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Audit Report: xxx

Submitted By:

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xxx, 200x

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1.0 Executive Summary

On xxxx, E. Barsky and L. Grunbaum from the Practical Solutions Group, LLC performed an audit of xxx on behalf of xxx. The purpose of the audit was to determine the company's compliance status with the current regulations and its ability to support xxx studies for the xxx, xxx, as they relate to protocols xxx.

The twenty-three (23) deficiencies listed in Attachment 1 were discussed with xxx personnel throughout the audit and then again at the close-out meeting. Representatives from xxx and xxx participated in the close-out meeting via teleconference. The observations were forwarded to xxxx management on xxx, xxx for subsequent distribution to xxx and pertinent xxx management. A response was requested within 30 calendar days.

Attachment 2 identifies copies of xxx records, which are forwarded for xxx files in a separate folder.

The deficiencies in Attachment 1 are classified as follows:

#1 - general observation/impression

#2 - 8: issues related directly or indirectly to lack of timeliness on behalf of xxx

#9-10: record retention

#11 - security

#12 - document control

#13 - training

#14-15: company policies

#16-17: SOPs

18-23: validation issues

The details of the audit are provided in this report. None of the deficiencies observed is of immediate regulatory concern. However, unless corrected, the observed deficiencies can ultimately compromise xxx timelines as well as the quality of its data. Therefore, we recommend that xxx take the actions identified in Section 11.

2.0 Audit Purpose and Scope

xxx has been contracted by xxxx to collect xxx for xxx studies related to protocols xxxx, with the primary objective of evaluating the overall response rate for all studies.

xxx responsibilities include the following:

- xxx
- xxx
- xxx
- xxx
- xxx
- xxx
- xxx
- xxx
- xxx

The audit was performed at xxx offices in xxx on xxx, by E. Barsky and L. Grunbaum of The Practical Solutions Group, LLC on behalf of xxx. The purpose of the audit was to review the policies, procedures and associated documentation regarding the processes that will support these services.

It should be noted that xxx have yet been xxx at xxx for two reasons: 1) the xxxx has been approved only recently and 2) without that approval the xxx could not be generated and validated. The xxx will take place at the end of xxxx or beginning of xxx.

Therefore, the focus of the audit was to gain an understanding of the processes that place up to the xxx step. These processes include, but may not be limited to, xxx interaction with the xxx sites, obtaining information from the xxx sites, resolving queries, logging xxxx into the database and preparing xxx for a xxxx.

It is recommended that xxx revisit xxx prior to the xxx step. At the minimum, it is recommended that the following areas be inspected for compliance at that time:

- xxxx
- eCRF
- Test data transfer process (as per format identified in eCRF)
- Training records for two (2) xxx, one (1) xxx, clinical xxx monitor, xxx (including that the eCRF objectives were reviewed)
- Proprietary xxx application
- xxx manipulations

Attachment 2 identifies the documents reviewed as part of the audit, as well the xxx staff that participated.

3.0 Company Overview

Founded in xxx and located in xxx, xxx provides xxx services to the pharmaceutical, biotechnology and medical device industries. The company is xxx owned by xxx and utilizes its technology platform to focus on the design, implementation, centralized management and analysis of xxx for clinical trials, including xxx, xxx, xxx, xxx, xxx, as well as development of comprehensive xxx for Sponsors and/or FDA. xxx objective, as stated in their website, is to allow its clients to xxx, xxx, and xxx.

The following descriptive information was provided to the auditors at the outset of the visit or during the visit:

- Experience/General Information
 - Xxx people, of whom xxx% have xxx background
 - xxx years of xxx for drug development
 - Senior team, with xxx years of working together
 - xxx clinical trials
 - xxx FDA submissions
 - FDA audit in xxx (no 483s)
 - Low personnel turnover rate (about xxx%)
- Organization
 - Technical Operations: xxx
 - Clinical Operations: xxx
 - Quality Assurance: xxx
 - Business Development: xxx
 - Legal/Finance: xxx
 - Executive Management: xxx
- xxx – xxx Experience
 - xxx studies: xxx completed; xxx open
 - xxx patients
 - xxx sites
 - xxx countries
 - xxx Charters Submitted
- Areas of Interest
 - xxx: 40%
 - xxx: 35%
 - xxx: 20%
 - xxx
 - Devices

xxx Executive Management team consists of the following individuals:

- xxx
- xxx
- xxx
- xxx
- xxx

The auditors were informed that xxx experiences xxx client audits per month, which would point to the fact that they are experienced with hosting external audits. It was also stated that all audit responses are reviewed by the Executive Management Team to assure that any changes made for one client do not negatively impact another client.

The Quality Assurance Unit consists of the following: Director of QA, QA Assistant, Associate Manager of Document Control and xxx (xxx) Data Coordinators, one of whom is part time.

Observations associated with the general company policies that pertain to this section are provided in Attachment 1, numbers 14 and 15.

4.0 Facilities

xxx offices are at located at xxx, xxx. The offices are located on xxx floors of this building. During the facility tour, we were told that the xxx are located on the first floor; xxx is located on the third floor. The QC checks are performed in that area, and the cabinets in which some of the client specific documentation is stored are located there as well. The cabinets are locked at all times and can only be opened by the authorized personnel. The xxx, xxx, xxx facilities (see detailed description in Section 8.0 of this report) and corporate offices are located on the xxx floor. This may not be an exhaustive inventory of offices as the auditors focused only on areas within the audit scope.

The offices appeared to be in good repair with sufficient space for equipment and operations. The entrance to each xxx office location is locked and entrance gained only via a key fob. Key fob access is also required to the server room and the room identified as the archive room.

xxx utilizes xxx to store hard copy and backup tapes, and for emergency retrieval services. xxx QA has visited the location where hard copy is stored, and indicated that it will visit the location where electronic records are stored next month.

Observations associated with the specific documents and processes identified in this section are listed in Attachment 1, number 11.

5.0 Standard Operating Procedures

xxx SOP Table of Contents is referenced in Attachment 2 and its hard copy is included in the folder that is provided to xxx with this report.

The focus of the SOP review was on the xxx, xxx and xxx categories. Detailed discussions took place regarding the role of QA/QC support for all xxx processes.

All of xxx SOPs are current, approved and organized according to a complete index and through a comprehensive numbering system (SOP category, sub-designation and version number). SOPs are being reviewed every xxx or on as needed basis, with changes to the versions identified through the SOP's Revision History.

There is a process in place that requires for all personnel to be trained on the pertinent SOPs prior to the time SOPs become effective. To assure that xxx personnel do not use obsolete SOPs, only the current versions of the SOPs are maintained electronically on the company's Intranet to which the personnel have access. When the auditor asked to confirm for herself that this is so, the xxx denied the request.

