15-21 closed on July 30, 2015
CAR 15-35 closed on September 22, 2015
CAR 15-38 closed on September 17, 2015
CAR 15-48 closed on December 10, 2015
CAR 16-02 closed on February 5, 2016
CAR 16-06 closed on June 17, 2016
CAR 16-19 closed on July 28, 2016
CAR 16-21 closed on August 12, 2016
CAR 16-24 closed on August 31, 2016
CAR 16-30 closed on November 3, 2016
CAR 16-36 closed on August 30, 2016
CAR 16-47 closed on November 16, 2016
NCR #207 October 15, 2014
NCR #230 February 6, 2015
NCR #237 April 14, 2015
NCR #240 June 5, 2015
NCR #254 September 23, 2015
NCR #260 October 15, 2015
NCR #274 November 11, 2015
NCR #276 November 16, 2015
NCR #282 December 1, 2015
NCR #283 December 4, 2015
NCR #305 January 8, 2016
NCR #319 February 12, 2016
NCR #321 February 15, 2016
NCR #326 March 7, 2016
NCR #327 March 7, 2016
NCR #335 March 17, 2016
NCR #377 June 17, 2016
NCR #379 July 7, 2016
NCR #421 September 7, 2016
NCR #440 November 2, 2016
NCR #436 October 19, 2016