



Team Product Document

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Distribution			Abstract		
*	Name	Mail Addr.	<p>The attached document is an update to the "cross-walk" submittal sent to Richard J. Schassburger on 4/23/2007 (subsequently numbered as EPA-00062) for compliance with the DOE safety requirements contained in 10 CFR 851. The original submittal cover letter is attached at the end of the "cross-walk" along with the acceptance letter received from Dae Chung dated 5/21/2007.</p>		
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Supporting Document Summary of Change

No. EPA-00062 Rev D
Page 1 of 1

Rev.	Summary of Change	Approvals and Date
A.	<p>Revision A. was made to reflect the following changes:</p> <ol style="list-style-type: none"> 1. Layoff of all union represented employees resulting in a further reduction in personnel. 2. Communication of Company directive documents resulting in greater consistency and dependence on Enterprise directive documents. Where site SOPs were shown in the original document, Enterprise procedures (PROs) are given and site-specific documents are indicated as "programs". 	
B.	<p>Revision B required no changes to the body of the document. However, a change to the required approval signatory and distribution list were made.</p>	
C	<p>Revision C reflects the following changes:</p> <ol style="list-style-type: none"> 1. Program Manager is now stated as Program Management Office 2. Removal of paragraph references when related ETEC program documents are listed 3. Deletion of references to Boeing PRO-6140 and PRO-1019 which were eliminated as company directive documents 4. Additional references to EID-04694, ETEC Closure Contract Integrated Safety Management Description (ISMSD) and the SSFL Injury and Illness Prevention Program as appropriate 5. Removal of planned actions concerning NFPA 70E compliance in section 851.23(a) (1)-(14) since these actions have been completed 6. Notation for section 851.27(b) (7-10) that pressure systems and explosives are not used at ETEC 7. Expanded explanatory information and several minor editorial corrections 	
D	<p>Changes in Revision D involved changing the title (no longer used reference to R21-PS removed) and updating the distribution list.</p>	
		<p>P. Rutherford 6/5/2012</p>

TABLE OF CONTENTS

1. Overview/Background 3
2. Purpose 3
3. Scope..... 3

TABLE & APPENDICES

Table 1 10 CFR 851 Compliance Plan 4
Appendix A Original Submittal Letter To Richard Schassburger, 4/23/2007 19
Appendix B Letter Of Acceptance from Dae Chung, 5/21/2007 21

1. OVERVIEW/BACKGROUND

DOE Rule 10 CFR 851, Worker Safety and Health Program Rule, requires contractors to develop a written Worker Safety and Health Program (WSHP) by February 26, 2007 and submit it to the appropriate Head of DOE Field Element for approval. This WSHP must describe the methods the contractor is using to implement the requirements of Subpart C of the Rule. The Head of DOE Field Element must complete a review and provide written approval of the contractor's worker safety and health program within 90 days of receiving the document. The worker safety and health program and any updates are deemed approved 90 days after submission if they are not specifically approved or rejected by DOE earlier. Beginning May 25, 2007, no work may be performed at a covered workplace unless an approved worker safety and health program is in place for the workplace.

It should be noted that those Boeing policies, procedures and other directive documents referenced in this 10 CFR 851 Compliance Plan (other than those specific to the DOE closure effort – e.g., EID-04694 and EPA-00060) are applied to all areas of the Santa Susana Field Laboratory including the ETEC closure operations in Area IV. The Santa Susana Field Laboratory employee population currently consists of approximately 50 Boeing employees, and as of 4/3/2009, no union represented or hourly employees, supported by varying levels of subcontract personnel participating in site characterization, environmental compliance, demolition and similar activities.

NOTE: All activities relating to decommissioning and decontamination (D&D) work at ETEC facilities were suspended in May 2007 and remain on-hold pursuant to the DOE stop order received on May 24, 2007.

2. PURPOSE

The purpose of this Plan is to outline the methods that will be used by the Boeing Energy Technology Engineering Center (ETEC) at the Santa Susana Field Laboratory to comply with the WSHP required by 10 CFR 851.

Per 851.13(b) Boeing asserts that a written safety and health program and an approved Integrated Safety Management System (ISMS) description pursuant to the DEAR clause existed before the date of the issuance of the final rule. Boeing intends to use the program and the description, and their referenced procedures, as the worker safety and health program and submits this plan to the DOE Field Element approval authority.

3. SCOPE

This Plan applies to all contractor personnel, as defined by 10 CFR 851, participating in the ETEC closure activity.

Table 1

10 CFR 851 Compliance Plan
Energy Technology Engineering Center
Boeing Santa Susana Field Laboratory
ETEC Closure

Worker Safety and Health Program Criteria/Requirements

DOE Rule 10 CFR 851 requires (or implies) that a written Worker Safety and Health Program include the information elements described in bold. The ETEC compliance plan for each element is described beneath the requirement in normal text.

