

September 28, 2007

Mr. Matt DeWitt  
Director of Business Development  
Cameron's Measurement System Division  
14450 JFK Boulevard  
Houston, TX 77032

SUBJECT: NRC INSPECTION OF THE IMPLEMENTATION OF THE CAMERON 10 CFR  
PART 21 PROGRAM AT THE CAMERON CITY OF INDUSTRY, CA, FACILITY

Dear Mr. DeWitt:

This letter responds to your letter dated September 6, 2007 (ADAMS Accession Number ML072640456), which provided information to the NRC to clarify the applicability of NRC requirements to Cameron, Inc., with respect to its asset acquisition related to certain differential pressure devices previously manufactured as nuclear safety-related components by PRIME Measurement Products, LLC (PRIME) (formerly Barton IIT). In your letter you stated that Cameron has never manufactured safety-related differential pressure devices for the nuclear industry and has not reached a decision as to whether it will undertake that activity. You stated that unless and until Cameron elects to manufacture nuclear safety-related differential pressure devices, Cameron is not required to maintain either a quality assurance program under Appendix B to 10 CFR Part 50, nor is it subject to the obligations of 10 CFR Part 21. Furthermore, you stated that Cameron is not subject to previous NRC findings related to PRIME's activities concerning the manufacturing of differential pressure devices for the nuclear industry.

However, in a letter dated April 24, 2007 (ADAMS Accession Number ML071790055), Cameron responded to the NRC Notice of Nonconformance and Notice of Violation that was issued to PRIME by letter dated October 5, 2006 (ADAMS Accession Number ML062830056). In the April 24, 2007 letter, Cameron identified the reason for the nonconformances and violation, corrective actions to prevent recurrence, and dates that the corrective actions would be completed. Additionally, Cameron provided a copy of the Cameron QU-121 procedure, "NRC Regulations to 10CFR, Part 21," Revision 4, dated April 17, 2007, which was revised to address the NRC Notice of Violation.

The NRC reviewed the Cameron response to PRIME's Notice of Nonconformance and Notice of Violation. In the NRC letter to Cameron, dated July 3, 2007 (ADAMS Accession Number ML071910228), we stated that the NRC had reviewed your letter and found that your reply to these issues was responsive to our concerns. Additionally, we stated that we may review the implementation of your corrective actions during a future NRC staff inspection to determine that full compliance had been achieved and would be maintained.

On August 6 through 10, 2007, the NRC conducted a follow-up inspection of the implementation of the Cameron 10 CFR Part 21 program. During the NRC inspection, the NRC staff identified several findings, as described in Enclosure 1. Had you been an actual supplier of nuclear safety-related components, these findings would have been violations of 10 CFR Part 21 requirements.

In your letter, you further stated that as part of the Asset Purchase Agreement, PRIME continued as a separate corporate entity to manufacture and deliver Barton Differential Pressure Transmitters for commercial, military, and nuclear applications. PRIME production of those products ceased on May 15, 2007, and those assets associated with that activity were also transferred to Cameron.

Based on Cameron's letters dated April 24 and September 6, 2007, it is unclear to the NRC as to which procedures were being used to manufacture the components (assets) transferred to Cameron on May 15, 2007. Accordingly, the NRC requests that Cameron officially notify the NRC when Cameron determines whether it will itself undertake to manufacture or sell the nuclear safety-related differential pressure devices. At that point, the NRC will determine the necessity of another inspection of the Cameron Appendix B to 10 CFR 50 and 10 CFR Part 21 programs as they pertain to activities conducted at your facility.

As a matter of public record, following the August 10, 2007, exit meeting, you requested information from the NRC staff regarding the inspection. This information was provided to Cameron as a summary of the exit meeting and is also included in Enclosure 2.

Sincerely,

*/RA/*

Juan D. Peralta, Chief  
Quality and Vendor Branch 1  
Division of Construction Inspection and  
Operational Programs  
Office of New Reactors

Docket No. 99901370

Enclosures:

1. Findings Related to 10 CFR Part 21 Requirements (Enclosure 1)
2. Clarification and request for documentation (Enclosure 2)

M. DeWitt

-2-

veral findings, as described in Enclosure 1. Had you been an actual supplier of nuclear safety-related components, these findings would have been violations of 10 CFR Part 21 requirements.

