



**Nuclear Department Corporate Directive**

**CD 3.4**

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Page 1 of 20

Title: **Picture of Xcellence**

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**Table of Contents**

		<u>Page</u>
1.0	PURPOSE.....	3
2.0	APPLICABILITY .....	3
3.0	RESPONSIBILITIES .....	3
4.0	DEFINITIONS .....	4
5.0	REQUIREMENTS .....	5
6.0	RECORDS .....	13
7.0	REFERENCES.....	14
7.1	SOURCE DOCUMENTS .....	14
7.2	REFERENCE DOCUMENTS .....	14
7.3	COMMITMENTS.....	15
8.0	REVISION SUMMARY .....	15
9.0	ATTACHMENTS.....	15

## **1.0 PURPOSE**

This directive describes the strategic picture of the elements necessary to achieve Excellence as measured by our stakeholders (i.e. employees, owners, industry peers, regulators, neighbors).

## **2.0 APPLICABILITY**

This directive applies to all Xcel Energy Nuclear Sites, Nuclear Projects, and Nuclear Operations Headquarters offices.

## **3.0 RESPONSIBILITIES**

### **3.1 Site Vice Presidents**

- Assign owners to each pillar within the Picture of Xcellence.
- Verify all Forcing Functions are implemented in accordance with Xcel Energy Nuclear Department standards.
- Internalize and understand the attributes and defined behaviors associated with the Picture of Xcellence. Integrate every aspect of the Picture of Xcellence into the Site Organization through daily interactions at the individual and organizational level.

### **3.2 Directors / Department Managers**

- Implement Forcing Functions in accordance with Xcel Energy Nuclear Department standards.
- Internalize and understand the attributes and defined behaviors associated with the Picture of Xcellence. Integrate every aspect of the Picture of Xcellence into the Site Organization through daily interactions at the individual and organizational level.

### **3.3 Supervisors**

- Internalize and understand the attributes and defined behaviors associated with the Picture of Xcellence. Integrate every aspect of the Picture of Xcellence into daily interactions with workers, peers and Nuclear Department Managers.

### **3.4 All personnel**

- All personnel are responsible for utilizing the concepts, principles, attributes, and behaviors that support the Picture of Xcellence. Reference to elements of the Picture of Xcellence

should be integrated into every aspect of work conducted at Xcel Energy Nuclear department.

## 4.0 DEFINITIONS

**4.1 ACEMAN** - The results of individual performance. Through the use of the "Enablers of Xcellence" and human performance error prevention tools, human performance behaviors are improved and individual performance outcomes are positive. The attributes of ACEMAN are:

- A** Accident Free
- C** Control Dose
- E** Event Free
- M** Meets Commitments
- A** Attend Training
- N** No Rework

**4.2 Action Request** - The electronic document for identification of an issue that meets the criteria listed in FP-PA-ARP-01, "Action Request Process."

**4.3 Defense (or Barrier)** - Anything that protects a system or person from a hazard whether physical, administrative, or human in nature. A measure, including expected behavior that protects against various hazards or mitigates the consequences of an error.

**4.4 Defense – Six "Enablers of Xcellence" from the "Picture of Xcellence"** - specific defenses that significantly increase the potential for positive results (ACEMAN) when preparing for and performing assigned tasks. The six Enablers of Xcellence are:

- Qualified Workers
- Job Planning and Preparation
- Procedures/Work Instructions
- Verification/Validation
- Supervisor Oversight
- Worker Practices

- 4.5 **Error (general definition)** - Human error is an action that does not meet some standard or limit of acceptability. Human error is a behavior that is caused by a variety of conditions related not only to unacceptable individual behavior but also to unsuitable management and leadership practices and organizational weaknesses.
- 4.6 **Forcing Functions** - Formal opportunities to coach and engage the workforce (includes manager/supervisor to worker, worker to manager/supervisor and peer to peer) in performance improvement.
- 4.7 **Human Performance Tools** - A collection of standard human error reduction tools intended to prevent events, reduce human errors and improve station performance.
- 4.8 **Latent Organizational Weakness** - Undetected deficiencies in the management control processes (e.g., strategy, policies, work control, training and resource allocation) or values (shared beliefs, attitudes, norms and assumptions) creating workplace conditions that can provoke errors (precursors) and degrade the integrity of defenses (flawed defenses).
- 4.9 **Picture of Xcellence** - The Picture of Xcellence (POE) is a visual representation that provides a “line of sight” between individual performance and Xcel Energy Nuclear Department Xcellence. It represents overall structures to ensure that a working environment is maintained to support achievement of Xcellence.
- 4.10 **Results** - consequences (positive or negative) of individual behaviors.

