

PROJECT PLAN

E-Learning: Chemical Feed Pumps O&M

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EXECUTIVE SUMMARY

This project plan guides the design, development, evaluation, and implementation of an e-learning module, Chemical Feed Pumps-O&M, which will be delivered to employees via computer and Intranet at two plants located within the Atlanta region. The purpose of this project is to shift some of the classroom-based learning to electronic learning (e-learning) so that the rising costs of shift coverage for training are reduced, enhance learning through new instructional technologies, and provide employees with innovative ways to learn.

The project connection to organizational goals is to use the proposed e-learning module as an educational and technical resource to help each employee perform in a coordinated manner that lowers the costs of chemicals used to treat raw water while maximizing the highest quality of drinking water. Therefore, the scope of this project is constrained to one instructional unit delivered only to employees at two water production plants located within the Atlanta region. Thus, the business unit primarily affected by this project is Operations. Some employees essential to this project completion will come from other departments such as Technical Training, Information Technology, Engineering, and Equipment Maintenance to form the Project Team. The project time estimate for completion is nine months and includes assessment stages to measure the effectiveness of the e-learning initiative in achieving specific organizational goals. Costs associated with implementing this project are minimal due to a majority of technology resources such as instructional software, computers, and Intranet already in use elsewhere in the organization and a majority of the project team members already employed within the Atlanta region.

Risks associated with this project are limited to project timeline, staffing of two Independent Quality Assurance Consultants from other regions, end user log on, password access, and training. However, risk mitigations have been identified to ensure anticipated risks are managed in a timely manner. As a result, a solid quality management plan is presented in this project plan to expose any unforeseen risks in terms of project deliverables, work products, product deployment and testing, problem and issue resolutions, and business results.

PROJECT DEFINITION

BACKGROUND

The Technical Training Department was created to provide educational and technical resources such as standard operating procedures to enhance human performance in production-oriented environments where the product produced is quality drinking water. This product is vital because it serves as a commodity that all species, including humans, need to survive. Therefore, the Technical Training Department has devoted time and resources to provide its production staff with learning avenues such as on-the-job training, conferences, workshops, advanced State Licensing certification (as required by the Environmental Protection Agency and Environmental Protection Department), and classroom-based training programs to ensure all employees in water production environments have the educational resources to successfully perform tasks required to produce the highest quality of drinking water. As a result, employees in this environment have learned the performance requirements of their individual jobs well, but more training is needed to help each employee perform in a coordinated manner that lowers the costs of chemicals used to treat raw water while maximizing the highest quality of drinking water. Toward that end, the Technical Training Department is seeking new ways for employees to learn so that the rising costs of shift coverage for training are reduced, enhance learning through new instructional technologies, and provide employees with exciting and innovative ways of learning.

CURRENT STATE OF TECHNICAL TRAINING PROGRAM

The current state of the technical training program provides learning through conferences, workshops, advanced certification training, continuing technical education, and license renewal training. This organization currently has one designated Technical Trainer, several Subject Matter Trainers, and External Trainers. There are at least six training rooms devoted to classroom-based training. In addition, the organization has training equipment that is

current in terms of technological capabilities. A majority of this training equipment and instructional technology design tools such as software are stored in the Information Technology Department and assigned to trainers and other employees as necessary.

PROPOSED STATE OF TECHNICAL TRAINING PROGRAM

The proposed state of the Technical Training program is to shift some of the classroom-based learning to electronic learning (e-learning) so that a wider base of learning opportunities positions every employee at the center of his or her learning in terms of time, choice, and professional development. E-Learning strategies are defined as instructional content delivered by electronic resources such as CD-ROMs, computers, and the World Wide Web. Therefore, this plan proposes one instructional unit related to water production delivered by e-learning using desktop computers and the organization's Intranet as delivery modes.

PROJECT CONNECTION TO ORGANIZATIONAL GOALS

The project connection to organizational goals is to use the proposed e-learning module, Chemical Feed Pumps-Operation and Maintenance, as an educational and technical resource to help each employee perform in a coordinated manner that lowers the costs of chemicals used to treat raw water while maximizing the highest quality of drinking water. In addition, this learning module will enhance individual skills and knowledge for understanding the chemical feed process in terms of job performance. Further, this project will extend learning opportunities that enhance computer skills and professional development thereby increasing morale and personal worth.