Section	Requirement
851.10(b)	The ETEC Closure worker safety and health program, as described in this compliance plan through compliance with referenced procedures, describes how compliance with the following elements will be achieved:
851.10(b)(1)	Subpart C requirements, parts 851.20 through 851.27, are applicable to the hazards associated with the ETEC closure scope of work
851.10(b)(2)	<p>The WSHP must describe contractor provisions for addressing any compliance orders issued by the Secretary pursuant to 851.4.</p> <p>When received, compliance orders are delivered to the Program Management Office for action. Responsive and/or corrective actions are coordinated with the Health, Safety and Radiation Services organization and other support organizations, as needed. The Program Management Office will coordinate an appropriate response to the DOE and ensure acceptance by the DOE.</p>
851.11(a)(1)	<p>If a contractor is responsible for more than one covered workplace at a DOE site, the contractor must establish and maintain a single worker safety and health program for the covered workplaces for which the contractor is responsible.</p> <p>Not applicable. This 10 CFR 851 compliance plan is specific to ETEC closure activities performed within area IV of the Santa Susana Field Laboratory as defined in contract DE-AC03-99SF21530.</p>
851.11(a)(2)(i)	<p>If more than one contractor is responsible for the covered workplace, each contractor must establish and maintain a worker safety and health program for the workplaces for which the contractor is responsible.</p> <p>Not applicable. Boeing is the sole DOE contractor performing ETEC closure work.</p>
851.11(a)(2)(ii)	<p>The WSHP must describe how ETEC coordinated safety and health roles and responsibilities with other contractors in the workplace.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • PRO-2751, Safety, Health and Environmental Management Program for Service Providers • EID-04694 ETEC Closure Contract ISMS Description (ISMSD) • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530

Section	Requirement
851.11(a)(3)(i)	<p>The WSHP must describe how ETEC will comply with the requirements in Subpart C of 10 CFR 851, including the methods for implementing those requirements.</p> <p>Boeing will comply with the applicable requirements by applying the safety management processes existing in Boeing Environment, Health and Safety (EHS) PROs, site-specific safety programs, EID-04694 ETEC Closure Contract ISMSD , EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 and, where required, additional requirements contained in 10 CFR 851.</p> <p>“PRO” documents are Enterprise level Boeing procedures, that is, procedures developed at the corporate level and apply to all of Boeing or to large segments of the business. These are directive documents that establish requirements for the conduct of Boeing business.</p>
851.11(a)(3)(ii)	<p>The WSHP must describe how ETEC will integrate the requirements of Subpart C of 10 CFR 851 with other related site-specific worker protection activities and with the Integrated Safety Management System.</p> <p>Explanations of this requirement are contained in Subpart C responses, parts 851.20 through 851.27.</p>
851.20(a)(1)	<p>The WSHP must describe ETEC written policy, goals and objectives for the worker safety and health program, or reference where they are located.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • Boeing POL-4, Safety, Health and Environmental Affairs • PRO-910, Protection of Environment, Health and Safety • EID-04694 ETEC Closure Contract ISMSD, • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 • Injury and Illness Prevention Program (IIPP)
851.20(a)(2)	<p>The WSHP must describe how ETEC ensures that qualified worker safety and health staff are used to direct and manage the program.</p> <p>Boeing Staffing ensures that appropriately qualified candidates are hired to fulfill EHS staff positions. Moreover, the Health, Safety and Radiation Safety organization will provide orientation to new staff members to assist in ensuring that DOE-specific requirements applicable to the ETEC closure are understood.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-04694 ETEC Closure Contract ISMSD • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530
851.20(a)(3)	<p>The WSHP must describe how the ETEC assigns worker safety and health program responsibilities, evaluates personnel performance and holds personnel accountable for worker safety and health performance.</p> <p>Organizational responsibilities for safety and health are specified in Boeing EHS directive documents at the Enterprise (corporate) and site level.</p>

Section	Requirement
	<p>Personnel performance is managed through the Performance Evaluation Process which includes annual development of goals and objectives and performance assessment. POL-4, Safety, Health and Environmental Affairs, provides that promoting a safe and healthy work environment be included as a performance measure on managerial performance reviews. Accountability for safety and health performance, aside from the Performance Evaluation Process, is managed under:</p> <ul style="list-style-type: none"> • PRO-1909, Administration of Corrective Action • BPI-3946, Employee Corrective Action Review Boards • EID-04694 ETEC Closure Contract ISMSD • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530
851.20(a)(4)	<p>The WSHP must describe how ETEC provides mechanisms to involve workers and their elected representatives in the development of worker safety and health program goals, objectives, and performance measures and in the identification and control of hazards in the workplace.</p> <p>Applicable Boeing documents and processes concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-04694 ETEC Closure Contract ISMSD • Injury and Illness Prevention Program (IIPP)
851.20(a)(5)	<p>The WSHP must describe how ETEC provides workers with access to information relevant to the WSHP.</p> <p>Applicable Boeing documents and processes concerning this requirement, as discussed in EID-04694 ETEC Closure Contract ISMSD and EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530, include:</p> <ul style="list-style-type: none"> • Job-specific health and safety training, training scheduling, completion tracking • SSFL EHS web • EHS Bulletins • All-Hands EHS meetings • Tailgate meetings • SSFL EHS Council
851.20(a)(6)	<p>The WSHP must describe what procedures ETEC has in place for workers to report without reprisal job-related fatalities, injuries, illnesses, incidents and hazards and to make recommendations about appropriate ways to control those hazards.</p> <p>Applicable Boeing documents and processes concerning this requirement, as discussed in EID-04694 ETEC Closure Contract ISMSD, include:</p> <ul style="list-style-type: none"> • Injury and Illness Prevention Program (IIPP) • PRO-910, Protection of Environment, Health and Safety
851.20(a)(7)	<p>The WSHP must describe what procedures ETEC has in place to provide for prompt response to such reports and recommendations from employees (i.e., reports of job-related fatalities, injuries, illnesses, incidents and hazards, and recommendations for how to control hazards).</p>

