

NEI 06-06 [Revision 6]

Nuclear Energy Institute

Fitness for Duty Program
Guidance for New Nuclear
Power Plant Construction
Sites

November 2011

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EXECUTIVE SUMMARY

This document, NEI 06-06, *Fitness for Duty Guidance for New Nuclear Power Plant Construction Sites*, has been designed to establish program level consistency in Fitness for Duty Programs for new plant construction sites throughout the nuclear power industry in the implementation of 10 CFR Part 26 Fitness for Duty Program requirements.

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FITNESS FOR DUTY PROGRAM GUIDANCE FOR NEW NUCLEAR POWER PLANT CONSTRUCTION SITES

1 INTRODUCTION

This document, NEI 06-06, *Fitness for Duty Guidance for New Nuclear Power Plant Construction Sites*, has been designed to further define implementation criteria for new plant construction throughout the nuclear power industry in the implementation of 10 CFR Part 26, Subpart K, “*Fitness for Duty Programs for Construction*.” The criteria defined in this document are required for each new plant construction site, with a plant under construction, and shall remain in effect until the FFD program for operation is implemented. This document does not address those individuals required by 10 CFR Part 26.4(e) and (f) whose duties require the individual to be included in the full 10 CFR Part 26 Fitness for Duty (FFD) program. These individuals are maintained within a FFD program managed by an NRC licensee or an approved contractor/vendor (C/V) of a licensee company.

NEI 06-06 provides the construction site entity a process to authorize and maintain a worker’s status in the construction site entity’s **FFD Program** in order to allow an individual to work on a construction site. It is acknowledged that the construction site entities implementing this guidance will include United States Nuclear Regulatory Commission (NRC) licensees; contractor/vendors (C/V); applicants for, or holders of, a Combined License (COL), Construction Permit (CP) or Limited Work Authorization (LWA); or other entities authorized by the NRC and shall hereafter be referred to as “construction site entities.”

2 PURPOSE AND SCOPE

2.1 CONSTRUCTION

This document is applicable to a construction site entity and applies ~~only~~ to the construction site workforce as defined in Section 4. It has been designed to provide a standard industry approach in establishing and implementing a FFD program for evaluating the suitability of personnel for whom access to the construction site has been requested. This standard approach ensures consistent application of regulations and is intended to serve as the FFD Program description for COL applications as required in 10 CFR Part 52.

The FFD program described herein applies only to construction activities on safety- and security-related SSCs that are performed on the construction site where the new power reactor will be installed and operated.

The construction site entity must determine whether the site activity is a construction activity as defined in 10 CFR Part 26.5. Therefore, if the activity is being performed to fabricate, erect, integrate, and test a safety- or security-related SSC, and the installation of their foundations, including the placement of concrete, the FFD program as defined in this document must apply to those individuals. This would include individuals who are

directed or supervising the installation of engineered backfill (e.g., dirt) designated or determined to be safety-related (i.e., safety-related dirt) because it is part of the engineered fabric of the safety-related foundation for example, the FFD Program for Construction applies to persons who:

- Produce concrete to be used for security- or safety-related structures and build or fabricate foundations for those particular SSCs;
- Fabricate safety-related emergency diesel generator buildings or install associated safety-related tanks, electrical and piping systems, and support systems;
- Weld or fabricate bullet resisting physical barriers and vital areas required by the Security Plan;
- Install and test vehicle control measures, personnel access control, intrusion detection systems, and contraband search equipment required by the Security Plan;
- Test safety- or security-related SSCs (e.g., motor-operated valves) or conduct bench-testing of safety-related relief valves prior to installation in the nuclear power plant (this is not to include, for example, warehouse receipt inspection/testing or a mechanical/electrical shop located outside the construction OCA);
- Integrate (i.e., welding, bolting, wiring, or connecting) safety- or security-related pre-fabricated modules to other safety- or security-related modules, structures, or systems; and,
- Install or fabricate security blast walls, install cable trays, pull electrical cables, or lay sensory electronics for safety- or security-related SSCs.

Construction activities conducted at facilities off-site such as another location, city, state, or outside of the U.S. would not be subject to the program described herein.