The deviations to the SOP are recorded on the SOP deviation form. Hard copies of the obsolete SOPs are removed from the SOP binder and from the Intranet. This precludes personnel from accessing the old versions of the SOPs. xxx claims that the SOP originals are stored in the archive room and that outdated SOPs are retained at the site for a year, after which time they are stored at an off-site location for xxx years after they are made obsolete.

At least xxx SOPs (xxx) have been recently revised and will become effective when the employees are trained.. The revised SOP xxx includes a standard for who should review and approve SOPs, and the revised xxx addresses the quiz forms utilized for the SOP self-training.

Observations and recommendations associated with this section are listed in Attachment 1, numbers 16 and 17.

6.0 Training and Qualifications

Training and qualification requirements are provided in SOP xxx (xxx). The SOP requires that every employee be trained on the SOPs, xxx, and xxx. In addition, the SOP requires that employees' CVs be reviewed xxx and that all job descriptions be approved by executive management.

The auditors reviewed training records, including the individual training logs, for the following staff involved with xxx projects: xxx (xxx); xxx (xxx); xxx (xxx); xxx (xxx); and xxx (xxx).

The auditors also reviewed training provided by xxx, xxx employee, who provided "xxx"; and "xxx" training to xxx staff. On day 1 the auditors asked to see the training materials, which were provided only on day 2 of the audit. Regarding the trainer's CV, the auditors were informed that the CV was unavailable and that the CV would not be provided during the audit because xxx was on vacation.

Observations and recommendations related to training are provided in Attachment 1, number 13.

7.0 Project Management

xxx has developed a xxx-specific *Staffing Plan* that is intended to identify personnel involved with xxx work, as well as their back-ups. It was difficult to assess how many project status reports, project summaries and/or teleconference/meeting summaries were provided to xxx to date because none of these documents were shared with the auditors. When the xxx was asked to provide some of these documents, the response was that it will take time to gather them. Therefore, no further request to review them was made.

The xxx stated that the *Communication Plan* between xxx and xxx was finalized the week of xxx, xxx. That document was not shared with the auditors either. It is hard to predict if having such document in place will improve the xxx involvement and engagement with xxx studies.

The overall impression of the xxx ability to manage xxx work and specific recommendations to xxx regarding this aspect of xxx services are listed in detail in Section 10, titled "Comments/Impressions", of this report.

8.0 Manual Data Collection and Management Processes

The processes described below focuses mainly on the processes that surround interaction with the xxx sites, obtaining information from the xxx sites, resolving queries, logging xxx into the database and preparing xxx for a subsequent xxx.

Based on the xxx site selection from their clients, xxx performs a technical evaluation of the xxx sites to assure that they have the proper equipment to support the client's xxx studies. In addition, if possible, information is being collected on the sites' xxx procedures, which helps to assess xxx sites' capability to collect xxx according to the study-specific xxx guidelines. The study-specific xxx guidelines are listed in the xxx, a document that provides instructions and guidance to the xxx sites regarding xxx documentation, archival, collection, shipment/transport, etc. Changes to the xxx are supposed to be handled via Amendments, and the sites are supposed to be notified of those changes.

xxx also has capability to perform technical monitoring visits on behalf of the client. To date, there has been no request from xxx for these visits. As a result, xxx has not visited any of xxx sites nor is it planning for such visits.

xxx Forms from sites xxx, xxx and xxx were reviewed and appeared to be complete. xxx of these sites were assessed for xxx procedures. The xxx explained that sometimes this information is hard to obtain. xxx management indicated that their periodic inability to obtain the subject information is not problematic because xxx sets the xxx guidelines in a way that most of the xxx sites can meet. The information on the xxx procedures is captured in the Comments section of the electronic xxx site updates that are periodically sent to xxx. According to the xxx, the xxx procedures information was not available if that section is not complete.

When xxx arrive at the site, the xxx group logs them into the data log. Before the xxx are forwarded to the xxx for xxx to the xxx, which serves as data back-up, the incoming paperwork is inspected for discrepancies. All original xxx are

stored in the xxx room, access to which was denied. The explanation for the denial from xxx was that access to it is limited to the members of the xxx and xxx personnel who are part of xxx department. Since the audit team was not allowed to enter the xxx, there was no way of verifying that the xxx are stored there, assessing the overall organization/condition/size of the xxx or confirming the existence of the sign-out/sign-in log xxx claims to use for any documents taken out of the xxx. It is recommended that xxx requests access to the xxx during its subsequent visit.

Also, it should be noted that not all of the records that the audit team requested were readily available. Details are provided in Attachment 1, as part of the audit observations.

On the average, all the originals are stored at the site for a year, after which time they are forwarded to an off-site storage location. All xxx destruction requires a pre-approval from the client and is documented.

Xxx QA has indicated that xxx are xxx from xxx (e.g., xxx, xxx) on the day of their receipt. xxx personnel, who are responsible for this activity and for xxx (xxx - xxx – xxx), indicated that it is not always possible to maintain this timeline. In the audit observations to xxx, it was recommended that xxx QA monitor the timelines of the xxx process and that xxx be provided with periodic written updates regarding this information. This will help xxx to assess whether the timeliness of the xxx process is acceptable. If the process is not timely enough for xxx purposes, then it is recommended that a xxx-specific timeline for xxx be established and communicated to xxx in writing. It is also recommended that periodic checks be taken to confirm that the timeline is followed.

xxx personnel have indicated that other original documents (e.g., SOPs, client specific protocols/reports) are also stored in the xxx and that these documents are also stored in the electronic format for the purposes of a back-up. Only xxx Project Team and xxx QA, including xxx, have access to xxx related information.

Prior to the xxx being archived to the xxx and the xxx, the xxx performs a QC check for the accuracy and completeness of the information recorded on the xxx, as well as for compliance to the xxx guidelines. Discrepancies and incomplete and/or inaccurate information are queried, and no xxx can take place until the query resolution is received. The auditor questioned if it would improve the quality of the xxx completion if a second review of the form be requested from the xxx site, prior to it being sent to xxx. xxx is of an opinion that such a request would delay the xxx process further rather than improve the quality of the activity.

As per xxx request, the xxx criteria are being evaluated by the xxx at the xxx from the xxx standpoint. xxx responsibility is to assure that the xxx obtain, manage and transport xxx in accordance to xxx instructions listed in the xxx and that xxx are collected. Xxx is not responsible for following the xxx schedule and methods of xxx. Additionally, xxx is not responsible for informing xxx of the patient discontinuation from the study or performing the follow-ups on the patients for xxx.