## 5.0 REQUIREMENTS

### 5.1 PICTURE OF XCELLENCE BACKGROUND

#### 5.1.1 Picture of Xcellence Principles

The Picture of Xcellence is based on the premise that performance of any organization is the result of the behaviors exhibited by the individuals who make up the organization. Sustained good performance requires daily good behaviors. The Picture of Xcellence provides the structure to develop and sustain a work environment which provides repeatable behaviors which result in excellence. This work environment requires establishing and maintaining the following four key principles:

- Select and retain the Right People in the Right Jobs;
- Communicate and Enforce the Right Picture;
- Verify effective implementation of the Right Processes;

- Provide the Right Management Coaching and ensure effective Employee Engagement.

The Picture of Xcellence is organized by pillars: Nuclear Xcellence, Organizational Xcellence, Operational Xcellence, Training Xcellence, and Equipment Xcellence. Each pillar is described in terms of the attributes which characterize the pillar and the behaviors which define those attributes. In addition, each pillar contains objective performance measure (PIs) which are used to measure progress or the need for improvement. Pillar attributes, behaviors, and performance measures were developed based upon benchmarking of nuclear industry leaders.

**5.1.2** Supporting the Pillars of Xcellence are the results which measure Individual Xcellence (ACEMAN) and the Enablers of Xcellence which are used to support achievement of Individual Xcellence. The Enablers are to be used to identify lessons which should be applied to future activities which support achievement of Individual Xcellence. Examples of behaviors to fully utilize the concepts of Enablers of Xcellence can be found in Attachment 2.

**5.2 PICTURE OF XCELLENCE – STRUCTURE**

**5.2.1 Nuclear Xcellence**

The Nuclear Xcellence Pillar is characterized by the following Attributes and Behaviors.

<b>Nuclear Xcellence Attributes</b>	<b>Defined Behaviors</b>
Safe	<ul style="list-style-type: none"> <li>• Doing what is right</li> </ul>
Reliable	<ul style="list-style-type: none"> <li>• Focused on long term success</li> <li>• Preventing not reacting</li> </ul>
Predictable	<ul style="list-style-type: none"> <li>• Doing what we say and when we say it will be done</li> <li>• Finding our problems before others</li> </ul>

The Site Excellence Plan is periodically updated to schedule actions necessary to close any “gaps” between current performance and achieving/maintaining Nuclear Xcellence. Gaps are found through self assessment, industry benchmarking, industry assists, regulatory activities and the site corrective action program. Stream Analysis is periodically used to determine drivers and contributors in order to set priority (Attachment 3 notes the Stream Analysis Streaming Bin Definitions).

**5.2.2 Organizational Xcellence Pillar**

The Organizational Xcellence Pillar is characterized by the following Attributes and Behaviors:

<b>Organizational Xcellence Attributes</b>	<b>Defined Behavior</b>
Predictable	<ul style="list-style-type: none"> <li>• Doing what we say and when we say it will be done</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• Work to resolve past problems regardless of who owns them</li> <li>• Communicate what is needed when it is required</li> </ul>
Accountable	<ul style="list-style-type: none"> <li>• Holding ourselves to the highest standards</li> <li>• Being our own toughest critic</li> </ul>
Learning Organization	<ul style="list-style-type: none"> <li>• Improving from the experience of ourselves and others</li> <li>• Know our roles</li> <li>• Develop ourselves and others</li> </ul>

The Organizational Xcellence section of the Site Xcellence Plan is periodically updated to schedule actions necessary to close any “gaps” between current performance and achieving/maintaining Nuclear Xcellence. Gaps are found through self assessment, industry benchmarking, industry assists, regulatory activities and the site corrective action program. Stream Analysis is periodically used to determine drivers and contributors in order to set priority.