PROJECT GOALS

The primary goal of this project is to produce the highest quality of instructional content for electronic delivery via computer and Intranet that involves each end user with interactive activities for enhancing learning. Further, this project will provide avenues for evaluating the e-learning module to ensure organizational achievement of each production employee

performing in a coordinated manner that lowers the costs of chemicals while maximizing the highest quality of drinking water.

PROJECT SCOPE

The scope of implementing this project covers business processes, business units, business locations, business applications, and end users.

- Business processes that will be affected by this project are two production plants.
- Business units that will be affected by this project are Operations, Technical Training, Information Technology, Engineering, and Equipment Maintenance departments.
- Business locations that will be affected by this project are the Atlanta region and two other locations, not defined yet, where two Quality Assurance Consultants will be hired to assist in evaluating this project.
- Business applications that will be affected by this project are the installations of the Intranet on all computers at two plants and assignment of user names and passwords for all end users.
- End-Users that will be affected by this project are employees working in production including supervisors and superintendents located at two plants. There are a total of 39 End Users.

PROJECT STAKEHOLDERS

The project stakeholders will serve as support and guidance to the Project Manager and Team during project development and after project completion in terms of assisting in evaluating project effectiveness. The project stakeholders are the Senior Manager, Operations Manager, Human Resource Manager, Information Technology Manager, Finance Manager, Project Manager, and End Users. Listed below are primary tasks of each stakeholder.

- The central task of the *Senior Manager* is to ensure organizational goals connected to this project are achieved.
- The primary tasks of the *Operations Manager* are to ensure access to both plants for technology installations, retrieval of reports for comparing organizational goals to e-learning initiative, and encouraging their employees (end users) to participate in this e-learning module.
- The primary tasks of the *Human Resource Manager* are to represent all end-users in terms of employee relations such as modifying related performance appraisals, creating employee recognition initiatives, and promoting professional development via e-learning module through internal advertisement and marketing strategies.
- The primary tasks of the *Information Technology Manager* are to ensure their department successfully installs, deploys, and product test e-learning module and ensure every End User has been assigned a user name and password.
- The primary tasks of the *Finance Manager* are to ensure necessary funds are available in a timely manner and costs are monitored to develop the highest quality product.
- The primary tasks of the *Project Manager* are to ensure this project produces a high quality product in a timely manner and administer all phases of project management including development, implementation, and evaluation as well as successfully guide the project team in a timely manner.
- The primary tasks of the *End Users* are to serve as the ultimate customer in terms of participation and evaluation of the e-learning initiative.

PRODUCT OVERVIEW

This project will produce one e-learning module that will be delivered to employees via computer and Intranet at two plants located within the Atlanta region. The e-learning module is titled, Chemical Feed Pumps-O&M. In addition to instructional content, this e-

learning module will provide simulations, drag/drop interactions, questions, and games to support learning for user interactivity utilizing the organization's instructional technology software, Macromedia Studio FX. The e-learning product will be designed for user access via each End User signing on with his or her user name and password. Also, this product will be designed so that additional lessons may be added to this learning module at a later time for continuous learning.

PROJECT DELIVERABLES AND WORK PRODUCTS

All project deliverables will accompany a written statement that concurs or non-concurs deliverables. This written statement will be signed-off by project approvers. Work products are documents that support project deliverables. Work products are also considered deliverables with the exception these documents will be submitted to members within the project. Examples of work products are project proposal, project plan, quality assurance plans, instructional design storyboards, all phases of instructional design, including evaluation plans, training plans, training documentations, and trainees' manuals. In addition, the Technology Management Team work products will be in the form of sign-off sheets validating all technical upgrades, installations, training plans, and training documentations, and trainees' manuals. It is important to note that some work products will eventually serve as product deliverables.

The table below is the project schedule for project stages, major work products, deliverables, deliverable dates, project approvers, and risk rating per product or deliverables (*Refer to Table 1*). Although no work products are assigned, dates for these items are due at least four business days prior to deliverable dates so that all work products can be reviewed in terms of quality control.