Section	Requirement
	<p>Applicable Boeing documents and processes concerning this requirement , as discussed in EID-04694 ETEC Closure Contract ISMSD, include:</p> <ul style="list-style-type: none"> • Injury and Illness Prevention Program (IIPP) • Incident Reporting System (IRS) • BPI-1906, Incident Notification, Investigation and Corrective Action
851.20(a)(8)	<p>The WSHP must describe how ETEC provides for regular communication with workers about workplace safety and health matters.</p> <p>Applicable Boeing documents and processes concerning this requirement , as discussed in EID-04694 ETEC Closure Contract ISMSD, include:</p> <ul style="list-style-type: none"> • Job-specific health and safety training, training scheduling, completion tracking • SSFL EHS web • Safety and Health Bulletins • All-Hands EHS meetings • Tailgate meetings • EHS Council Meetings
851.20(a)(9)	<p>The WSHP must describe what procedures ETEC has in place to permit workers to stop work or decline to perform a task because of a reasonable belief that the task poses an imminent risk of death, serious physical harm, or other serious hazard to workers, in circumstances where the workers believe there is insufficient time to utilize normal hazard reporting and abatement procedures.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-04694 ETEC Closure Contract ISMSD • Injury and Illness Prevention Program (IIPP)
851.20(a)(10)	<p>The WSHP must describe what procedures or processes ETEC has in place to inform workers of their safety and health rights and responsibilities, to include posting of the DOE-designated Worker Protection Poster in the workplace where it is accessible to all employees.</p> <p>Boeing maintains required OSHA and DOE postings which address employees' health and safety rights.</p> <p>Applicable Boeing documents concerning this requirement include, EID-04694 ETEC Closure Contract ISMSD</p>
851.20(b)	<p>The WSHP must describe how ETEC informs workers of their responsibility to comply with the requirements of this part.</p> <p>Applicable Boeing documents concerning compliance with this requirement are included in EID-04694 ETEC Closure Contract ISMSD which is distributed to affected personnel. The DOE-designated Worker Protection Poster is posted at locations accessible to all workers.</p>
851.20(b)(1)	<p>The WSHP must describe how ETEC allows employees to participate in activities described in this section on official time.</p> <p>See below.</p>

Section	Requirement
851.20(b)(2)(i) – (vi)	<p>The WSHP must describe how ETEC provides employees with access to the following:</p> <ul style="list-style-type: none"> • DOE safety and health publications – ORPS Reports, Lessons Learned and Operating Experience Summaries are distributed to affected management and staff. • The Worker Safety and Health Program (WSHP) for the covered workplace – The WSHP and a copy of 10 CFR 851 are posted at the Radioactive Materials Handling Facility (RMHF) and on the site EHS web page. • The standards, controls, and procedures applicable to the covered workplace - EID-04694, ETEC Closure Contract ISMSD, and EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530, are available on the local EHS web page. Boeing health and safety procedures are available on the site EHS web page. • The safety and health poster that informs the worker of relevant rights and responsibilities – Required postings concerning employees' rights relevant to health and safety are posted in areas normally occupied by ETEC employees. • Limited information on any recordkeeping log (OSHA Form 300). Access is subject to Freedom of Information Act requirements and restrictions – OSHA 300 Summaries are posted, as required, in buildings normally occupied by ETEC employees. Boeing subcontractors will post their OSHA 300 logs for ETEC Closure work in accordance with their contract requirements. • The DOE Form 5484.3 (the DOE equivalent to OSHA Form 301) that contains the employee's name as the injured or ill employee – ETEC maintains OSHA Form 301 information for OSHA Recordable injuries in electronic format on a common server. Boeing subcontractors will be required to maintain their OSHA 301 forms for ETEC Closure work in accordance with their contract requirements.
851.20(b)(3)	<p>The WSHP must describe what procedures or processes ETEC has in place for notifying employees when monitoring results indicate worker(s) are overexposed to hazardous materials.</p> <p>SSFL industrial hygienists communicate monitoring results in correspondence addressed to monitored employees and their managers. The significance of the results and any corrective actions are reviewed. When overexposures are observed, updated medical surveillance requirements may be initiated in accordance with the Boeing Occupational Health Examination Guide.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • RA-104g, Industrial Hygiene Surveillance Guidelines • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 • PRO-1034, Medical Surveillance Program • EID-04694 ETEC Closure Contract ISMSD
851.20(b)(4)	<p>The WSHP must describe how ETEC ensures that employees are allowed to observe monitoring or measuring of hazardous agents and are provided with the results of their own exposure monitoring.</p> <p>SSFL industrial hygienists coordinate employee exposure monitoring with field personnel. Monitored employees are advised as to the purpose of the</p>