In addition to the xxx obtained via xxx, xxx may choose to obtain data on the patient using some other methodology. That information gets recorded on the xxx and forwarded to xxx along with all the other xxx.

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It is the xxx responsibility to keep track of xxx and xxx dates. In case this information is not received or the xxx does not notify xxx about the xxx, it is the xxx responsibility to follow-up for the information.

To assist the xxx with complying with the xxx instructions, xxx requests that the sites apply xxx to the documentation that pertains to xxx-related studies. These xxx are intended to alert the xxx personnel to the fact that the xxx have to be collected in accordance with the xxx. However, xxx has no way of verifying whether the xxx follow these instructions.

xxx requests that the xxx and xxx be identified because it helps them to confirm whether the order of the xxx correlates with the rest of the information provided.

It should also be noted that the xxx to xxx states "...xxx recommends xxx" When the auditor asked for documented evidence that the xxx follow xxx recommendation, unlike the recommendation made in the xxx, xxx indicated that the xxx are rarely, if ever xxx, due to xxx. In addition, xxx claimed that, on the average xxx are xxx within xxx business days of their receipt at the site. Unless the timing for the xxx study-related xxx improves significantly, xxx will not be able to maintain this time schedule for xxx.

Also, for xxx study xxx xxx xxx will be making their assessment using the xxx criteria. This means that the xxx of the xxx status, rather than their xxx having to fall xxx, should match.

The most current listings of information were requested for xxx related studies xxx, xxx and xxx. Out of those records the following xxx (xxx) files were selected for a detailed review:

- xxx
- xxx
- xxx

The following hard-copy records within the folders were reviewed and assessed for compliance against the xxx (document that identifies xxx-specific requirements): xxx, xxx (only for xxx), xxx, xxx, xxx (where applicable) and xxx (where applicable). These files did not contain xxx, and, therefore, these forms were not reviewed.

Note: At the time the list of referenced documents was being compiled for this report, the auditor noted that the listing provided on xxx, xxx may not have been current. What appears to be the dates on which the listings were printed are xxx, xxx and xxx, xxx, respectively.

In addition, at the time the list of referenced documents was being compiled for this report, it was noticed that the xxx forms with the same heading information (details are described in Attachment 1, observation 12) also had a different "look and feel" for the same header information for approval, effective and supercedes dates. Namely, one has xxx logo, while another one does not. The footers and fields of the documents are different. This indicates that, unlike what xxx suggested as an explanation to the observation, there may be a more significant issue with the controls of the template versions.

It is recommended that xxx reviews pertinent xxx audit responses for reasonableness in light of these additional points.

Observations associated with the specific documents and processes identified in this section are listed in Attachment 1, numbers 1-10 and 12.

9.0 Automated Data Collection and Management Processes

xxx utilizes computerized systems to support its client service activities. The following computerized systems were reviewed and/or discussed during the audit:

- xxx: An internally-developed system used to xxx and xxx, xxx the xxx files according to a given project naming convention, and to xxx additional xxx attributes according to the needs of a given project.
- xxx: An xxx used by the project teams to record the receipt of xxx from xxx prior to the xxx being xxx to the xxx application. This system has been and is being used to support the xxx effort as a project management tool.
- xxx: xxx used by xxx QA to track corrective actions stemming from internal audits
- xxx: xxx to support change request and defect management

The auditors were informed that xxx and the xxx directly support the xxx study. The auditors did not observe or were made aware of any other systems that directly support the xxx study. We recommend that the follow up audit include a detailed analysis of xxx workflow to identify the source of each form, report, etc. and confirming that xxx is in compliance with relevant regulations and xxx expectations, as they pertain to the workflow.

The validation status of these computerized systems is as follows:

- xxx was tested (xxx-xxx) and there is objective evidence to support what was done, but this work was performed in a manner not in accordance with accepted industry practices. For example, there was no validation plan or report. Testing was done to confirm that approved requirements are being met, but neither xxx nor xxx reviewed these requirements for suitability to xxx projects. We recommend that the follow up audit include a review by xxx of the suitability of the functional requirements (e.g., appropriateness of the xxx method). Additionally, attention should be paid to confirming that xxx, xxx and xxx dates that are tracked in the system are accurately reflected in the system for xxx records.
- xxx was validated from xxx to xxx. The suite of validation documentation conforms to standard industry practices (e.g., validation plan, validation report, traceability matrix). An evaluation of the vendor (xxx) and related documentation (e.g., SOPs) was performed via a review of documentation sent by the vendor; xxx QA did not feel it necessary to visit the vendor. The auditors have no disagreement with this decision. This evaluation was documented. Requirements were developed and approved, and the traceability matrix confirmed that requirements were tested. However, the auditors felt that the xxx staff may not have an understanding of the

system's audit trail capability. This is reflected in the observations included in Attachment 1.

- Neither the xxx nor xxx was validated because the respective users indicated that these systems were xxx and therefore did not require validation. As a result of this indication, no evidence of testing was requested.

xxx QA recognizes that validation efforts conducted to date were not always performed according to regulatory requirements and expectations. xxx QA will therefore perform a "gap" analysis on all applicable computerized systems and develop a remediation plan (e.g., revalidate an existing system, enhance existing testing, develop new/updated policies and procedures, perform risk assessments of automated applications) to address the "gaps." We recommend that xxx review the "gap" analysis and remediation activities and ensure that all remediation activities of significance to xxx studies are completed to xxx satisfaction by the time of xxx (xxx/xxx).

The xxx organization consists of xxx people, as of the organization chart dated xxx. According to the documentation review of the above systems, xxx (xxx) of these individuals and the xxx have participated in the validation effort.

The auditors reviewed checklists supporting the installation of the following:

- Server Installation
- xxx
- xxxx
- Backup Server
- xxx
- xxx (xxx)

The auditors were informed that installation checklists do not exist for any other automated component (e.g. xxx, xxx). Additionally, there are no formal policies or procedures (e.g., installation qualification procedures) in place governing the installation of hardware and software that supports client processes.

There is currently no document (e.g., xxx) that provides the network architecture for xxx automation infrastructure (e.g., servers, applications resident on the respective servers, interfaces between the servers, firewalls).

Observations and recommendations regarding xxx automated data collection and management processes are provided in Attachment 1, numbers 18 – 23.

10.0 Comments/Impressions

Listed below are the auditor's comments and impressions resulting from the interactions with xxx staff. We are providing these points because, in the aggregate, they created a lack of confidence in the ability of staff to adequately support xxx studies. The comments and impressions are as follows:

- We had to request documents (e.g., xxx, xxx) multiple times before they were provided. The impression was that the xxx staff was not attentive to our requests, did not care about making a good impression and/or was hoping that we would forget to follow-up on our requests.
- We established an internet connection to check email but decided to ask permission before logging into our website. The xxx went to check and then falsely informed us that "there is no way to get out from here." We

do not understand whether the dishonesty was intentional or whether the answer was provided just to “blow us off”, even though there may not have been any knowledge of the existence of the internet connection.