Table 1. Project Schedule for Deliverables and Work Products

Project Stage	Work Products	Project Deliverables	Deliver Date	Project Approvers	Risk
Planning	Proposal Project Plan Project Timeline QA Plan	Proposal Project Plan	24-Mar-03	Stakeholders Stakeholders Project Mgr/QA Leader Project Mgr	medium low high
Instruction Design	analysis design development implementation evaluation plan trainees' manual training plan	evaluation report trainee's manual training plan	2-May-03 2-May-03 2-May-03 2-May-03	Instructional Design Team Instructional Design Team Instructional Design Team Instructional Design Team QA Consultant Project Team/Stakeholders Project Team/Stakeholders	low low low low low low low
Technology Installation User Log on/Password	installations report	installation report	2-May-03	Info Tech Leader/Prj Mgr	low
Product Deploy/Test	deployment report	deployment report	13-Jun-03	Info Tech Leader/Prj Mgr Tech QA Leader	low
Product Assessment	evaluation report	evaluation report	7-Jul-03	Stakeholders/Prj Team QA Leaders	low
End User Training (Part I) computer training	training plan	training plan	2-May-03	Info Tech Leader Tech QA Leader Project Manager	low
End-User Training (Part II) e-learning product training	training plan	training plan	18-Jul-03	All Team Leaders/Prj Mgr	low
Project Implementation	implementation report	implementation report	3-Sep-03	All Team Leaders/Prj Mgr	low
End-User Assessment	assessment plan	assessment report	3-Sep-03	Team Leaders/Prj Mgr Stakeholders/QA Leaders	low
Business Results Assess	assessment plan	assessment report	6-Nov-03	Senior Manager Operations Manager Project Manager	low

PROJECT ESTIMATE FOR COMPLETION

The project time estimate for completion is nine months from the start of this project plan proposal to business results assessment (connection to organizational goals). As a standard for project time estimation, each month reflects 31 business days from the start of a stage or phase to the end of a stage with some stages overlapping. However, the business results assessment stage is longer than project calculation of 31 days per month so that a true full month cycle can be completed to align with production monthly reports that will be used to measure organizational goals such as chemical costs, process optimization and water quality. Production monthly reporting cycles begin on the first day of the month at 12:00 a.m. through the last day of the month at 12:00 a.m. Listed below is a table showing the project time estimate completion for each stage (*Refer Table 2*).

Table 2. Project Estimation for Completion

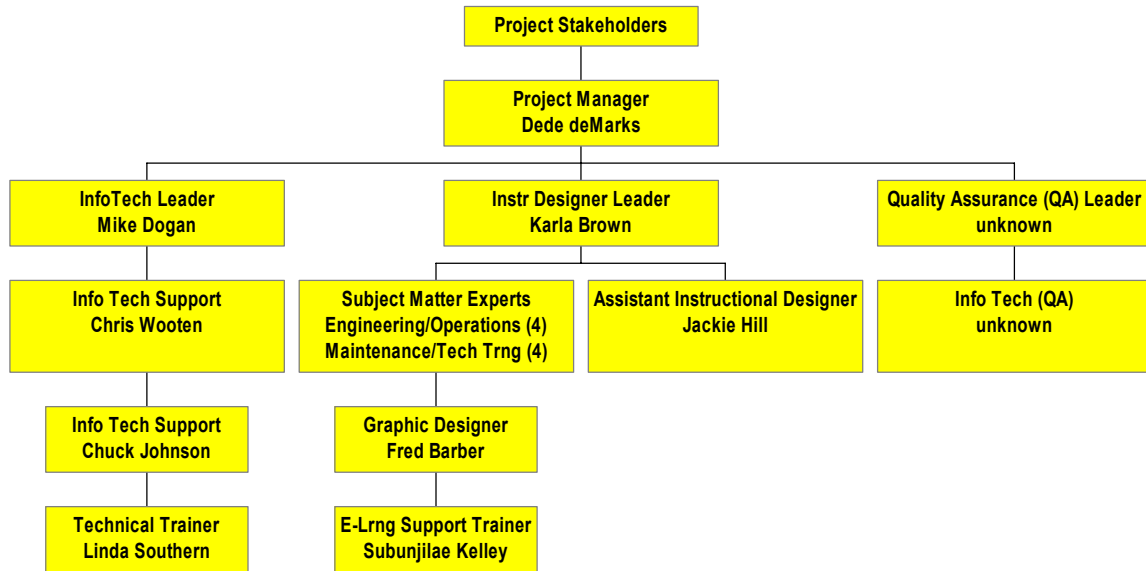
	Feb 24 - Mar 24	Mar 24 - May 2	May 5 - Jun 13	Jun 14-July 17	July 18 - Sep 3	Sept 8 - Nov 6
Planning/Preparation						
Instructional Design (full time)						
Tech Installation/Password						
Deployment/Testing						
Product Assessment						
End-User Training (part 1)						
End-User Training (part 2)						
Project implementation						
End-User Assessment						
Business Results Assessment						