Section	Requirement
	monitoring and provided the results of their own monitoring in correspondence addressed to themselves and their manager.
851.20(b)(5)	<p>The WSHP must describe what provisions ETEC has in place to allow a representative authorized by employees to accompany the Director (of the Office Price Anderson Enforcement) or his authorized personnel during the physical inspection of the workplace for the purposes of aiding the inspection. NOTE: when no authorized employee representative is available, the Director or his authorized representative will consult, as appropriate, with employees on matters of safety and Health.</p> <p>As of 4/3/2009, no union represented employees work at SSFL.</p>
851.20(b)(6)	<p>The WSHP must describe what provisions ETEC has in place to allow employees to request and receive results of inspections and accident investigations.</p> <p>EID-04694, ETEC Closure Contract ISMSD describes means to foster communication and provide feedback.</p> <p>The SSFL Injury and Illness Prevention Program (IIPP), provides for employees to be allowed opportunities to express concerns related to safety and health to supervision or the EHS organization any time an unsafe condition needs attention.</p>
851.20(b)(7)	<p>The WSHP must describe what provisions ETEC has in place to allow employees to express concerns related to safety and health.</p> <p>EID-04694, ETEC Closure Contract ISMSD describes means to foster communication and provide feedback.</p> <p>The SSFL Injury and Illness Prevention Program (IIPP), provides for employees to be allowed opportunities to express concerns related to safety and health to supervision or the EHS organization any time an unsafe condition needs attention.</p>
851.20(b)(8)	<p>The WSHP must describe what provisions ETEC has in place to allow employees to decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious physical harm to the worker coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures.</p> <p>EID-04694, ETEC Closure Contract ISMSD describes means to foster communication and provide feedback, including encouragement to decline to perform work until reasonable safety precautions are provided.</p> <p>The SSFL Injury and Illness Prevention Program (IIPP) provides that employees may decline to perform work believed to be unsafe until it is determined to be safe by Health and Safety staff.</p>
851.20(b)(9)	<p>The WSHP must describe what provisions ETEC has in place to allow workers to stop work when the employee discovers employee exposures to imminently dangerous conditions or other serious hazards.</p> <p>EID-04694, ETEC Closure Contract ISMSD provides that employees may stop any activity that can endanger workers, the public, or the environment.</p>

Section	Requirement
	<p>The SSFL Injury and Illness Prevention Program (IIPP) provides that employees may stop work believed to be unsafe until it is determined to be safe.</p>
851.21(a)(1) – (8)	<p>The WSHP must describe what procedures ETEC has in place to identify existing and potential workplace hazards and assess the risk of associated workers injuries and illnesses. Procedures must include methods to:</p> <ol style="list-style-type: none"> 1. Assess worker exposure to chemical, physical, biological or safety workplace hazards through appropriate workplace monitoring; 2. Document assessment for chemical, physical, biological, and safety workplace hazards using recognized exposure assessment and testing methodologies and using accredited and certified laboratories; 3. Record observations, testing and monitoring results; 4. Analyze designs of new facilities and modifications to existing facilities and equipment for potential workplace hazards; 5. Evaluate operations, procedures, and facilities to identify workplace hazards; 6. Perform routine job activity-level hazard analyses; 7. Review site safety and health experience information; and 8. Consideration interaction between workplace hazards and other hazards such as radiological hazards. <p>Health, Safety and Radiation Services conducts monthly audits of ETEC areas and determines corrective actions when necessary. Audits are documented and maintained on a common server.</p> <p>Activity-level hazard analyses are performed when field observations are made of Boeing and Service Provider activities. Observations are documented and maintained on a common server.</p> <p>Service provider activities, such as demolition, are managed under PRO-2751, Safety, Health and Environmental Management Program for Service Providers and implementing local site procedures. Subject activities are evaluated using a structured checklist and subject matter expert review and approval process.</p> <p>Incident investigations are conducted through the Boeing Incident Reporting System (IRS) in the event of an employee injury or when a near miss or environmental event is reported. Corrective actions are recorded and tracked to closure.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-06146, Guidelines for Performing Process Hazards Analyses for Closure of ETEC • EID-04694 ETEC Closure Contract ISMSD • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 • Injury and Illness Prevention Program (IIPP)
851.21(b)	<p>The WSHP must describe the procedures or processes ETEC will use to identify closure facility hazards (and controls) and provide the list of hazards and controls to the Head of DOE Field Element within 90 days after identifying such hazards. NOTE: the Head of DOE Field</p>

Section	Requirement
	<p>Element, with the concurrence of the Cognizant Secretarial Officer, has 90 days to accept the closure facility hazard controls or direct additional actions to either: (1) Achieve technical compliance; or (2) Provide additional controls to protect the workers.</p> <p>Closure facility hazards and controls are provided in EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530.</p> <p>New assessments will be developed for newly authorized projects following the Project Impact Evaluation or demolition processes referenced in EID-04694, ETEC Closure Contract ISMSD.</p>
851.21(c)	<p>The WSHP must describe what provisions ETEC has in place for obtaining baseline information on existing and potential workplace hazards, as well as obtaining updated information as often as necessary to ensure compliance with the requirements of Subpart C.</p> <p>Health, Safety and Radiation Services reassesses baseline workplace hazards described in EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530, during monthly audits of ETEC areas and audits field activities.</p>
851.22(a)	<p>The WSHP must describe the ETEC hazard prevention and abatement process. The process must ensure that all identified and potential hazards are prevented or abated in a timely manner.</p> <p>Foundations for hazard prevention are laid by the requirements contained in Boeing Enterprise and site safety-related programs, employee training and health and safety communications. Service provider and demolition activities are reviewed in advance following PRO-2751, Safety, Health and Environmental Management Program for Service Providers and implementing local site processes. ETEC hazard prevention and abatement also occurs during tailgate meetings when planned activities are reviewed and safety concerns assessed.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-06146, Guidelines for Performing Process Hazards Analyses for Closure of ETEC • EID-04694 ETEC Closure Contract ISMSD • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530
851.22(a)(1)	<p>The WSHP must describe how ETEC ensures that controls are incorporated in the appropriate facility design or procedure for hazards identified in either the facility design or during the development of procedures.</p> <p>ETEC procedures are developed in coordination with the Environment, Health and Safety (EHS) organization so that appropriate hazard control measures are considered and incorporated. New procedures must be authorized by the Program Management Office and Health, Safety and Radiation Services. ETEC closure activities are not expected to involve new facility design or the development of new facility procedures, however, if necessary, appropriate reviews will be incorporated to address environmental, health and safety concerns.</p>
851.22(a)(2)(i)	<p>The WSHP must describe what procedures ETEC has in place to prioritize and implement abatement actions, according to risk to</p>