2.2 OPERATION

Management and oversight personnel, listed below, shall be subject to a full operating plant FFD program that meets the requirements of 10 CFR Part 26, subparts A through H, N, and O. NEI 06-06 will not provide implementing guidance for these personnel because these persons are required to be screened and maintained within an operating plant's or an approved C/V's FFD program defined in the NRC-approved licensing document.

- security personnel required by the NRC,
- those who perform quality assurance/quality control/quality verification activities related to safety- or security-related construction activities,
- individuals directly involved in witnessing or determining inspections, tests, and analyses (ITAAC) certification,
- designated individuals to monitor the fitness of individuals,
- individuals responsible for oversight and implementation of the licensee fitness-for-duty and access authorization programs, and
- second-level and higher supervisors and managers.

3 RESPONSIBILITY

Each construction site entity is responsible to the NRC for ensuring that the applicable FFD program/program elements of 10 CFR Part 26 are implemented and effective at their construction sites including those implemented by an C/V.

Each construction site entity approving a C/V program shall ensure the latest revision of this document has been provided to each of its C/Vs for use and require that the criteria herein be met. Audits are used to assure that licensee and licensee-approved C/V programs supporting the fitness for duty program for the construction site meet regulatory requirements. Construction site entities are responsible for ensuring that program deficiencies are corrected.

Each construction site entity is responsible to ensure that its FFD program at the construction site is implemented for individuals who perform certain activities during the full lifecycle of construction, i.e., as the construction site transitions to an operational mode. As summarized below and in Table 1, the applicability of specific 10 CFR Part 26 requirements is based on the conduct of certain activities (e.g., receipt of nuclear fuel onsite) and the roles and responsibilities of certain individuals. For example, although not part of a 10 CFR Part 26, Subpart K, FFD program, the fatigue provisions in 10 CFR Part 26, Subpart I, are applied to security officers required by the NRC when a construction site is in receipt of special nuclear material in the form of fuel assemblies (10 CFR 26.4(e)(1)). Furthermore, FFD requirements become more comprehensive as the site transitions through construction towards an operational *mode*.

3.1 BEFORE THE START OF CONSTRUCTION

Licensees and entities must have fully functional FFD program with procedures/instructions in place and approved prior to allowing individuals subject to the requirements of 10 CFR Part 26 to construct or direct the construction of a nuclear power plant.

3.1.1 FFD program personnel

An FFD program (that includes all requirements of 10 CFR Part 26, except Subparts I and K, and at the licensee's or other entity's discretion Subpart C) is needed for FFD program personnel involved in the day-to-day operations of the FFD program and whose duties require them to have the type of access or perform the duties as described in 10 CFR 26.4(g)(1)-(5).

3.1.2 Persons constructing or directing the construction of safety- or security-SSCs

An FFD program for reactor construction (such as a Subpart K program) will be needed for persons constructing or directing the construction of safety- or security-related SSCs as described in 10 CFR 26.4(f). A licensee can also elect to implement an FFD program that includes all requirements of 10 CFR Part 26, except Subparts I and K, for the individuals listed in 10 CFR 26.4(f).

3.1.3 **Persons performing the activities listed in 10 CFR 26.4(e)**

Licensees must have an FFD program that includes all requirements of 10 CFR Part 26, except Subparts I and K, for all persons performing the activities listed in 10 CFR 26.4(e), such as those: serving as security personnel required by the NRC; performing quality assurance, quality control, or quality verification activities; implementing a fitness monitoring program; witnessing or determining inspections, tests, and analysis under 10 CFR Part 52; supervising/managing (above 1st line supervisors) the construction of safety- or security-related SSCS; or directing or implementing the access authorization program and those, in part, who have certain access or decision-making authority. For security personnel required by the NRC, this FFD program only applies before the receipt of special nuclear material in the form of fuel assemblies.