Note:

- End User Training (part 1) is training related to basic computer skills and knowledge and accessing the World Wide Web and Intranet. (*Refer to Project Processes-General Management-Risk Management section in this document for explanation*).
- End User Training (part 2) is training related to use of the e-learning module.
- Installation/Password is technology installation of components that will support the e-learning module such as Intranet and End Users log on name and password. There are a total of 39 End Users. This stage is planned for risk mitigation of End Users' log on and password. (*Refer to Project Processes-General Management-Risk Management section in this document for explanation*).

PROJECT ORGANIZATION

TEAMS, ROLES, AND RESPONSIBILITIES



There are four major teams for this project. The teams are listed below.

- Stakeholders Team
- Information Technology Team
- Instructional Design Team
- Quality Assurance Team.

During the development of this project, all four teams will meet at least once every month through project completion. The key roles and responsibilities of each member are listed below.

Project Stakeholders

- Provide support and guidance to the Project Manager and Team
- Ensure project staffing
- Resolve conflicts across organizations
- Facilitate communication
- Review and approve project deliverables

Project Manager

- Manages daily planning and control of project
- Coordinates project resolutions of issues, problems, and risks
- Manages Project Team
- Ensures adequate staffing
- Provides regular and timely communications
- Prepares and administers project plans
- Tracks and reports progress
- Reviews and approves project deliverables and work products

Information Technology Leader

- Manages information technology (IT) project support staff
- Reviews project deliverables from IT staff
- Acts as single point of contact for IT project staff
- Participates in developing and reviewing work products
- Tracks and reports progress
- Reviews and approves project deliverables and work products

Information Technology Support (2)

- Installs/deploys/test related IT components and systems that supports e-learning module
- Participates in developing and reviewing work products
- Tracks and reports progress

Technical Trainer

- Assists in the development of the training plan
- Assists in developing trainee's manual
- Trains End-Users in basic and browser computer skills
- Participates in developing and reviewing work products
- Tracks and reports progress

Instructional Designer

- Leads and participates in e-learning design, development, implementation, and evaluation components
- Manages Assistant Instructional Designer and Subject Matter Expert Team
- Participates in developing and reviewing work products
- Tracks and reports progress
- Reviews and approves project deliverables and work products

Assistant Instructional Designer

- Assists Lead Instructional Designer in e-learning design and content development
- Participates in developing and reviewing work products
- Tracks and reports progress

Subject Matter Experts (8)

- Participates in developing and reviewing work products as directed by Instructional Design Leader
- Participates in developing and reviewing e-learning module and other related modules such as training manuals
- Tracks and reports progress

Graphic Designer

- Assists Instructional Design team in graphic design and development
- Performs tasks associated with e-learning design as it relates to Graphic Designs
- Participates in developing and reviewing work products
- Tracks and reports progress

E-Learning Support Trainer

- Assists in the development of the training plan
- Assists in developing trainee's manual
- Trains End-Users on e-learning module
- Participates in developing and reviewing work products
- Tracks and reports progress

Independent QA Consultant Leader

- Reviews and approves project deliverables from a QA perspective
- Provides guidance and assistance on project matters from a QA perspective
- Participates in developing and reviewing work products
- Tracks and reports progress

- Reviews and approves project deliverables

Independent Information Technology QA Consultant

- Reviews and approves project deliverables from a Technical QA perspective
- Provides guidance and assistance on project matters from a Technical QA perspective
- Participates in developing and reviewing work products
- Tracks and reports progress
- Reviews and approves project deliverables

MILESTONES

Listed below in Table 3 are the projected milestones start and exit dates for each stage.