Section	Requirement
	<p>workers, for existing hazards identified in the workplace.</p> <p>Abatement actions noted during area audits or identified for approved project activities are given priority attention based on the risk to personnel safety, environmental risk or regulatory compliance, whichever is greater.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EID-06146, Guidelines for Performing Process Hazards Analyses for Closure of ETEC. • EID-04694 ETEC Closure Contract ISMSD • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530
851.22(a)(2)(ii)	<p>The WSHP must describe what procedures ETEC has in place to protect workers from dangerous safety and health conditions identified in the workplace.</p> <p>Hazard mitigation procedures are described in EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530; and POL-4, Safety, Health and Environmental Affairs. Hazards are identified by area management, PICs; Health, Safety and Radiation Services staff, or area employees; and actions are taken to eliminate, mitigate or isolate the risk until more appropriate action can be implemented.</p> <p>Additional Boeing documents concerning this requirement include:</p> <p>EID-06146, Guidelines for Performing Process Hazards Analyses for Closure of ETEC.</p>
851.22(b)	<p>The WSHP must identify what procedures or processes ETEC has in place to ensure that hazard controls are based upon the following hierarchy:</p> <ol style="list-style-type: none"> 1. Elimination or substitution of the hazards where feasible and appropriate; 2. Engineering controls where feasible and appropriate; 3. Work practices and administrative controls that limit worker exposure; 4. Personal protective equipment. <p>The site Personal Protective Equipment program specifies that PPE will be used when engineering or administrative controls cannot eliminate safety and health hazards.</p> <p>EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530, also addresses the hierarchy described in 851.22(b).</p>
851.22(c)	<p>The WSHP must describe what procedures or processes ETEC has in place for addressing hazards when selecting or purchasing equipment, products, and services.</p> <p>ETEC closure activities generally are not acquiring assets. Purchasing vehicles, such as Powered Industrial Trucks, personnel lifts, etc., require assessment and training under PRO-6595, Authorization of Powered Industrial Truck Operators. Purchasing chemical products must be</p>

Section	Requirement
	<p>reviewed by Health, Safety and Radiation Services. PPE purchases must be listed on the Boeing Qualified Products List (QPL). Purchasing services are managed under PRO-2751, Safety, Health and Environmental Management Program for Service Providers and local site programs.</p>
851.23(a)(1) – (14)	<p>The WSHP must describe how ETEC ensures compliance with the following mandatory safety and health standards that are applicable to the hazards at their covered workplace:</p> <ol style="list-style-type: none"> 1. 10 CFR 851, “Chronic Beryllium Disease Prevention Program” (N/A) 2. 29 CFR, 1904.4 through 1904.11, 1904.29 through 1904.33; 1904.44, and 1904.46, “Recording and Reporting Occupational Injuries and Illnesses” 3. 29 CFR 1910, “Occupational Safety and Health Standards,” excluding 29 CFR 1910.1096, “Ionizing Radiation.” 4. 29 CFR 1915, “Shipyard Employment” (N/A) 5. 29 CFR 1917, “Marine Terminals” (N/A) 6. 29 CFR 1918, “Safety and Health Regulations for Longshoring” (N/A) 7. 29 CFR 1926, “Safety and Health Regulations for Construction” 8. 29 CFR 1928, “Occupational Safety and Health Standards for Agriculture” (N/A) 9. American Conference of Governmental Industrial Hygienists (ACGIH), “Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices,” (2005) (incorporated by reference, see section 851.27) when the ACGIH Threshold Limit Values (TLVs) are lower (more protective) than permissible exposure limits in 29 CFR 1910. When the ACGIH TLVs are used as exposure limits, contractors must nonetheless comply with the other provisions of any applicable expanded health standard found in 29 CFR 1910. 10. American National Standards Institute (ANSI) Z88.2, “American National Standard for Respiratory Protection,” (1992) (incorporated by reference, see section 351.27). 11. ANSI Z136.1, “Safe Use of Lasers,” (2000) (incorporated by reference, see section 851.27). 12. ANSI Z49.1, “Safety in Welding, Cutting and Allied Process,” sections 4.3 and E4.3 (1999) (incorporated by reference, see section 851.27). 13. National Fire Protection Association (NFPA) 70, “National Electrical Code,” (2005) (incorporated by reference, see section 851.27). 14. NFPA 70E, “Standard for Electrical Safety in the Workplace,” (2004) (incorporated by reference, see section 851.27) <p>Compliance with the applicable regulations noted is accomplished through Boeing Enterprise and site-specific health and safety programs, including those incorporated into EPA-00060, Health and Safety Plan for Contract DE- AC03-99SF21530</p>
851.23(b)	<p>The WSHP should describe additional specific safety and health requirements that ETEC determines to be necessary to protect the safety and health of workers.</p> <p>Additional requirements applicable to ETEC are not evident.</p>
851.24(a)	<p>The WSHP must describe a structured approach to the worker safety</p>