In your letter, you further stated that as part of the Asset Purchase Agreement, PRIME continued as a separate corporate entity to manufacture and deliver Barton Differential Pressure Transmitters for commercial, military, and nuclear applications. PRIME production of those products ceased on May 15, 2007, and those assets associated with that activity were also transferred to Cameron.

Based on Cameron's letters dated April 24 and September 6, 2007, it is unclear to the NRC as to which procedures were being used to manufacture the components (assets) transferred to Cameron on May 15, 2007. Accordingly, the NRC requests that Cameron officially notify the NRC when Cameron determines whether it will itself undertake to manufacture or sell the nuclear safety-related differential pressure devices. At that point, the NRC will determine the necessity of another inspection of the Cameron Appendix B to 10 CFR 50 and 10 CFR Part 21 programs as it pertains to activities conducted at your facility.

As a matter of public record, following the August 10, 2007 exit meeting, you requested information from the NRC staff regarding the inspection. This information was provided to Cameron as a summary of the exit meeting and is also included in Enclosure 2.

Sincerely,

Juan D. Peralta, Chief  
Quality and Vendor Branch 1  
Division of Construction Inspection and  
Operational Programs  
Office of New Reactors

Docket No. 99901360

Enclosure:

1. Findings Related to 10 CFR Part 21 Requirements (Enclosure 1)
2. Clarification and request for documentation (Enclosure 2)

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NAME	KKavanagh (JPeralta for)	DFThatcher	BWJones	JPeralta
DATE	09/28/07	09/26/07	09/26/07	09/28/07

**OFFICIAL**

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cc:

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## Findings Related to 10 CFR Part 21

## Requirements

- (1) The Nuclear Regulatory Commission (NRC) inspectors found that Cameron had made changes to QU-121, Revision 4, dated April 17, 2007 after the same procedure and revision had been submitted to the NRC in a letter dated April 24, 2007 as a response to violation 99901360/2006-201-01. The NRC determined that the procedure changes had, in effect, removed the necessary guidance which had been the basis for the staff's previous conclusion that Cameron had been responsive to the concerns identified to PRIME.

Therefore, as currently written, the Cameron procedure QU-121 does not meet the requirements of 10 CFR 21.21(a)(1).

- (2) The NRC inspectors found that there was no connection between the Cameron Corrective Action Program and the Part 21 program, as it was implemented by both Cameron and PRIME. The NRC inspectors identified three Part 21 evaluations, 05-005, 05-004, and 05-001, that did not have associated Corrective Action Request (CARs), Supplier Correction Action Request (SCARs), or Preventative Action Request (PARs). Two Part 21 evaluations, 06-002 and 05-002, listed CARs but the NRC inspectors could not determine the correlation between the Part 21 evaluations and the associated CARs, as required by Cameron procedures. Additionally, two Part 21 evaluations, 05-006 and 05-003, had associated CARs that were initiated either after the potential deviation report or after the industry advisory was sent out to customers.

In addition, the NRC inspectors identified two examples where the time requirements of Part 21 were not met based on an inaccurate definition of discovery as stated in Section 4.1 of Cameron QU-121 procedure. Based on these examples, the NRC inspectors determined that the Cameron procedure QU-121 lacked sufficient guidance to meet the requirements of §21.21(a)(1) and §21.21(b).

- (3) The NRC inspectors reviewed the PRIME 10 CFR Part 21 notification to the NRC dated November 2, 2005 (ADAMS Accession Number ML053180299). The NRC inspectors found that the PRIME notification was not listed on the NRC website as a Part 21 notification. Upon further review of the package, the NRC inspectors noted that PRIME had mailed the notification to the NRC. However, §21.21(d)(3)(i) requires that the initial notification be made by facsimile or by telephone within two days following receipt of information by the director or responsible corporate officer under paragraph (a)(1) of §21.21, on the identification of a defect or a failure to comply. The NRC inspectors determined that the Cameron procedure QU-121 does not have instructions on how to properly notify the NRC of an identification of a defect or a failure to comply, in order to prevent recurrence of the PRIME error.
- (4) The NRC inspectors reviewed Cameron QU-121 procedure and PRIME documentation related to Barton Model 763, 763A, and 764 transmitters. The NRC inspectors found that PRIME had issued an Industry Advisor letter dated January 15, 2007, titled "Barton Transmitter Defective Connectors – Supplement 1." The advisory, dated January 15, 2007, modified the May 15, 2006 PRIME advisory and recommended replacing lead-wired connectors with a quick-disconnect connector (QDC) for all connectors manufactured after May 31, 1982, in those transmitters used in applications where an