Table 3. Project Milestones for Stages

Project Stage	Target Start	Target Exit
Planning/Preparation	Feb 10	March 24
Instructional Design	March 24	May 2
Technology Installation/User Password	March 24	May 2
Product deployment/Testing	May 5	June 13
Product Assessment	May 26	July 7
End-User Training (part 1)	March 24	May 2
End-User Training (part 2)	June 9	July 18
Project Implementation	July 21	Sept 3
End-User Assessment	July 21	Sept 3
Business Results Assessment	Sept 8	Nov 6

PROBLEM/ISSUE ESCALATION

In the event a problem is encountered during the course of project development, the issue will be reported in an Issue/Resolution Log. This log will include the problem description, date the problem was reported, person or persons who reported the problem, name of the person responsible for overseeing the resolution of the problem, a detailed explanation for overcoming the issue, and resolution date.

Problem situations are to be resolved in an orderly and timely manner. The severity of the problem will determine the person or persons responsible and time period allowed for adequate resolution. If no decision is made concerning the problem in the amount of time stated, the Project Manager will intervene to resolve the problem or proceed at risk.

In addition, the Project Manager will allow three business days to resolve any problems with the affected project team member or members if the problem is practical. If the problem is not practical, the Project Manager will consult with affected Stakeholders to resolve difficult problems.

PROJECT PROCESSES

GENERAL MANAGEMENT PROCESSES

Scope Management

- **Project Management**

The Project Manager will direct and guide project teams in the most efficient manner to reach milestones and target dates. (Refer to Table 1- Project Schedule for Deliverables and Work Products and Table 3-Milestone Dates). The first priority of project management is to guide the development of the e-learning module to produce the highest quality product that utilizes learner interactions and achieves learning goals and intended learning outcomes. The next priority is the implementation of the e-learning module to the Intranet so that all learners can be trained or refreshed on computer and browser skills and trained on accessing and using the e-learning module prior to project completion.

- **Stakeholder Management**

The Project Manager is committed to resolving each stakeholder needs and expectations as well as the collective needs of the group and influencing the expectations of this group to ensure successful project completion. It is the primary responsibility of the Project Manager to update all stakeholders in a systematic way of project progressions and updates.

- **Project Tracking and Control**

All work products completed will be tracked against what is planned to monitor for anticipated risks, problem resolutions, and quality control indicators. The Project Manager will list all line items (activities, tasks, and subtasks) of the development stages on a weekly status report with deliverable dates corresponding to each task. Listed below are examples of the kinds of reviews, meetings, and quality control methods that will be used to track project completion.

- In-progress reviews will be conducted on a weekly basis to update Stakeholders
- In-Stage quality assessments will be conducted by Quality Assurance and Information Technology Quality Assurance Consultants for work product quality control
- Stage exit meetings will be conducted prior to submittal of deliverables to review stage work products for accuracy, address issues, and revise project plan if necessary
- General project progress reports will be submitted to stakeholders, affected departments, project teams, and end-users on a monthly basis as necessary
- Issue/Resolution Log will track all issues, problems, and resolutions as each incident occurs

▪ **Status Reporting**

Status reporting of project development will consist of formal meetings and informal meetings. These meetings will occur throughout the entire project and on as needed basis. In addition, the Project Manager will be available for informal meetings to respond to team members’ questions, comments, and suggestions concerning project progress. The Project Manager will schedule the day and time of all formal meetings within a reasonable timeframe to avoid meeting time conflicts. Listed below is an overview of the project status reporting methods. *(Refer to Table 4).*

Table 4. Project Status Reporting

Weekly	Project Manager will update the status report on a weekly basis to provide project progress, recent completions, accomplishments, and efforts expended. These meetings will be face-to-face and/or email, and/or conference calls.
Monthly	All weekly information will be summarized in a monthly project status report and will serve as the official primary reporting mechanism for this project. The monthly report will be distributed to Stakeholders and Project Team. Project Stakeholders will meet monthly through project completion.