Section	Requirement
	<p>and health program, which at a minimum, includes provisions for the following applicable functional areas in their worker safety and health program:</p> <ol style="list-style-type: none"> 1. Construction Safety: PRO-2751, Environmental, Safety and Health Management Program for Service Providers. EID-04694 ETEC Closure Contract ISMSD 2. Fire Protection: EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530. PRO-2821, Security and Fire Protection, PRO-2898, Fire Protection 3. Firearms Safety: Site contract security maintains procedures for firearms safety. 4. Explosives Safety: PRO-1026, Explosives Safety 5. Pressure Safety: RC-130G, Design, Certification, Operation, and Maintenance of High Pressure Vessel and Fluid Systems 6. Electrical Safety: PRO-5772, Electrical Safety 7. Industrial Hygiene: RA-104G, Industrial Hygiene Survey Procedures (a guide). 8. Occupational Medicine: PRO-1034, Occupational Health Examination. PRO-1033, Hearing Conservation. PRO-2621, Employee Medical Records. RF-020M, Occupational Health Examination Guide for Providers. 9. Biological Safety (N/A) 10. Motor Vehicle Safety: PRO-6595, Authorization of Powered Industrial Truck Operators. <p>Particular EHS and Security individuals have been assigned responsibility for these functional areas.</p>
851.24(b)	<p>The WSHP must describe how ETEC complies with the applicable standards and provisions in Appendix A of 10 CFR 851, entitled, “Worker Safety and Health Functional Areas.”</p> <p>Boeing maintains Enterprise and/or site-specific programs or technical specialists for the applicable functional areas listed in order to assure compliance with the provisions of Appendix A of 10 CFR 851. Documented program reviews are performed to assess compliance with company requirements and applicable regulations. Program performance is also reviewed with affected personnel and stakeholders and signed by management.</p>
851.25(a)	<p>The WSHP must describe how ETEC methods for implementing a worker safety and health training and information program that ensures that all workers exposed or potentially exposed to hazards are provided with the training and information on that hazard in order to perform their duties in a safe and healthful manner.</p> <p>Boeing PRO-4338, Learning, Training and Development, provides direction to assure appropriate training is provided to employees. The Boeing EHS training process is described in and implemented through tools available on the Enterprise EHS website.</p> <p>Specific training requirements are contained in Enterprise and site-specific procedures, such as Confined Space Entry, Lockout/Tagout and Hazard Communication.</p> <p>All new employees receive New Employee Orientation through a common</p>

Section	Requirement
	<p>Boeing-wide computer based process. Determinations concerning appropriate additional training are made by the organization leader through the Enterprise EHS Training Questionnaire.</p> <p>Applicable Boeing documents relevant to this requirement include:</p> <ul style="list-style-type: none"> • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 • EID-04694 ETEC Closure Contract ISMSD
851.25(b)(1)	<p>The WSHP must describe ETEC provisions for providing training and information for new workers, before or at the time of initial assignment to a job involving exposure to a hazard.</p> <p>New Employee Orientation is required by the Boeing Enterprise-wide training through the Learning, Training and Development Center training management system. Required employee training is communicated by email to managers and through MyBoeing.com for employees. Delinquency notices are delivered if training is not completed within the required timeframe.</p> <p>Please also see the response for 851.25(a).</p>
851.25(b)(2)	<p>The WSHP must describe ETEC provisions for providing periodic training as often as required to ensure that workers are adequately trained and informed.</p> <p>The EHS Training Governing Board with recommendations from Enterprise EHS training development teams specifies retraining frequencies in compliance with regulatory requirements or best management practices.</p> <p>Please also see the response for 851.25(a).</p>
851.25(b)(3)	<p>The WSHP must describe ETEC provisions for providing additional training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists.</p> <p>EID-04694, ETEC Closure Contract ISMSD, specifies that refresher training is provided as needed to maintain proficiency.</p> <p>The SSFL Injury and Illness Prevention Program (IIPP) requires additional training when new hazards are introduced into the work site or may be required when job responsibilities change. EHS is also responsible to advise when new safety and health information becomes known in order to ensure the safety of site personnel.</p> <p>Tailgate meetings conducted by ETEC personnel or service providers also raise issues that may be associated with changes in site conditions.</p> <p>Please also see the response for 851.25(a).</p>
851.25(c)	<p>The WSHP must describe ETEC provisions for providing training and information to workers who have worker safety and health program responsibilities that is necessary for them to carry out those responsibilities.</p> <p>Each year staff members with responsibility for implementing the health and safety program identify professional development areas as part of the Performance Development Partnership process in order to improve their</p>