**5.2.3 Operational Xcellence Pillar**

The Operational Xcellence Pillar is characterized by the following Attributes and Behaviors:

<b>Operational Xcellence Attributes</b>	<b>Defined Behavior</b>
Safety	<ul style="list-style-type: none"> <li>• Make operational decisions based on safety as our highest priority</li> <li>• Make risk-informed decisions</li> <li>• Use procedures that are technically accurate, easily understood, and consistently used.</li> <li>• Eliminate workarounds and operator challenges</li> </ul>
Configuration Control	<ul style="list-style-type: none"> <li>• Link all work activities to improving plant performance</li> <li>• Understand and operate plants within design basis.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• Hold ourselves accountable to the highest industry standards</li> <li>• Be our own toughest critic</li> </ul>

The Operational Xcellence section of the Site Xcellence Plan is periodically updated to schedule actions necessary to close any “gaps” between current performance and achieving/maintaining Site Xcellence. Gaps are found through self assessment, industry benchmarking, industry assists, regulatory activities and the site corrective action program. Stream Analysis is periodically used to determine drivers and contributors in order to set priority.



**5.2.4 Training Xcellence Pillar**

The Training Xcellence Pillar is characterized by the following Attributes and Behaviors:

<b>Training Xcellence Attributes</b>	<b>Defined Behavior</b>
Teamwork	<ul style="list-style-type: none"> <li>• Demonstrate strong line management ownership of training programs.</li> <li>• Routinely assign top performers to training.</li> <li>• Provide effective observation of training and use feedback effectively.</li> </ul>
Effective	<ul style="list-style-type: none"> <li>• Integrate training into core business as a means to improve plant and human performance</li> <li>• Apply the systematic approach to training (SAT) process to training for performance improvement</li> </ul>
Accountable	<ul style="list-style-type: none"> <li>• Attend training as scheduled</li> <li>• Actively participate in training</li> </ul>
Model	<ul style="list-style-type: none"> <li>• Conduct training consistently with station standards.</li> </ul>

The Training Excellence Xcellence section of the Site Plan is periodically updated to schedule actions necessary to close any “gaps” between current performance and achieving/maintaining Nuclear Xcellence. Gaps are found through self assessment, industry benchmarking, industry assists, regulatory activities and the site corrective action program. Stream Analysis is periodically used to determine drivers and contributors in order to set priority.

**5.2.5 Equipment Xcellence Pillar**

The Equipment Xcellence Pillar is characterized by the following Attributes and Behaviors:

<b>Equipment Xcellence Attributes</b>	<b>Defined Behavior</b>
Zero Tolerance	<ul style="list-style-type: none"> <li>• Demonstrate a consistent intolerance for unanticipated equipment failures</li> <li>• Aggressively resolve long-standing or repetitive equipment problems especially operator workarounds.</li> <li>• Manage backlogs to eliminate old equipment issues</li> <li>• Eliminate single-point vulnerabilities.</li> </ul>
Reliable	<ul style="list-style-type: none"> <li>• Emphasize preventative and predictive maintenance as long-term strategies</li> <li>• View work management as a site-wide process to improve equipment reliability.</li> <li>• Use operating experience and benchmarking as a key part of the overall strategy.</li> </ul>
Predictable	<ul style="list-style-type: none"> <li>• Make critical safety related systems a primary organizational focus.</li> </ul>
Pride	<ul style="list-style-type: none"> <li>• Focus on work quality by doing the job right the first time.</li> </ul>

The Equipment Xcellence section of the Site Excellence Plan is periodically updated to schedule actions necessary to close any “gaps” between current performance and achieving/maintaining Nuclear Xcellence. Gaps are found through self assessment, industry benchmarking, industry assists, regulatory activities and the site corrective action program. Stream Analysis is periodically used to determine drivers and contributors in order to set priority.

The Equipment Xcellence portion of Site Excellence plans will be based on initiatives from the Equipment Bubble Chart for Excellent Equipment Reliability and Material Condition.