- **Stage Exits**

Each planned stage of work product completions will conclude with a formal checkpoint or assessment called stage exit. When a stage has been successfully ‘exited’, the date of exit will indicate that all deliverables and outstanding issues have been completed and addressed. Further, each stage will include an in-stage assessment conducted by the Project Manager and Quality Assurance Consultants to ensure all drafts and final deliverables have been completed, all outstanding issues have acceptable action plans, and a sound plan is intact for remainder of the project. This quality control checkpoint process will consist of meetings with key stage Team Members, Quality Assurance Consultants, and other designated members to review goals and objectives. A concur or non-concur written statement will be signed by project approvers accepting project deliverables for each stage. *(Refer to Table 1-Project Schedule for Deliverables and Work Products in the project definition section of this document for list of project approvers defined by job title).*

- **Assumptions, Constraints, and Dependencies**

- ***Instructional Design Assumptions.*** It is assumed the instructional design component will include interactions suitable for e-learning. Further, it is assumed that this e-learning module will be designed to measure intended learning outcomes in addition to behavioral outcomes.
- ***End User Assumptions.*** It is assumed that all End Users have access to at least one desktop computer and Intranet access at all designated workstations. Further, it is assumed that all End Users have been assigned a user name and password for computer access and have the required skills and knowledge of basic computer operations and browser access.
- ***Technology Assumptions.*** It is assumed that all desktop computers that will be utilized by End Users have been installed with Intranet access. Further, it is assumed that Macromedia Studio MX has been purchased by the Information Technology Department as an instructional technology resource requested by the internal Technical Training Specialist. Also, it is assumed that Information Technology Technical Support Technicians have

installed this software on the computers of the Instructional Design Leader and Assistant Instructional Designer. (*Refer to the Project Definition-Project Organizational Chart section for names of these designers*).

- **Business Results Assumptions.** It is assumed that business results will be measured in terms of comparing intended learning outcomes from the e-learning module to production reports reflecting chemical costs and drinking water quality parameters.
- **Constraints:** This project is constrained to one e-learning module designated for internal End Users within a designated department (Operations) located within the Atlanta region. Further, this project is constrained to one designated instructional design and development tool: Macromedia Studio FX.
- **Dependencies:** The success of this project is dependent upon the Information Technology Department providing technical support to deploy the e-learning module to all computers via Intranet access. Further, this project is dependent upon all End Users being trained or refreshed on basic computer operation, accessing the Intranet, and accessing and working through the e-learning module.

■ Risk Management

Although all work products and deliverables listed on the project schedule (*refer to table 1*) have been assigned a risk category of low, medium, or high for purposes of monitoring for possible risks, listed below are risks identified that require immediate attention.

- **Risk Category: Aggressive Project Timeline**

The project timeline is very aggressive and requires coordination between the Project Manager, Instructional Design Team, and Information Technology Leader.

- **Risk Mitigation: Aggressive Project Timeline**

The Project Manager will lead the coordination efforts of managing the project timeline by providing advance notification via email for timeframes,

deadlines, and meetings. This method will assist in allowing all affected members time to plan and request additional resources, if necessary, to efficiently review work products, documentations, and deliverables.

- ***Risk Category: Staffing of Independent Quality Assurance Consultants (2)***

The current vacancies of two Independent Quality Assurance Consultant positions present a high risk to the project timeline because quality assurance should start at the onset of this project.

Risk Mitigation: Staffing of Independent Quality Assurance Consultants (2)

The Project Manager will immediately begin implementing the process of hiring two Independent Quality Assurance Consultants from other locations within the organization by contacting key management personnel in the Information Technology and Technical Services Departments in other regions. Every effort will be made to adequately staff these positions with exceptionally qualified people.

- ***Risk Category: End User Log On/Password***

End Users log on name and password present a low risk because it is assumed that most of end-users have been assigned a user name and password.

Risk Mitigation: End User Log On/Password

This project plan has included a project stage that addresses assignment of user names and passwords for each end user. If there are no risks associated with this category, then, other technology project stages may complete ahead of schedule completion dates.