Section	Requirement
851.26(a)(1)	<p>effectiveness in carrying out their function.</p> <p>The WSHP must describe ETEC provisions for establishing and maintaining complete and accurate records of all hazard inventory information, hazard assessments, exposure assessments, and exposure controls.</p> <p>Monthly audits of ETEC areas are maintained on a common server and distributed to the Program Manager for review.</p> <p>Industrial hygiene assessments are entered into a local industrial hygiene database.</p> <p>As developed, Program Impact Evaluations, contractor health and safety plans, training records, and demolition work statements are maintained for future reference. Exposure information, medical records, MSDSs, and other required records are retained according to Cal-OSHA regulations and Boeing records retention requirements.</p> <p>Applicable Boeing documents concerning this requirement include:</p> <ul style="list-style-type: none"> • EPA-00060, Health & Safety Plan for Contract DE-AC03-99SF21530 • EID-04694 ETEC Closure Contract ISMSD • SSFL IIPP
851.26(a)(2)	<p>The WSHP must describe ETEC provisions for ensuring that work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with DOE M 231.1-1A, Environment Safety and Health Reporting Manual, September 9, 2004 (incorporated by reference, see section 851.27).</p> <p>It appears that Boeing BPI-1906, Incident Notification, Investigation, and Corrective Action, and Boeing Guide RA-060G, Occupational Injury and Illness Recording Codes, provide injury and illness recordkeeping requirements sufficient to comply with DOE M 231.1-1A. SSFL uses the Boeing Safety Reporting System (SRS) to track injury and illness information, generate OSHA 300 information and report performance metrics to management. Injury and illness data affecting ETEC is reported to the DOE quarterly through CAIRS reports.</p>
851.26(a)(4)	<p>The WSHP must describe ETEC provisions for ensuring that information concerning non-compliances or potential non-compliances to requirements of this part is not concealed or destroyed.</p> <p>Each year Boeing requires all employees to complete ethics training. Ethics training emphasizes the criticality of performing to the highest ethical standards in all aspects of Boeing's business. Failure to perform in this area may adversely impact the company's ability to acquire new business and may result in disciplinary action for the individual involved.</p> <p>Monthly audits of ETEC areas are maintained on a common server and distributed to the Program Manager for review.</p> <p>Industrial hygiene assessments are entered into a local industrial hygiene database.</p>

Section	Requirement
851.26(b)(1)	<p>The WSHP must describe ETEC provisions for ensuring that all work-related accidents, injuries and illnesses are reported and investigated.</p> <p>ETEC reports injuries and illnesses through two principal systems – Safety Reporting System (SRS) and Incident Reporting System (IRS). Please note also the information provided in 851.26(a)(2). When employees receive treatment at our contract medical clinic, information concerning the condition, treatment and disposition are sent to a host Boeing Medical clinic where relevant information is recorded in the Medical Information System and subsequently into SRS. Information is also sent to SSFL site Health, Safety and Radiation Services staff for follow up. Managers notified of injuries or illnesses are required to initiate an IRS report by the end of the next business day. The IRS system investigation is distributed to business management and EHS. Action items are electronically tracked to closure.</p>
851.26(b)(2)	<p>The WSHP must describe ETEC provisions for ensuring that related data is analyzed for trends and lessons learned per DOE Order 225.1A, Accident Investigations, November 26, 1997.</p> <p>Injury trending information is available through SRS and CAIRS reports. ORPS Reports, Operating Experience Summaries, and Lessons Learned are distributed to supervision and staff for personal review and sharing, when applicable.</p>
851.27(b)(7) – (10)	<p>The WSHP must describe how ETEC ensures compliance with the following mandatory safety and health standards that are incorporated by reference that are applicable to the hazards at their covered workplace:</p> <ol style="list-style-type: none"> 1. American Society of Mechanical Engineers (ASME) Boilers and Pressure Vessel Code, sections I through XII including applicable Code Cases, (2004). 2. ASME B31 (ASME Code for Pressure Piping) as follows: <ol style="list-style-type: none"> a. B31.1-2001-Power Piping, and B31.1a-2002-Addenda to ASME B31.1-2001; b. B31.2-1968-Fuel Gas Piping; c. B31.3-2002-Process Piping d. B31.4-2002-Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids; e. B31.5-2001-Refrigeration Piping and Heat Transfer Components, and B31.5a-2004, Addenda to ASME B31.5-2001 f. B31.8-2003-Gas Transmission and Distribution Piping Systems; g. B31.9-1996-Building Services Piping; h. B31.11-2002-Slurry Transportation Piping Systems; and i. B31G-1991-Manual for Determining Remaining Strength of Corroded Pipelines. 3. DOE Manual 231.1-1A, Environment, Safety and Health Reporting Manual, September 9, 2004. 4. DOE Manual 440.1-1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006. <p>No pressure system vessels or piping are currently in use in ETEC facilities. Purchased or rented pressure vessel and cryogenic containers meet applicable ASME requirements. Remaining operations at ETEC are not expected to involve installation of ASME pressure vessels or piping.</p>

Section	Requirement
	<p>Compliance with Boeing BPI-1906, Incident Notification, Investigation and Corrective Action, and Boeing Guide RA-060G, Occupational Injury and Illness Recording Codes, provide injury and illness recordkeeping requirements should be sufficient to comply with DOE M 231.1-1A.</p> <p>Explosives are not used for ETEC operations, however, if explosives are used as part of a demolition activity the Service Provider HASP will be reviewed to ensure compliance with appropriate elements of DOE Manual 440.1-1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006.</p>

Appendix A

Original Submittal Letter To Richard Schassburger, 4/20/2007

The Boeing Company
Santa Susana Field Laboratory
5800 Woolsey Canyon Road
Canoga Park, CA 91304-1148

April 23, 2007
In reply refer to SHEA-105241



Mr. Richard Schassburger
U.S. Department of Energy
Oakland Environmental Programs
1301 Clay Street, P.O. Box 54
Oakland, CA 94612-5208

Dear Mr. Schassburger:

Please find enclosed our "cross-walk" submittal in compliance with the safety requirements contained in 10 CFR 851. Boeing applies the weight of its extensive company-wide safety, health and environmental commitment and performance processes to the safe operation of the Santa Susana Field Laboratory and to the safe, successful and timely closure of this Energy Technology Engineering Center DOE project.