- We felt that the xxx staff was uncomfortable with giving us an opportunity to review xxx study-related records in detail. This is indicated by the following:
 - On day one we received a permission from the xxx to make copies of xxx-related records for our files so that we could include supporting details in the audit report (this document);
 - As the copies were being made, the xxx informed us that permission will be granted to take any copies off-site only upon a written authorization from xxx;
 - At around 9AM in the morning of day two such an email approval was send to xxx;
 - We promptly notified xxx that the email approval was sent but he made no effort to check for it;
 - Around 1 PM and after several requests to retrieve the authorization e-mail, we were informed that a faxed copy with a signature from xxx employee would be needed in order for xxx to be able to provide us with copies of the documents that we requested. This was especially interesting because it gave the impression that xxx was trying to “buy time”, and also because:
 - When questioned about the formal approval of the xxx, xxx stated that there was e-mail correspondence that signified xxx approval of the xxx to perform study-related activities for xxx. Since there was no mention of the fact that those e-mails were signed by xxx personnel and since copies of those e-mails were never shared with us, we believe that xxx signature may not have been requested in that case.
 - xxx felt it necessary to have a written approval from xxx to release copies of xxx-related documents to us but a written approval was not required for xxx to begin study-related activities for xxx.
 - The copies of the documents were not made until the very end of our visit, which prevented us from obtaining everything we needed.
- We were informed that xxx was “intimated” by the auditors’ questions and that was why he couldn’t provide detailed or accurate answers. It should be noted that the xxx CV stated that he was the President and CEO of his own company. It is hard to believe that someone who held these titles would be that easily intimidated by auditor’s questions. It was also quite strange that xxx, as well as the xxx, were never issued business cards, especially since, according to the CV, the xxx has been with xxx since xxx. The xxx indicated that the xxx started with xxx as a consultant.
- Additionally, even though present in the room, the xxx, for the most part, seemed to be totally disengaged from the second day of discussions.

Instead, his boss, the xxx, answered most of the xxx-related questions but was combative. When the questions were addressed directly to the xxx, he was irritated and uncomfortable and, rather than passing over the requested documents, seemed to be throwing them.

- Furthermore, when specific xxx-related QC training records were requested for an individual who left the company, the xxx stated that the individual did not work on that project. The evidence of the fact that the individual in question in fact worked on the project was confirmed only after the audit, at the time when the observations to xxx were being compiled against copies of the documents that were eventually released for us to take. It should be noted that the latter point was not included in the observations that went to xxx because this issue was not noted during the audit itself.
- All these behaviors exhibited by the xxx raises the following questions:
 - If the xxx is knowledgeable of xxx daily operations, why would he be intimidated by probing questions?
 - If a serious problem occurs, could xxx rely on the completeness and accuracy of his responses to xxx queries?
- We were not able to observe selected aspects of the xxx operation:
 - We were not allowed to view the room identified as the xxx because of the risk that we would observe something related to other clients (it should be noted that xxx had several weeks to prepare for our visit so they had the opportunity to address any concerns that they might have had relating to confidentiality)
 - On the day of the audit, no xxx were performed. As a result, no one was able to provide us with a xxx demo. This was surprising in that 1) the audit was scheduled several weeks in advance so xxx had the opportunity to make appropriate arrangements and 2) the xxx are the very core to xxx operations for not even one of them to be at the site on the day of the audit.
- As signified by the signatures on the SOP training forms, the xxx is assisting the xxx with an SOP quiz test score review. When questioned how often xxx reviews personnel training records, xxx stated that this question should be addressed to the xxx. It was obvious that the xxx either did not know the answer or did not want to respond.
- A “missing” record was in the “transit” study files for over a month, after it was received from the xxx and only had to be logged in to be transferred to the respective xxx file. When questioned regarding the timeliness of the process, the xxx indicated that such timeframe is perfectly acceptable.

Until confidence is gained in the xxx ability to support xxx studies in a timely and quality manner, it is strongly recommended that xxx closely monitor all xxx activities.

11.0 Conclusions

No deficiencies of immediate regulatory concern were observed. However, unless corrected, the observed deficiencies can ultimately compromise xxx timelines as well as the quality of its data. Therefore, we recommend that xxx take the following actions (note that a reference is provided to the sections in this report that contain supporting details):

- **Revisit** xxx prior to the xxx (Section 2). At the present time, xxx is scheduled in the xxx – xxx timeframe. We recommend that xxx examine the following areas, at a minimum, for compliance to regulations and, if pertinent, xxx protocols at that time:
 - xxx Procedure of xxx xxx (xxx)
 - xxx
 - Test data transfer process (xxx)
 - Training records for xxx (xxx) xxx, xxx (xxx) xxx, xxx, xxx (including that the xxx objectives were reviewed)
 - xxx
 - xxx
- **Request** access to the xxx during the subsequent visit (Section 8).
- If the xxx process is not timely enough for xxx purposes, then **establish** a xxx-specific timeline for xxx (Section 8). This timeline must be communicated to xxx in writing. It is also recommended that periodic checks be performed to confirm that the established timeline is followed.
- **Review** pertinent xxx audit responses for reasonableness regarding templates in light of the points included in the note in Section 8.
- As part of the follow-up audit, **analyze** xxx workflow to identify the source of each form, report, etc. and confirm that xxx is in compliance with relevant regulations and xxx expectations as they pertain to the workflow (Section 9).
- **Review**, as part of the scope of the follow-up audit, suitability of the functional requirements (e.g., xxx) for xxx (Section 9). Additionally, attention should be paid to confirming that xxx, xxx and xxx dates that are tracked in the system are accurately reflected in the system for xxx records.
- **Review** xxx “gap” analysis and remediation activities regarding computer system validation and ensure that all remediation activities of significance to xxx studies are completed to xxx satisfaction by xxx (xxx/xxx).
- **Monitor** closely the xxx ability to support xxx studies in a timely and quality manner (Section 10). The close monitoring should continue until confidence is gained in the xxx ability to support xxx studies.

Attachment 1 – Observations and Recommendations to xxx

Observation #1: The issues noted below involved instances where the personnel with direct responsibility over xxx projects could not provide the auditor with adequate and timely explanations:

- The xxx copies of xxx (the source documents), which are stored in xxx files, are illegible. These forms are maintained by xxx for xxx traceability until the xxx, with a signature from the xxx, is received. On Day 1 of the audit, the auditor was informed by one person that the data is maintained in the xxx, and a second person indicated that the maintenance of xxx copies of xxx, is indeed problematic. On Day 2 of the audit, the auditor was informed by a third person that, before the xxx original is sent to the xxx, a xxx copy of the form is made. This xxx copy is attached to the copy of the letter that goes to the xxx and lists all xxx. These legible copies are retained in xxx files, which are separate from the xxx files. The auditor was informed that the above process is informal in nature; i.e., not documented.