**5.3 HUMAN PERFORMANCE PROGRAM**

Achievement of Nuclear Excellence is based upon the achievement of Individual Xcellence. In keeping with this methodology, Xcel Energy Nuclear Department has developed measures of Individual Xcellence (ACEMAN); and has established the Enablers of Xcellence which the organization must support in order to achieve positive results. . This methodology, combined with INPO Human Performance guidance, forms the foundation of our Human Performance Program and is demonstrated by the following:

- Human Performance Tools have been defined and are in use at each site to ensure that the Enablers of Xcellence can be achieved (FP-PA-HU-02).
- The Observation Program has been established to ensure that our Supervisors (leaders) verify that employee behaviors are aligned with our Picture of Xcellence and that the Enablers of Xcellence support demonstration of those attributes. (FP-PA-HU-03).
- Communication of failed Enablers of Xcellence and how events could have been prevented is established via our Site and Department Event Free Clock Procedure (FP-PA-HU-01). This is communicated in an effort to engage the worker to reinforce or strengthen the Enablers of Xcellence.
- Incident Investigation Teams formed following a significant event (in accordance with FP-PA-ARP-02) analyze the event against the Picture of Xcellence, Enablers of Xcellence. Areas needing improvement are identified and the workforce is appropriately engaged to develop action to correct deficiencies.

Departmental Trending includes human performance trends (positive or negative) using ACEMAN data and periodic “Enablers of Xcellence” performance (FG-PA-DRUM-01, “Department Roll up Meeting (DRUM) Manual – Department Performance Trending”).

**5.4 PICTURE OF XCELLENCE – FORCING FUNCTIONS**

Every Forcing Function is an opportunity to apply the Picture of Xcellence to our work activities. It is the responsibility of every employee to “coach and engage” other employees (manager, supervisors, and workers) toward improving site performance through the Picture of Xcellence. Examples of Forcing Functions are as follows (note; list not all inclusive):

<b>POE Tier</b>	<b>Forcing Function</b>	<b>Purpose/Objectives</b>
Nuclear Xcellence	Executive Council	To ensure that management directs, manages, and controls the business, affairs, and properties of the company and that the directives of the Board of Directors are met.

<b>POE Tier</b>	<b>Forcing Function</b>	<b>Purpose/Objectives</b>
Nuclear Xcellence	Fleet Picture of Excellence Review Group (FPERG)	To prioritize, integrate, approve and commit the fleet to specific projects – FPERG also oversees the entire process, including the post standardization assessment, to ensure the new processes are achieving the projected results. FPERG provides the strategy to leverage economies of scale, resulting in increased efficiency, lower costs, and improved performance.
Nuclear Xcellence	Management Review Meetings	To provide senior management (CNO, VPs, and line managers) oversight opportunities of site performance.
Organizational Xcellence	Performance Assessment Review Board	To provide senior management oversight of the Corrective Action Program, Self-Assessment Program, Human Performance Program, and Operating Experience Program.
Organizational Xcellence	Site Picture of Excellence Review Group (PERG)	To routinely review and adjust planned site activities to ensure the Picture of Xcellence priorities are maintained. The PERG reviews proposed changes to the POE activities to continue to bring the site to excellence. PERG meetings require full representation of fleet members to assess priorities and needed resources effectively.
Operational Xcellence	Plant Operations Review Committee (PORC)	To provide advice to the plant manager on plant related matter concerning nuclear safety. PORC SHALL keep safety considerations paramount relative to cost or schedule considerations.
Training Xcellence	Training Oversight Committee (TOC)	To provide management oversight, direction, support and accountability for the implementation and maintenance of all site-accredited and selected non-accredited training programs.
Training Xcellence	Fleet Training Advisory Committee (TAC)	To provide strategic oversight of department training programs
Training Xcellence	TAC	To provide strategic oversight of department training programs