accident environment would necessitate protection of the connector from conductive contaminants. PRIME determined that the connectors were not fully qualified for use in a conductive accident environment. The NRC inspectors determined that the connectors not being fully qualified was a different deviation than the deviation reported in the May 15, 2006 industry advisory, i.e., defective external lead-wire connectors. PRIME did not perform an evaluation of this new deviation. The NRC inspectors determined that PRIME did not follow the requirements of §21.21(a)(1).

**From:** Juan Peralta  
**To:** Matt Dewitt  
**Date:** 08/20/2007 4:13:50 PM  
**Subject:** RE: Clarification and request for documentation

Dear Mr. Dewitt,

Please be aware that the information Ms. Kavanagh shared with you through this e-mail is entirely her personal opinion and does not represent an official NRC staff position. The information that was presented to you during the inspection exit meeting is considered pre-decisional and subject to management review and final approval. NRC inspection reports are normally issued within 45 days of the exit. If any findings are identified in our inspection report, you will requested to formally respond within 30 days.

Since this e-mail is now part of the inspection record, it will be enclosed with our inspection report and thus be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). If you feel this e-mail contains confidential and privileged information of Cameron and its Operating Divisions, you must specifically identify the portions that you seek to have withheld and provide in detail the bases for your claim of withholding (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).

You will have an opportunity to express your concerns to the extent they are related to the information contained in our final inspection report.

Sincerely,

Juan D. Peralta, Chief  
Quality & Vendor Branch 1 (AP1000/EPR)  
Division of Construction Inspection & Operational Programs  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
(301) 415-6621  
(301) 415-5399 (fax)

>>> "Dewitt, Matt" <[Matt.Dewitt@c-a-m.com](mailto:Matt.Dewitt@c-a-m.com)> 8/13/2007 2:09:52 PM >>>

Kerri,

ENCLOSURE 2



Thank you for your email. I have passed this information on for review, and I will let you know when I have any feedback.

Matt

-----Original Message-----

From: Kerri Kavanagh [mailto:[KAK@nrc.gov](mailto:KAK@nrc.gov)]

Sent: Monday, August 13, 2007 8:06 AM

To: Dewitt, Matt

Cc: Dale Thatcher; Juan Peralta

Subject: Re: Clarification and request for documentation

Matt -

I received both your email and your voicemail. The draft NRC inspection report is not complete and it is not customary for the NRC to provide draft reports to vendors. However, I will forward your request to my supervisor, Juan Peralta, for his consideration when he returns to the office on Aug. 20th.

Below is a summary of the exit meeting that was held on Friday August 10th.

The NRC conducted an inspection of PRIME Measurement Systems in July 2006. An NRC inspection report was issued to PRIME in October 2006 which identified two nonconformances with Appendix B to 10 CFR Part 50 and one violation of 10 CFR Part 21.

Cameron responded to the NRC's nonconformances and violation in a letter dated April 24, 2007. In response to the nonconformances, Cameron stated that it has implemented the use of a qualified connector assembly manufactured by EGS. However, EGS was not on the approved supplier list of PRIME or Cameron and an audit of EGS had not been conducted by Cameron at the time of the NUPIC audit (August 2007). Therefore, the NRC will not close the previous two nonconformances until Cameron resolves the issue with EGS. In response to the violation, Cameron provided Revision 4 of QU-121 dated April 17, 2007, which addressed the NRC concerns identified in the violation. However, at the time of the NUPIC audit it was identified that QU-121 (which is part of the Cameron quality assurance manual) had been revised without changing the revision number and date, and that those changes were not consistent with 10 CFR Part 21. Therefore, the NRC will not close this violation

until QU-121 is revised correctly to address the requirements of 10 CFR Part 21.