- The comments section of the xxx stated that a xxx of the xxx for the xxx, xxx xxx file was received by xxx. However, it was missing from the respective xxx file. The project personnel did not know where the form was. Another individual found the “missing” copy, towards the end of the visit, in the xxx file after being informed earlier that day that the form was missing from the xxx file. The form was received on xxx, xxx, but was not filed into the patient files until xxx, xxx. It is not clear why the process of returning the outstanding document to the proper file has taken over a month.

Impact #1: These issues do not represent immediate regulatory risk to xxx. It is evident that high-level processes have been established and that the personnel are qualified, based on their education and experience included in the CVs, to carry out those processes. However, it may become a significant regulatory risk if a better process is not established for the xxx project personnel to provide a clear, accurate and consistent explanation to process-related questions. This is because the auditor will walk out with the impression that the information is not available. Additionally, the impression was that there is a lack of understanding and/or knowledge amongst the project team regarding project details. xxx clients, auditors and FDA expect the project staff to be familiar with process-related details and be able to clearly and promptly communicate required/requested information.

Additionally, at least one individual involved in discussions is directly responsible for training the xxx and the xxx. The inability to explain issues clearly and/or completely may potentially lead to the misunderstandings, on the part of xxx and internal personnel, of xxx processes/requirements, xxx expectations and xxx study-specific requirements.

Recommendation #1: xxx should gain an understanding as to why the individuals directly involved in the initial discussion were not able to provide factual information as identified above. This issue is critical from a business perspective because it will potentially prevent others from accurately and/or fairly assessing xxx capability to support clients and/or maintain regulatory compliance. Additionally, xxx should ensure that the processes are documented appropriately and that the project staff is familiar with

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the details of the process to be able to clearly and promptly communicate required/requested information.

Observation #2: The xxx related to xxx study xxx were sent to xxx as early as in xxx xxx. The xxx, which is specific to the subject study, was not in place until xxx, xxx. Documentation of the xxx training on the xxx content was not generated until xxx (the day before the audit).

During the audit, the xxx team verbally indicated that the xxx who performed the initial QC check on xxx study-related xxx were previously trained on the usage of QC forms. However, the xxx team could not point to specific training documentation. Only at the conclusion of the audit was the auditor informed that the former training documentation for this activity was included in the xxx. When finally provided, the training documentation was reviewed and found to be acceptable.

Impact #2: This observation does not have a direct impact on xxx because 1) no xxx have yet been xxx at xxx for xxx studies and 2) the personnel performing the initial QC activity were trained in the past. Had the xxx personnel provided or pointed to the supporting training documentation at the time the initial discussion took place, the questions regarding the compliance with the process would have not been raised.

Also, there is an expectation that documents that support client studies be generated in a timely fashion. It is the auditor's opinion that generating the required documents xxx months after the study started is not "timely." While this does not present a direct risk to xxx studies, lack of timeliness does not reflect well on xxx operations.

Recommendation #2: xxx should update xxx (xxx) to include requirements for generating and approving the xxx prior to the client's project start-up. Additionally, xxx personnel that interact with auditors should be expected to provide supporting documentation in a timely fashion. xxx should provide training to that affect.

Observation #3: While reviewing xxx files xxx, xxx, xxx, xxx and xxx, the auditor noted that a number of resolutions to xxx were not received from the xxx for over xxx (xxx) months. xxx procedures require that all xxx be resolved before the xxx are entered into the internal database for a subsequent xxx. Also, the xxx requires that the resolution of xxx take place as quickly as possible.

Impact #3: It is the auditor's opinion that a xxx-month delay in receiving xxx resolutions is not timely. If the timeliness does not improve, there is an increased risk that xxx study timelines will be negatively impacted.

Recommendation #3: Timelines for collecting the xxx from the xxx should be tightened. The xxx, which is sent to the xxx, should be updated to include a section related to responding to xxx xxx. Specifically, xxx should establish clear expectations of the sites regarding: a) the timeliness and completeness of providing xxx with the requested information and b) the need for all individuals at the xxx who participate in this process to be trained and for such training being documented. Alternatively, if the xxx cannot be received in a more timely fashion, the project timelines should be modified accordingly.

xxx has indicated that they have been regularly following up on the xxx, but have had little success in obtaining information from the xxx in a timely fashion. As a result, in

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addition to the regular updates that xxx is currently providing to xxx, it is recommended that the xxx project team make an extra effort to clearly and promptly communicate to xxx both the lack of xxx timely responses regarding the xxx and/or issues surrounding xxx. This will ensure xxx direct oversight of the project and their involvement with resolving issues related to the project.

Furthermore, if the xxx improve the quality of completing the xxx, there will be fewer instances that require xxx to xxx. The xxx project team should collaborate with xxx to identify major negative trends regarding the xxx completion of the xxx, and determine the most effective and efficient way to eliminate the identified deficiencies.

Observation #4: The xxx is mentioned in the xxx-specific xxx, but the form itself is not included in the xxx.

Impact #4: The existence of the process for gathering the information required by the xxx from the sites was confirmed during the audit. However, since the form was not part of the xxx, it is not clear whether all of the appropriate xxx members have been trained on using it and whether there is any correlation between the lack of a timely xxx and the fact that the appropriate team members may not have been trained.

Recommendation #4: The xxx should be included in the xxx, and xxx (xxx) should confirm that all appropriate personnel have been trained on the form's content and its appropriate use. If such training took place, xxx should be provided with copies of appropriate training records. If appropriate personnel have not been trained, such training should be conducted in a timely fashion to address the criticality of and the reason for collecting xxx from the sites on the open issues.

Observation #5: The "xxx" in the xxx require that the xxx for the xxx be recorded. The instructions do not require the xxx recording for the xxx. However, in some instances the missing information for the xxx was not queried for and in some instances it was.

Impact #5: If xxx continues to query for unnecessary and inconsistent information from the xxx, it will further add to the xxx confusion regarding filling out the xxx and will further delay the xxx responses to xxx clarification xxx.

Recommendation #5: The xxx should have a consistent and complete understanding of the xxx requirements, as well as that of xxx internal practices related to the interaction with the xxx. It is left up to xxx to determine how to best implement and enforce this matter. xxx should be provided with a plan of action regarding this issue.