<b>POE Tier</b>	<b>Forcing Function</b>	<b>Purpose/Objectives</b>
Training Excellence	Curriculum Review Committee (CRC)	To determine, at the working level, the details and structure of a training program to ensure incumbents receive the training needed to maintain and improve their performance.
Equipment Xcellence	Plant Health Committee Meetings	The Plant Health Committee provides oversight of all processes / personnel which operate plant equipment, monitor equipment health, perform equipment maintenance and install plant modifications. These meetings are to ensure all resources are integrated and prioritized in a manner to achieve Equipment Xcellence.
Individual Xcellence	Daily "15" Meetings	To provide a forum for functional group supervisors to meet daily with their employees for at least 15 minutes to discuss information provided by the communications department. Information includes, for example, daily plant status report data, coaching hints and the daily focus topic. The meetings are intended to increase awareness of business goals and expectations, foster an environment of employee ownership for site activities, and improve employee understanding of how each individual's daily performance affects safe and reliable plant operation.
Individual Xcellence	Individual Performance and Development System (IPAD)	To provide a means for IPAD process to give employees accurate feedback so they may develop to their fullest potential. The process allows each employee to plan and document his/her individual goals, accomplishments and career development over a period of a year. It also measures employee performance and behaviors relative to the leadership competencies.

## **6.0 RECORDS**

**6.1** No records are required to be generated as a result of this directive.

## **7.0 REFERENCES**

### **7.1 SOURCE DOCUMENTS**

- 7.1.1 National Academy for Nuclear Training, "Human Performance Fundamentals Course Reference", December 2002
- 7.1.2 CD 3.3, "Performance Assessment Program"
- 7.1.3 INPO document, "Excellence in Human Performance", September 1997
- 7.1.4 INPO document, "Principles for Enhancing Professionalism of Nuclear Personnel", March 1989
- 7.1.5 INPO's Human Performance Initiative – 2004.
- 7.1.6 NEI / INPO / EPRI Industry wide Benchmarking Project LP002, "Human Performance Process Benchmarking Report", May 2001
- 7.1.7 FP-G-BUS-01, "Picture of Excellence Review Group and Site Excellence Plans"
- 7.1.8 FG-BS-STR-01, "Using Stream Analysis to Diagnose and Improve Performance"

### **7.2 REFERENCE DOCUMENTS**

- 7.2.1 FP-PA-HU-01, "Human Performance Program"
- 7.2.2 FP-PA-HU-02, "Human Performance Tools"
- 7.2.3 FP-PA-HU-03, "Human Performance Observation Program"
- 7.2.4 FP-PA-ARP-01, "Action Request Process"
- 7.2.5 FP-PA-ARP-02, "Augmented Incident Evaluation"
- 7.2.6 FG-PA-DRUM-01, "Department Roll Up Meeting (DRUM) Manual – Department Performance Trending"

**7.3 COMMITMENTS**

None

**8.0 REVISION SUMMARY**

**8.1** General revision to incorporate governance, oversight and communication of the directive following transition to Xcel Energy.