The NRC inspection conducted the week of August 6 through August 10, 2007, identified three potential violations of the requirements of 10 CFR Part 21. The first potential violation is associated with PRIME's failure to evaluate a new deviation associated with the original connectors environmental qualifications. The second potential violation is associated with not meeting the time requirements specified in 10 CFR Part 21. The NRC inspectors identified a few examples where the 60 day evaluation period and 5 day notification to customers was not met by PRIME (since Cameron has not done any 10 CFR Part 21 evaluations to date). In addition, the date of discovery for the deviations evaluated was difficult to determine since neither the PRIME/Cameron corrective action procedures or the QU-121 provides adequate instructions for documenting the date of discovery of the deviation. The third potential violation relates to notification of the NRC when PRIME/Cameron has determined that a defect that could cause a substantial safety hazard exists. The NRC inspectors identified one instance where PRIME notified the NRC by letter instead of by fax or phone as prescribed in the regulations of 10 CFR Part 21. The PRIME/Cameron procedure QU-121 also does not provide adequate instructions to properly implement this requirement.

From our inspection, it appeared that the Cameron corrective action and Part 21 procedures need significant amount of work to address these concerns. Even though Cameron did not acquire the corporation of PRIME, you did acquire the same individuals who were implementing the corrective action and Part 21 programs for PRIME. Going forward, if you correct and implement the corrective action and Part 21 programs, the issues identified by this current inspection should no longer occur.

I hope this helps address your concern. I am heading out of the office for another trip within the hour, returning on August 21st if you have any further concerns or questions.

Sincerely,

Kerri Kavanagh  
Senior Reactor Engineer  
Quality and Vendor Branch  
Office of New Reactors  
301-415-3743

>>> "Dewitt, Matt" <[Matt.Dewitt@c-a-m.com](mailto:Matt.Dewitt@c-a-m.com)> 08/12/2007 5:19 PM >>>

Kerri,

I met with our management to review the close out meeting Friday afternoon. We have concerns and would like to receive an email copy of your draft report next Monday or ASAP. I ask that the NRC does not publish the report until we have a chance to review.

The two items that concern us are:

1. You stated that we could have a potential liability for the connectors that were manufactured by Prime Measurement before they switched to the EGC connectors.
2. The lack of differentiation between Prime Measurement and Cameron. In particular to the violations that happened under Prime Measurement.

We want the NRC and NUPIC to clearly understand that we did not acquire the corporation of Prime Measurement. What we did acquire were the assets, intellectual property, and the equipment to manufacture the products.

In this type of acquisition Prime Measurement will still carry the liability of violations that happened under their management. We did not acquire the corporation or its liabilities.

Cameron is not currently in this industry with these products, and we are currently evaluating whether or not to enter. If the position of the NRC is that we are going to be liable for products produced by Prime, we may well make the decision not to enter this industry at all. We need to have the report reviewed by legal so we can get clarification/input prior to its release to the public.

For the same reason as stated above we want clear differentiation on the report between the actions that were cited against Prime measurement, and not Cameron. We cannot risk the damaging the reputation of Cameron when in reality we have not entered into this business. No orders have been accepted by Cameron and we have not built any product.

I am attaching a press release so you will have the details of the acquisition and close date of the acquisition.

Please understand that we do not have a problem addressing the issues you cited if we decide to go into this business. We are not willing to accept responsibility for something that is not our responsibility so we must get this clarified.

We are not going to start on any corrective actions until we decide whether or not we are going to enter this market.

Please send me a draft copy of the report as soon as possible so that we can make a decision. If you have any additional comments about our concerns we would like to hear them.

Sincerely,

Matt DeWitt

Director, Business Development

Measurement Systems

Tel: 281-582-9523

Cel: 432-528-9438

Email: [matt.dewitt@c-a-m.com](mailto:matt.dewitt@c-a-m.com) <<mailto:matt.dewitt@c-a-m.com>>

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**CC:** Dale Thatcher; Kerri Kavanagh; Nakoski, John

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**Subject:** RE: Clarification and request for documentation  
**Creation Date** 08/20/2007 4:13:47 PM  
**From:** Juan Peralta

**Created By:** JDP3@nrc.gov

**Recipients**

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