Observation #6: It has been observed that xxx (xxx) different xxx of xxx and xxx have been recorded on the xxx for xxx, xxx. This triggered a general question regarding what happens if xxx receives the conflicting information for the same data field from xxx sources that support xxx studies: xxx and xxx.

The xxx has indicated that xxx information would be relied on, if there was an information discrepancy between xxx and the xxx, but this decision has not been documented anywhere.

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Impact #6: There is no regulatory significance to this finding. However, from a business perspective, it would be important to clearly communicate this information to the xxx in writing. Knowing whose information serves as the “gold standard” would potentially facilitate closures to some discrepancy resolutions, thus allowing xxx to better manage and maintain xxx study timelines.

Recommendation #6: xxx should suggest an appropriate document that would identify in writing the site that holds the “gold standard.” Such a document should be updated in a timely fashion, and training should be provided to those who need to have this information, as well as to know how and when to use it.

Observation # 7: Study team contact information has not been updated in the xxx since xxx. For example, xxx is still listed as the xxx in the xxx, when, in fact, he is no longer with the company.

The study team contact information provided in “xxx” of the xxx, which was generated at a much later date, is not current either. For example, xxx, who is an xxx and currently works on xxx project, is not listed in the xxx. It should be noted that xxx was trained on QC procedures, as per training documentation retained in the xxx.

In addition, the “xxx” section of the xxx lists xxx as the xxx, rather than the xxx, his current role.

It should be noted that the xxx staff verbally indicated that the xxx are notified of the contact information changes, but the timeliness or completeness of this claim was not confirmed.

Impact #7: There is no written requirement for the xxx to promptly communicate all study-related changes to xxx and/or xxx. Therefore, there is less assurance that this will be done than if it were in writing. Clear and prompt communication is critical to the effectiveness of xxx operations overall and to the xxx team that works on xxx project specifically.

Recommendation #7: A documented trail (e.g., letters, faxes, e-mail) should be established and forwarded for xxx files in order to ensure xxx that all sites participating in xxx studies, as well as xxx itself, were notified of all changes in a timely fashion.

Also, xxx should review the xxx for their content accuracy and completion and, if necessary, immediately inform the sites and xxx of any changes that may not have been communicated to them previously.

xxx should revise the xxx-specific xxx to include instructions on promptly communicating changes to both the xxx and xxx, and to train all of the responsible personnel on this documented requirement.

Observation # 8: SOP xxx (xxx) requires that the xxx be forwarded to the client for approval. xxx was finalized on xxx, but as of xxx, the sign-off page with the client’s formal approval was still not available.

Impact #8: It was verbally indicated that xxx has given its approval over e-mail. While it points to the fact that xxx is aware of the document content, it still creates a perception that the xxx is not closing open items in a timely fashion.

Recommendation #8: xxx should obtain the sign-off page immediately. Additionally, a better route of communication and follow-ups needs to be established between xxx and xxx. It is recommended that a standard timeline for document reviews and approvals be established between the two companies and documented.

Observation #9: *SOP xxx (xxx)* states that all records will be secure and reasonably protected from fire, flood, etc. during the required retention period. However, the on-site cabinets in which the documents are stored are not fire-proof, and the storage area, where the original xxx and xxx are retained, have active water sprinklers. The existing record protection set-up at the company does not support the requirements of the SOP.

Impact #9: There is a low risk to xxx in terms of data/information/documents physical destruction, assuming that xxx will xxx all of the original xxx and xxx documents in the electronic format within a reasonable period of time after the xxx are received by the site. There is a process in place for doing that, but the timeliness of its implementation was not confirmed.

In addition, xxx is developing a disaster contingency plan to ensure that the source data and original documents, that are currently stored at xxx site, are adequately protected from destruction.

Recommendation #9: xxx is generating electronic copies of xxx and xxx upon their receipt at the site. It is recommended that until the disaster contingency plan is implemented, the timeliness of this activity, as it pertains to xxx studies, be periodically monitored by xxx QA and that the periodic written updates on this activity be provided to xxx.

In addition, xxx should provide xxx with a copy of the approved disaster contingency plan in order for xxx to be able to keep track of the project status and progress.

Observation #10: There is no explicit requirement in the xxx for the site to retain a copy of the xxx that is being sent to xxx.

Impact #10: If the xxx overlooks the fact that it needs to retain a copy of the xxx at its site, and if the only copy sent to xxx gets lost in mail or destroyed during shipping, xxx will not be able to obtain xxx for the xxx for that xxx. It should be noted that the xxx is considered to be the source data.

Recommendation #10: While the xxx believes that this requirement is implied in the xxx, based on their own claimed difficulties with collecting the information from the xxx, it is best to add the requirement to the xxx. This revision should be communicated to the xxx in writing as soon as the change to the xxx is made, and the documentation of such communication should be retained by xxx.

Observation #11: On the first date of the audit, the front door to the facility was not locked.

Impact #11: It is unlikely that this issue presents a high security risk to the company because the space on the xxx floor of the building is relatively small. This allows for unattended visitors to be spotted quickly. Also, the areas where xxx claims to store

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documents have limited access. However, it gives a first impression that some of the company's personnel are either unaware of the existing policies or are not taking their job responsibilities seriously.

Recommendation #11: All of xxx personnel should be reminded of the need and reason for strictly adhering to company's policies.

Observation #12: There were xxx (xxx) issues noted re: the usage of xxx (xxx) forms:

- The general xxx forms (xxx) with the same header information regarding approval, effective and superseded dates (xxx, xxx, xxx, respectively) did not contain the same field information. One form had the xxx field for the form's version number, and another one did not. The form (xxx, xxx, xxx) without the version number field was used on xxx, xxx, after the form with the version number field became effective on xxx, xxx.

Note: it was explained that the templates are maintained in MSWord format and that it is possible that the individual who entered the information in the xxx has inadvertently deleted the xxx version field from the template.

- On xxx, xxx, after corrections were made to xxx-related study information on the xxx form, which required the inclusion of the version number information that tracks changes to the corrections made to the form, the version number information had not been properly updated in order to reflect the fact that the change was made. This observation pertains to xxx, xxx, xxx.

Both observations were made after reviewing only xxx (xxx), randomly selected patient records.

Impact #12: Regarding the first bulleted item, the template's MSWord format allows changes to the document to be made after its approval. This did and may in the future result in using the incorrect template for xxx information recording and xxx tracking purposes. Usage of the unapproved and/or obsolete template format is of a regulatory significance.

Regarding the second bulleted item, in this case it is possible to trace the change (the change is highlighted, dated and on the bottom of the form it is stated "corrected by"). However, not having seen enough forms with multiple changes made to the same record, it is hard to assess the seriousness of this procedural deviation. However, it gives an impression that some of the company's personnel are either unaware of the existing policies and/or are not taking their job responsibilities seriously.