**9.0 ATTACHMENTS**

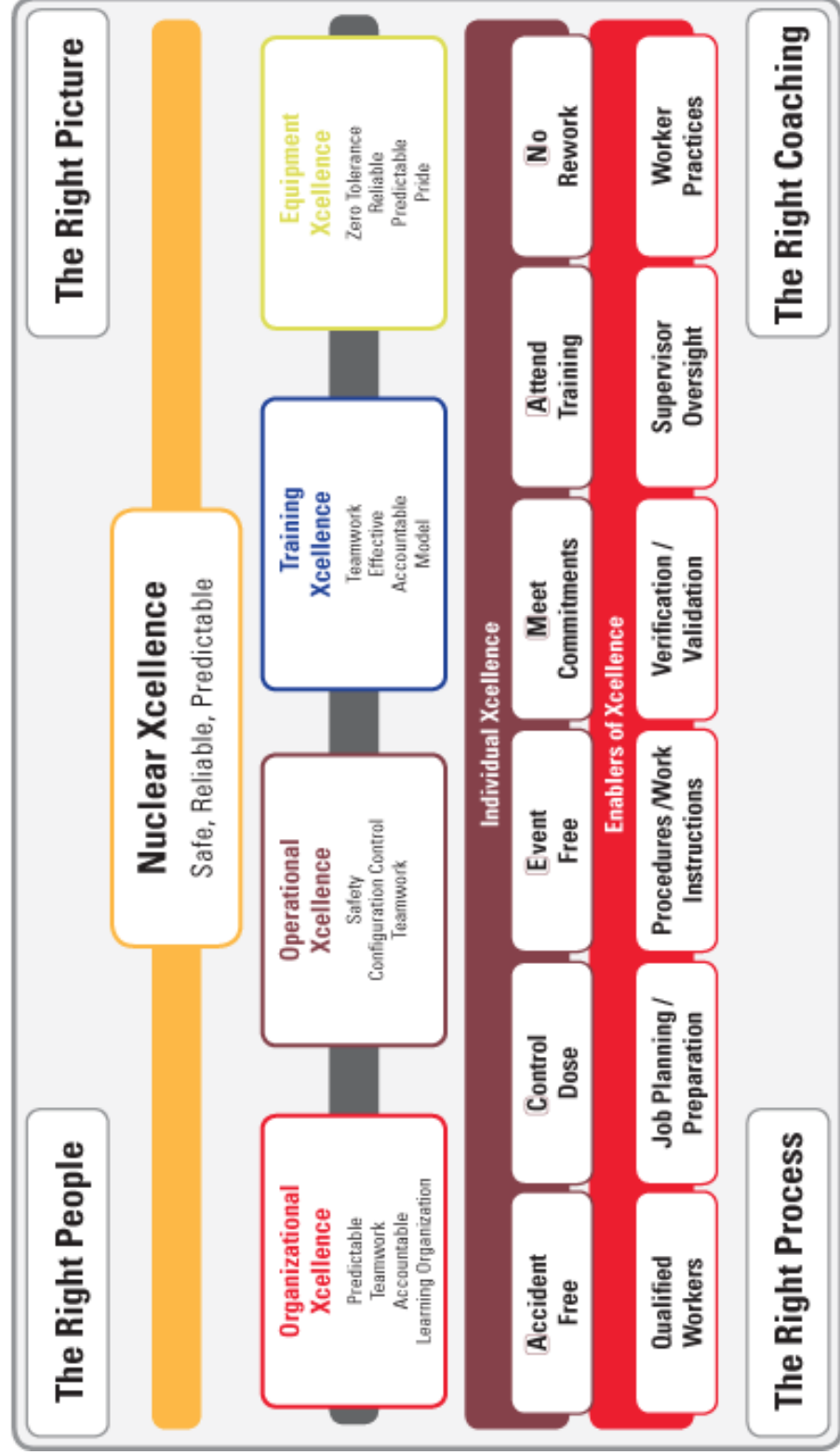
**9.1** Attachment 1, The Picture of Xcellence

**9.2** Attachment 2, Examples of Behaviors to Support Enablers of Xcellence

**9.3** Attachment 3, Stream Analysis Bin Definitions

**ATTACHMENT 1**  
**PICTURE OF XCELLENCE**

# Picture of Xcellence





## **ATTACHMENT 2**

### **Examples of Behaviors to Support Enablers of Xcellence**

#### **Qualified Worker**

- All necessary initial and requalification training has been completed, including, classroom, lab, simulator, On the Job Training (OJT) and Task Performance Evaluation (TPE).
- All necessary position, job and task qualifications are current.
- For the responsible workers, the Training and Qualification Matrix has been verified appropriate for the task.
- Workers are asked about their experience with and frequency of task performance. Special controls and oversight are put in place for first time or infrequently performed evolutions.
- Human factors (sick, tired, fatigued, distracted, etc.) have been addressed so that they will not impact the outcome of the task.
- Individuals are mentally prepared for the task by reviewing the work package / procedure and having any questions answered.
- Subtasks assigned within an activity are performed by qualified workers or under the direct supervision of a qualified worker.
- Activities that require team coordination have the appropriate mix of experienced and qualified personnel to be successful.

#### **Job Planning/Preparation**

- The activity has been scheduled far enough in advance to ensure all prerequisites, initial conditions, and predecessors have been considered and are included in the work schedule.
- Groups/Departments that are involved with the activity are aware it is taking place and understand the impact the activity has on their resources.
- Prerequisite activities have been completed prior to performing the task.
- Proper tools and parts are available and staged at the job-site when appropriate.
- Pre-job mock-ups and Just-in-Time training are developed and conducted for higher risk activities.
- Error-likely situations have been identified and resolved and /or mitigated as appropriate.
- Work packages, procedures, work plans, are walked-down and reviewed in advance to verify accuracy and readiness for use.
- A Pre-Job Brief has been conducted with details commensurate with the relative risk to the plant or personnel. The pre-job brief should not be used for planning the activity but rather as a final review before execution,
- Contingency plans and abort criteria for risk significant activities are developed, in place, and communicated to key stakeholders prior to beginning the activity.