- ***Risk Category: End User Training***

End User training for basic computer and browser skills and knowledge presents a low risk. This low risk is based on the assumption that end-users have the required computer skills and knowledge at the onset of this project.

Risk Mitigation: End User Training

The Project Manager will immediately request the Information Technology Department Manager to direct technical support teams to begin a technology needs assessment of end-users to determine the kinds of technology skills required to participate in the e-learning session. This assessment will be essential in determining whether all end users have met the prerequisites for basic computer operations and browser access capabilities.

Instructional Content Management

The instructional content is at the center of the e-learning project. Therefore, management of the instructional content will consist of several stages such as analysis, design, development, implementation, and evaluation. The instructional technology tool that will be used for the instructional design and development is Macromedia Studio FX. This software has technological capabilities for designing user interactivity such as simulations, drag/drop interactions, and instructional content-based games to assist End Users in participating actively in e-learning as oppose to point and click computer-based instructional content designs.

Two internal Instructional Designers will be assigned to creating the instructional content in addition to eight internal Subject Matter Experts providing instructional content. These Subject Matter Experts have been selected from Operations, Engineering, Equipment Maintenance, and Technical Training departments.

Several work products will be submitted to the Project Manager and Quality Assurance Consultants to review the instructional content and design processes to ensure this project is moving forward to completion in a timely manner. These work products are analysis, design, development, implementation, evaluation plans, training plans, and trainee's manual.

(Refer to Table 1- Project Schedule for Deliverables and Work Products in the project definition section of this document).

Technical Management

Technical management of this project will include reviews and assessments of all technical components such as hardware, software purchases, installations, system performance, technical constraints, and other related technical matters that may arise during the development of this project. Therefore, the Information Technology Manager will lead this process to ensure that all technical resources and support are in place to launch the e-learning product. The Quality Assurance and Information Technology Quality Assurance Consultants will be working closely together to ensure completeness and accuracy of all technological components. As a result, regularly scheduled meetings with these Consultants and Project Manager will be required to monitor and respond to any changes, updates, or system requirement requests in a timely manner.

End User Capability Management

End User capability management of this project will include training strategies for learners to refresh computer and browser skills or provide knowledge to access and use the e-learning module. The End Users targeted for this project are front-line employees, supervisory employees, and superintendents located at two plants. Although these employees have access to computers at workstations for process control data entry, a large percentage of operators may not utilize computers or Internet browser access on a regular basis. Management of this process will ensure all e-learning participants have the required skills and knowledge to utilize learning module. Based on the results of a technology needs assessment, if necessary, Project Trainers will provide training to all e-learning participants requesting or needing computer and browser skills related to the e-learning product. All End Users will be issued a trainee's manual as an additional resource for reference to accessing and using the e-learning module.

INTERPERSONAL MANAGEMENT PROCESSES

Communication Management

Communication management of this project will consist of formal organizational avenues (letters, emails, newsletters, weekly meetings and monthly meetings) to announce the forthcoming e-learning project and product, regularly report technical and non-technical project status, update specific information related to End Users and other target audiences, and update progress of each project member's tasks and assignments. The target audiences for project communication will include project stakeholders, project teams, end users, designated departments, and organizational-wide employees. The Project Manager and/or Project Stakeholders will determine the target audiences that will receive communication and define the type of project communication and delivery mode. In addition, communication will also include informal meetings. The Project Manager will have an open door policy for just-in-time communication.

Change Management

Change management of this project will involve managing change in ways the organization will view its technical training program with the addition of an e-learning product in terms of new learning opportunities for enhancing learning, revolutionizing employee development, and adding new competencies to employee performance reviews. Equally important, the result of the intended learning outcomes of this e-learning initiative when compared to organizational goals of employees performing in a more coordinated manner and lowering the costs of chemicals while maximizing the highest quality of drinking water may modify or change work processes. Therefore, the Project Manager will work closely with key stakeholders such as Senior Manager, Human Resources Manager, and Operations Managers to ensure all changes are implemented in an efficient and timely manner by providing immediate feedback loops, rewards initiatives, and innovative change strategies.