Recommendation #12: Regarding the first bulleted item, xxx QA should assess and document the risk of using the MSWord format for their version controlled form templates. A statistically representative sample of xxx records should be used to make this assessment, and acceptance criteria have to be set in advance of performing this task. If the acceptance criteria are not met, xxx has to enhance its process for maintaining general templates.

Regarding the second bulleted item, all of xxx personnel involved with the process should be reminded of the need and reason for strictly adhering to company's policies. xxx QA has to establish and document that not updating the xxx form's version number (as it

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relates to xxx studies) at the time of the changes is an isolated incident. Depending on the number of similar examples found, QA needs to assess whether an SOP xxx has to be completed or whether an appropriate SOP has to be revised to clarify the procedure.

Observation #13: Several training records of the individuals who work on xxx projects were selected. There were xxx (xxx) issues noted as follows:

- xxx completed his SOP xxx (xxx) training on xxx, xxx by taking a quiz. At the time of the audit (on xxx), QA's review of xxx quiz test results was missing. It was indicated that had it not been for the audit, most likely the review of these training records would not have been performed until the next training record periodic review.
- As of xxx, xxx, had not completed training on a few revised xxx SOPs. The SOP training that was missing from the training records pertained to the SOPs revised in xxx.

Impact #13: Regarding the first bulleted item, there was no impact in this particular case because, after the quiz review, xxx QA established that the individual passed. However, had he not passed the quiz there may have been an impact on xxx studies. Specifically, xxx would be engaged with the xxx processes while possibly not understanding the SOP, and this would not have been noted until the next periodic training record review.

Regarding the second bulleted item, the impact of this observation will not be known until changes between the current version of the SOPs and the previous ones are assessed.

Recommendation #13: Regarding the first bulleted item, xxx QA should avoid such omissions in the future. All training records, related to individuals who perform work for xxx, should be checked for the timeliness of QA review. If the SOP review has not been performed and/or if the individual(s) has/have not passed the quiz, the impact on pertinent operations and/or xxx studies should be assessed, documented and forwarded for xxx files.

Regarding the second bulleted item, xxx should be immediately trained on the revised SOPs. Every change to the SOP should be assessed in writing regarding whether lack of training had any impact on xxx related processes, and if so, how serious the impact was. Copy of such documentation should be forwarded for xxx files.

Observation #14: xxx personnel could not say with certainty whether it is their company's policy, as part of their standard background check, for the Human Resources to confirm that the individual performing work for xxx is on the FDA debarment list.

Impact #14: If an FDA debarred individual is hired or contracted with, studies that such an individual works on may deem to be non-submittable. One of such studies may be xxx study, since xxx performs work for xxx.

Recommendation #14: If such a check is not currently performed, xxx must include it into their hiring/consultant retaining process starting immediately.

Observation #15: Currently xxx are not required to have xxx.

Impact #15: The xxx is a somewhat subjective process. Poor or deteriorating xxx will add more bias to xxx process. Depending on the severity of the xxx problem, it is highly possible that xxx will be xxx less accurately by individuals with the xxx problem than those who have a xxx.

Recommendation #15: To minimize the subjectivity of the xxx process, it is advisable that xxx requests that all xxx undergo xxx. Acceptance criteria for the xxx should be established and agreed to by xxx, and no xxx should be allowed to participate in xxx study until the requirement is met.

Observation #16: *SOP xxx (xxx)* defines the corporate standard for developing and managing the SOPs for xxx. Section xx includes a prohibition against printing electronic SOPs. The prohibition by itself will not prevent unauthorized printing nor mitigate the affects of an SOP that is printed in violation of the SOP.

Impact #16: A printed SOP may not be current and a person could therefore be operating according to an obsolete SOP. This is a frequent citing in regulatory inspections.

Recommendation #16: xxx should indicate, either in the SOP or via a watermark in the SOP footer, that a printed SOP is valid only on the date printed. This would also require including the “print date” in the printed copy of an SOP.

Observation #17: *SOP xxx (xxx)* defines mandatory computer systems security procedures to be employed at xxx and describes the specifications, procedure and requirements for computer systems security. The SOP does not address the need for documented procedures for requesting access privileges for new employees and changing privileges when job responsibilities change.

Impact #17: Not formalizing the specifications, procedure and requirements regarding new and modified access privileges will weaken the company’s ability to ensure that only authorized access is permitted to computerized systems and electronic records. Not having these procedures will preclude xxx from providing the basis for establishing a cumulative record that indicates, for any point in time, the names of authorized personnel, their titles, and a description of their access privileges.

Recommendation #17: xxx should formalize existing procedures regarding new and modified access privileges in the subject SOP, or in another SOP if deemed appropriate. The procedure should also identify the applicable documentation and where the documentation will be maintained. Additionally, xxx QA should periodically audit and document this process as follows:

- Compare authorization documentation to existing privileges to confirm that all documentation is current;
- Compare existing privileges to documentation to confirm that all access is properly authorized.

Observation #18: There is currently no document (e.g., xxx) that provides the network architecture for xxx automation infrastructure (e.g., servers, applications resident on the respective servers, interfaces between the servers, firewalls).

Impact #18: Lack of such a document, supported by the detailed inventory that is maintained by Information Technology regarding hardware, software and peripheral equipment, will slow down restoration of the infrastructure should the equipment at the main office be destroyed (e.g., water damage) or restoration at an alternate site becomes necessary.

Recommendation #18: xxx should develop such a xxx as well as a procedure to keep the xxx current (e.g., what might trigger a change to the network, how often the diagram should be reviewed).

Observation #19: The validation documentation reviewed contained inconsistencies and potential errors/oversights. Specifically:

□ xxx

- No testing was performed to confirm that unauthorized access to the system is not allowed;
- No testing was performed to confirm that multiple changes to a given field are each captured in the audit trail (i.e., no records are overwritten or deleted);
- Testing was performed and completed on xxx but one of the pieces of objective evidence, confirming successful completion of the test, beginning on page xxx of xxx, was generated on xxx (after the validation was deemed to be complete);
- Section xxx of the “xxx”, which was developed to bridge the gap between current xxx validation standards and standards existing at the time of validation, identified xxx as the person responsible for “evaluation of results” and “summary report.” There is no documentation of either of these items in the binder nor was such documentation presented to the auditor.