It should be noted that those Boeing policies, procedures and other directive documents referenced in this 10 CFR 851 Compliance Plan (other than those specific to the DOE closure effort – e.g., EID-04694 and EPA-00060) are applied to all four areas of the Santa Susana Field Laboratory including the ETEC closure operations underway in Area IV. The Santa Susana Field Laboratory employee population currently consists of approximately 100 Boeing employees supported by varying levels of subcontract personnel participating in site characterization, environmental compliance, demolition and similar activities. The ETEC closure operations area consists of approximately 20 Boeing employees supported by varying levels of subcontractors involved in activities affecting Area IV.

Also, Per 851.13(b) Boeing asserts that a written safety and health program and an approved Integrated Safety Management System (ISMS) description pursuant to the DEAR clause existed before the date of the issuance of the final rule. Boeing intends to use the program and the description, and their referenced procedures, as the worker safety and health program and submits this plan to the DOE Field Element approval authority.

Mr. R. Schassburger, DOE (SHEA-105241)
April 23, 2007
Page 2

This submittal has been reviewed by Mr. Laurence Maghrak, Facility Representative - EMCBC Office of Technical Services, Paducah Site, found to be satisfactory and recommended for approval as the 10 CFR 851 worker safety and health program.

Please advise us of any questions or concerns that arise after assessment of our submittal.

 Sincerely,


Ravnesh Amar
Program Manager, ETEC Site Closure

RRM:bjc
Enclosure

Appendix B

Acceptance Letter From Dae Chung, 5/21/2007



Department of Energy
Washington, DC 20585

MAY 21 2007

MEMORANDUM FOR DAE CHUNG

DEPUTY ASSISTANT SECRETARY FOR
SAFETY MANAGEMENT AND OPERATIONS

FROM:

RICHARD J. SCHASSBURGER *RJ Schassburger*
DIRECTOR, CALIFORNIA SITES
PROJECTS OFFICE

THROUGH:

CYNTHIA V. ANDERSON *CA*
DIRECTOR, OFFICE OF SITE SUPPORT
AND SMALL PROJECTS

SUBJECT:

Boeing Compliance with 10 CFR 851 at the Energy
Technology Engineering Center (ETEC)

Attached is Boeing's 10 CFR 851 Compliance Plan and their Health and Safety Plan for Contract DE-AC03-99SF21530 for ETEC. These documents have been reviewed by Oakland Project Office staff as well as by Larry Maghrak, Consolidated Business Center Cadre member, as a part of the Safety Assessment performed by him of the ETEC site in March. I recommend that these documents be approved.

Please contact me at (510) 637-1617 or Thomas Johnson (818) 466-8959 if you have any questions.

Attachments

cc:

T. Kreitz, EM-61
T. Johnson, ETEC
S. Wolf, EM-3.2

APPROVAL SIGNATURE:

D.Y. Chung *Dae Chung*

Office of Environmental Management
U.S. Department of Energy

Date: 5/21/07



Printed with soy ink on recycled paper



Department of Energy
Washington, DC 20585

MAY 21 2007

MEMORANDUM FOR RICHARD J. SCHASSBURGER
DIRECTOR
CALIFORNIA SITES PROJECTS OFFICE

FROM: DAE Y. CHUNG 
DEPUTY ASSISTANT SECRETARY FOR
SAFETY MANAGEMENT AND OPERATIONS

SUBJECT: Review and Approval of the Boeing 10 CFR 851
Worker Safety and Health Program at Energy
Technology Engineering Center

In your May 9, 2007 memorandum, you submitted the Boeing Worker Safety and Health Program (WSHP) for work performed at the Energy Technology Engineering Center (ETEC) Closure Project under Contract DE-AC03-99SF21530 for my approval. In accordance with 10 CFR Part 851, Subpart B, Paragraph 851.11(b), we have evaluated the ETEC WSHP (*10 CFR 851 Compliance Plan*) that describes what policies and programs by which the contractor intends to implement the requirements of 10 CFR 851, including among others, Boeing's EPA-00060, Revision B, *Health and Safety Plan for Contract DE-AC03-99SF21530* and EID-04694, *ETEC Closure Contract Integrated Safety Management System Description*.

Based on our evaluation, the review by your project office and a safety assessment conducted by Mr. Larry Maghrak from the Consolidated Business Center cadre staff, and your approval recommendation, the Department of Energy approves the ETEC WSHP with the following clarification. The Boeing *10 CFR 851 Compliance Plan* notes a plan for full compliance NFPA 70E, *Standard for Electrical Safety in the Workplace*, and that arc flash suits have been acquired. For this approval, all electrical related work at the ETEC Closure Project must be evaluated and the proper electrical hazard personal protective equipment will be used in accordance with NFPA 70E.

Please formally provide this approval to Boeing.



2

Boeing is required to implement the applicable policies and procedures described in their WSHP by May 25, 2007. Please note, that approval of this WSHP does not eliminate the contractor's responsibility from meeting all appropriate 10 CFR 851 requirements.

If you have any questions, please call me at (202) 586-5151, or Terry Krietz at (301) 903-6456.

cc:

C. Anderson, EM-3.2
D. Mackenzie, EM-3.2
S. Wolf, EM-3.2
T. J. Jackson, EMCBC
L. Maghrak, EMCBC
T. Krietz, EM-61
G. Podonsky, HS-1
B. McArthur, HS-11
K. McCarty, HS-40