**ATTACHMENT 2 (Continued)**  
**Examples of Behaviors to Support Enablers of Xcellence**

**Procedures/Work Instructions**

- All activities and actions that change configuration of plant equipment are controlled by a written procedure or work instruction.
- Correct procedure revision has been verified.
- All pages are present in the required documentation.
- Procedure/work plan has been reviewed for flaws or inaccuracies before being implemented.
- Procedure / work instructions have an appropriate level of detail for the skill and experience level of the worker using the documents.
- Procedure/work plan has been written to be performed correctly
- The procedure/work plan is followed with a “thinking compliance” mentality to ensure any procedure or work instruction error is caught before it has an adverse impact on the plant or personnel
- The procedure/work plan is followed as written with place keeping techniques used to ensure completion of all steps in the correct sequence
- Progress through the procedure or work document is stopped to resolve identified deficiencies.

**Verification/Validation**

- Assumptions and pre-requisites are challenged to ensure they are valid.
- Participants are polled to identify questions or concerns about task performance and they are resolved prior to starting the activity.
- Questions have been answered adequately.
- Proper materials, tools, procedures, information, etc. necessary to successfully complete a task have been verified and validated.
- The correct train/unit/component of equipment is verified correct before beginning work.
- Critical data and calculations are verified accurate.
- Proper Independent, Concurrent, and Peer Check verification techniques are used when appropriate.

**ATTACHMENT 2 (Continued)**  
**Examples of Behaviors to Support Enablers of Xcellence**

**Supervisory Oversight**

- High standards and expectations are established, effectively communicated, and understood by workers.
- Work activities are observed in the field with direct and timely feedback provided to the observed workers. Supervisors place a high value on the quality and quantity of contact time with workers.
- Roles, responsibilities, job scope, etc. have been effectively communicated to all necessary parties.
- High standards are reinforced by identifying and acting quickly to performance shortfalls and setting a positive example for correct performance.
- Administrative and physical barriers that could prevent work from being successfully completed have been identified and removed or mitigated.
- Human Performance Tools like STAR, Stop When Unsure, Challenging Information, etc. are being consistently utilized and rigorously applied.
- Critical activities are monitored to ensure involved individuals are actively engaged in the task (including participating in Pre-Job Briefs and Post-Job Critiques).
- Effective communications are used and reinforced.
- High standards for meeting commitments are practiced and reinforced.
- Individuals are made aware of their surroundings and error-likely situations or hazards that are present.

**Worker Practices**

- Human Performance Error Prevention tools are being rigorously applied where appropriate.
- A healthy uneasiness when performing a task is prevalent in the work force. All individuals involved with the task are actively engaged in its successful execution.
- Individuals are aware of their surroundings and error likely situations or hazards that are present and act to eliminate or reduce the hazards.
- Workers are willing to challenge their peers and supervisors to rigorously practice error prevention techniques.
- Work activities are stopped if as-found conditions or results are not as expected.

**ATTACHMENT 3**  
**Stream Analysis Bin Definitions**

<b>People / Job</b>	<b>Picture</b>	<b>Process</b>	<b>Coach / Engagement</b>
<ul style="list-style-type: none"> <li>• Selection</li> <li>• Succession Planning</li> <li>• Training</li> <li>• Individual Attitude</li> </ul>	<ul style="list-style-type: none"> <li>• Expectations</li> <li>• Behavior</li> <li>• Performance</li> <li>• Vision, Goals, Strategy and Plan</li> <li>• Passion</li> </ul>	<ul style="list-style-type: none"> <li>• Procedures</li> <li>• Way we do business</li> <li>• Technology</li> <li>• Work Flow Design</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Oversight</li> <li>• Field Time</li> <li>• Rewards System</li> <li>• Engagement</li> </ul>