EVALUATION MANAGEMENT PROCESSES

Quality Management

Quality management for this project will include in-stage and exit stage assessments such as evaluating work products from a quality control perspective, conducting weekly and monthly meetings to address issues, and reviewing deliverables within four business days prior to a deliverable date. These assessments are required to ensure all processes and procedures were followed accurately and in a timely manner. In addition, management of the quality assessment process will also help expose any unforeseen risks and if necessary, adjust the project plan to mitigate any exposed risks. The project schedule in this document reflects a risk category that has been assigned a low, medium, or high-risk variable. *(Refer to Table 1-Project Schedule for Deliverables and Work Products in the project definition section).*

Assessment Management

Assessment management for this project will consist of evaluations in terms of quality assurance consultations, project deliverables, work products, product testing, business results, and project team.

- **Quality Assurance Consultations:** Two Independent Quality Assurance Consultants will provide quality assurance support to project team via meetings and reports throughout this project including in-stage and exit stage reports. These reports will range from high-level assessments to low-level assessments.
- **Project Deliverables:** All project deliverables will be submitted to team members for evaluation in terms of quality control assessment. In addition, document deliverables will be submitted to the Project Manager in a timely manner for review, comments, and suggestions. It will be the Project Manager's responsibility to include other team members or stakeholders for assistance in this review process.
- **Work Products:** All work products will be submitted to the Project Manager for distribution and discussion at daily, weekly, or monthly team meetings. It is at these

meetings where the project team will review, comment, and make suggestions, if necessary.

- ***Product Testing:*** The final e-learning product will be administered to product testers such as End Users, Project Stakeholders, employees outside the production environment, and employees located at other regions for review, comments, and suggestions to ensure unbiased assessments can disclose any overlooked instructional design errors, usability complications, or technical discrepancies.

- ***Business Results:*** Business results will be assessed in terms of how well employees increase his or her skills and knowledge through participation of the e-learning module to perform in a more coordinated effort that lowers the costs of chemicals while maximizing the highest quality of drinking water. Because this assessment includes time and reports such as daily chemical inventory, laboratory bench tests, and monthly production as dependent variables, assessment will be determined at least 31 days after the e-learning module has been implemented. Therefore, the Project Manager in collaboration with the Senior Manager and Operations Manager will evaluate the effectiveness of the e-learning module using End User evaluations, return of training investment report, and operational reports over time to determine whether the e-learning product was effective in achieving organizational goals.

- ***Project Team:*** The Project Manager will evaluate the project team as a group and individually during scheduled times throughout the project. Each member will be evaluated on his or her effectiveness in terms of completing assignments, reports, work products, and deliverables. The Project Manager has the authority to reassign tasks and assignments as needed for achieving project completion.

Cost Management

Costs associated with this project are minimal because all members of the project team with the exception of two Quality Assurance Consultants are located in the region where this e-learning module will be developed and implemented. Therefore, a majority of the costs associated with this project will come from Consultants' food, lodging, travel, and anticipated overtime for Lead Instructional Designer. Listed below is an overview of the costs associated with supporting this project. (Refer to Table 5).

Table 5. Project Costs

Item	Description	Cost	Cost Description
Payroll for Team Memb	Paid by permanent site location	0	
Consultant #1	Quality Consultant Leader		
Food		\$13,950.00	\$50/day for 279 days (9 mths)
Lodging		\$6,750.00	\$750/month for company apt-2 bedroom 750 x 9 months
Car Rental		\$350.00	\$350/month for company month rental plan
Consultant #2	IT Quality Consultant Leader		
Food		\$13,950.00	\$50/day for 279 days (9 mths)
Lodging		\$0.00	(room with Consultant 1 = 2 bedroom apt
Car Rental		\$350.00	\$350/month for company month rental plan
Inst. Designer Lead overtime	E-Learning Module	\$11,232.00	Designer gets \$29/hr regular pay \$39/hr overtime straight pay x 8 hrs per wk X 4 wks/month X 9 months
Macromedia Studio FX	Instructional Design Tools	\$0.00	Previously purchased by IT dept including registration access for 50 users
Office/Technical Supplies/Training Manuals		\$5,000.00	basic supplies paper, binders, zip disks computer accessories, instructional design supplies
	Total Est. Cost	\$51,582.00	