□ xxx

- Neither Test Series xxx (xxx) nor Test Series xxx (xxx) contained tests to challenge the system by attempting to do these functions without having xxx;
- For Test Series xxx, screen prints xxx and xxx were taken at 2:03PM and 2:06PM, respectively. Screen print xxx and subsequent screen prints were at 9:44AM and later in the morning of the same day. The tests were designed to be executed sequentially.
- For Test Series xxx (xxx), there was no testing of challenges (i.e., testing limitations);
- On the “test results” page for Test Series xxx – xxx, several steps did not generate the expected result but the respective step status was marked “pass” without an explanation;
- For Test Series xxx, the screen prints were taken at the times bulleted below (note that xxx a and b are out of sequence and there was no

explanation as to why they are out of sequence), all on the same day, although the test was designed to be executed sequentially:

- xxx – 12:11PM
- xxx – 12:12PM
- xxx – 3:13PM
- xxx – 3:14PM
- xxx – 3:14PM
- xxx – 2:57PM
- xxx – 3:00PM
- xxx – 3:16PM
- xxx – 3:17PM
- xxx – 3:18PM
- xxx – 3:25PM
- xxx – 3:26PM
- xxx – 3:26PM
- xxx – 3:27PM

Impact #19: In the main, the validation documentation provides confirmation that the respective systems operate as intended. However, the lack of challenges raises a question as to whether the respective systems identify or detect invalid or improper actions/data. Additionally, the issues with respect to the screen prints – the objective evidence – raise questions as to the veracity of the evidence itself.

Recommendation #19: xxx QA recognizes that validation efforts conducted to date were not always performed according to regulatory requirements and expectations. xxx QA will therefore perform a “gap” analysis on all applicable computerized systems and develop a remediation plan (e.g., revalidate an existing system, enhance existing testing, develop new/updated policies and procedures, perform risk assessments of automated applications) to address the “gaps. In context of xxx support of xxx, xxx QA should ensure that the remedies have been implemented prior to the start of the validation of the xxx system for study xxx and that this validation is conducted and documented according to regulatory requirements and expectations.

This “gap” analysis plan should be submitted to xxx as soon as possible, identifying the list of activities that need to be performed prior to xxx study start-ups and the respective timelines for their completion.

Observation #20: The auditor was informed that the digital signature in the xxx application is an “electronic signature” as defined in 21 CFR part 11, the electronic records/electronic signatures final rule. The system automatically assigns a digital signature of the person logging into the system; the signer is not asked to provide a user ID/password combination or any other identifier. Further, there is no testing in the validation suite that confirms that the electronic signature cannot be excised, copied, or otherwise transferred in order to falsify an electronic record.

Impact #20: If the digital signature is in fact an electronic signature under 21 CFR part 11, then xxx is not complying with 21 CFR part 11.200§ (a) (i) – electronic signatures not based on biometrics shall employ at least two distinct identification components such as an identification code and password. These identification components are in addition to the user ID/password combination that is used to access the system.

Recommendation #20: xxx QA, as part of the forthcoming “gap” analysis, should confirm that this is in fact an electronic signature as defined in the regulation (e.g., generally equivalent to a hand-written signature that would normally be executed on paper). If so, then (1) a means should be developed to apply and manifest the electronic signature according to the regulation or (2) documentation should be developed to explain why it will not be done. If it is not an electronic signature per 21 CFR part 11 and simply the linking of the user ID/password to the record, management should provide an appropriate explanation in the validation documentation.

Observation #21: The auditor was informed that the users of xxx believe that the application does not appear to have audit trail functionality. There was no testing of such functionality as part of the validation effort. However, the vendor’s website indicates that the application “supports” audit trails.

Impact #21: The application is xxx to support change request and defect management. This is a critical component of controlling the software development, deployment and maintenance processes. Lack of audit trail functionality prevents confirmation that all information regarding change request and defects are maintained with completeness and accuracy, and that the history of a change or defect can be reconstructed at any time if necessary.

Recommendation #21: xxx QA, as part of the forthcoming “gap” analysis, should determine if the application supports audit trail functionality and, if so, should ensure that it is tested and utilized. If the system does not have audit trail functionality, then a paper trail system should be established for documenting the changes, the reason for a change, who made the change and when the change was made.

Observation #22: Installation checklists were observed for the following:

- Server installation
- xxx
- xxx
- Backup server
- xxx
- xxx

These checklists were not signed off to evidence that they were executed as provided for. Additionally, there was no evidence available to confirm that the remaining automated systems (e.g., xxx, xxx) were installed in an appropriate manner.

Impact #22: If the installation of hardware and software components is not performed according to a formal protocol that is predicated on the manufacturer’s/developer’s installation instructions, there will be little or no assurance that all components that support regulatory processes are installed and configured appropriately for the xxx operating environment.

Recommendation #22: The existing installation checklists should be signed off to evidence the fact that they were executed as provided for. Additionally, xxx QA, as part of the forthcoming “gap” analysis and remediation effort, should develop an SOP that will provide for installing hardware and software in a qualified manner.

Observation #23: xxx utilizes xxx tools, exemplified by the following, to support selected business processes:

- The xxx is used by the project teams to record the receipt of xxx from xxx prior to the xxx being xxx to the xxx application;
- The xxx (xxx) is used by xxx QA to track corrective actions stemming from internal audits.

xxx personnel indicated to the auditor that these systems do not need to be validated because they are not being relied upon in place of hardcopy records. However, (1) xxx QA personnel referred to the xxx in a manner that led the audit team to believe that the resolution to the open queries (regulated information) is tracked by it for maintaining legible xxx information in house, and (2) xxx is prominently mentioned in *SOP xxx (xxx)*. In both cases, the auditor had the feeling that the respective xxx staff is relying on these systems, in place of hard copy documentation, to collect, maintain and track information.

No validation or testing documentation exists regarding these systems.

Impact #23: If the unvalidated systems are, in fact, being relied upon for the information collection, maintenance and tracking, there is no assurance that these systems are operating as intended.

Recommendation #23: xxx QA, as part of the forthcoming “gap” analysis, should evaluate these and other like systems to determine whether reliance is being placed on them in lieu of hardcopy records and, if so, to determine an appropriate validation strategy based on risk.

Attachment 2 – Documents Reviewed / xxx Staff Involved

Note: copies of the referenced documents and the audit certificate are enclosed in a separate folder that is attached to this report.

Documents Reviewed

- Proposed Audit Scope and Agenda: xxx
- xxx presentation
- xxx presentation
- xxx Organization Chart (dated xxx)
- SOP Table of Contents
- FDA letter
- Copy of e-mail providing an authorization to xxx
- Copy of page xxx of xxx from xxxx that requires xxx
- Samples of xxx
- Copy of xxx
- Source xxx
- Source Data Receipt Logs xxx
- Listings of xxxx

xxx Staff

- xxx was represented by the following individuals during the audit:
 - o xxx
 - o xxx
 - o xxx
 - o xxx
 - o xxx
 - o xxx