3.2 **NO LATER THAN THE RECEIPT OF SNM IN THE FORM OF FUEL ASSEMBLIES¹**

3.2.1 **Security personnel**

For security personnel required by the NRC, licensees must implement an FFD program that includes all requirements of 10 CFR Part 26, excluding Subpart K, no later than the receipt of SNM in the form of fuel assemblies, for security personnel as required by 10 CFR 26.4(e)(1). Note that if an entity is not in receipt of fuel assemblies prior to when the Commission makes its 10 CFR 52.103(g) finding or the establishment of a protected area, then security personnel would be subject to Section 3.1.3 above until the licensee or other entity reaches the milestone in Section 3.3 below.

3.3 **PRIOR TO THE EARLIER OF WHEN THE COMMISSION MAKES ITS 10 CFR 52.103(G) FINDING, THE LICENSEE'S RECEIPT OF FUEL ASSEMBLIES ON SITE, OR WHEN THE PROTECTED AREA IS ESTABLISHED**

Licensees must implement an FFD program that includes all requirements, except Subpart K, for all personnel performing the duties described in 10 CFR 26.4(a)(1)-(5). These duties include operating or directing the operation of safety-significant systems or components; performing health physicists or chemistry duties as a member of the onsite emergency response organization minimum shift complement; performing the duties of a fire brigade member who is responsible for understanding the effects of a fire and fire suppressants on safe shutdown capability; performing maintenance or onsite directing of the maintenance of safety-significant SSCS; or performing security duties as security personnel.

Licensees must implement an FFD program that meets all requirements of 10 CFR Part 26, except 10 CFR 26.205 through 26.209 and Subpart K, for all personnel granted unescorted access to the protected areas by the licensees in 10

¹ Each licensee who possesses, stores, or uses special nuclear material of low strategic significance (e.g., new or un-irradiated fuel assemblies) at a fixed site or contiguous sites, except those who are licensed to operate a nuclear power reactor pursuant to 10 CFR Part 50, shall implement the requirements of 10 CFR 73.67(f) and (g).

CFR 26.3(a) and, as applicable, 10 CFR 26.3(c) and who do not perform the duties described in 10 CFR 26.4(a).

3.4 PRIOR TO THE CONDUCT OF THE FIRST FULL-PARTICIPATION EMERGENCY PREPAREDNESS EXERCISE UNDER 10 CFR PART 50, APP. E, SECTION F.2.A

3.4.1 Emergency responders

Licensees must implement an FFD program that includes all requirements of 10 CFR Part 26, except 10 CFR 26.205 through 26.209 and Subpart K, for all persons who are required by a licensee in 10 CFR 26.3(a) and, as applicable, 10 CFR 26.3(c) to physically report to the licensee’s Technical Support Center (TSC) or Emergency Operations Facility (EOF) by licensee emergency plans and procedures.

Table 3-1—FFD Program Applicability and Milestones

Item	Persons Subject to FFD Program	10 CFR Part 26 Requirement	Milestone (e.g. timeline)	10 CFR Part 26 Subparts
1	Construction (workers and first line supervisors)	10 CFR 24.4(f)	Prior to initiating 10 CFR Part 26 construction activities	Subpart K or Subparts A-H, N and O
2	Construction (management and oversight personnel)	10 CFR 26.4(e)	Prior to initiating 10 CFR Part 26 construction activities	Subparts A-H, N and O
	Security Personnel	10 CFR 26.4(e)(l)	Prior to fuel assemblies being received on site	Subparts A-H, N and O
		10 CFR 26.4(a)(5)	Prior to the earlier of: A. Licensee’s receipt of fuel assemblies on site or B. Establishment of a protected area or C. The 10 CFR 52.103(g) finding	Subparts A-H, N and O
4	FFD Program Personnel	10 CFR 26.4(g)	Prior to initiating 10 CFR Part 26 construction activities	Subparts A, B, D-H, N O and possibly C
5	Persons required to physically report to the TSC and EOF	10 CFR 26.4(c)	Prior to the conduct of the first full-participation emergency preparedness exercise under 10 CFR Part 50, Appendix E, Section F.2.a	Subparts A-I, N and O except for 10 CFR 26.205-209

Notes:

1. The FFD program is typically described in Chapter 13.7 of the licensee’s or other entity’s Final Safety Analysis Report.
2. Construction site entities do not need to establish license conditions for the above milestones since the implementation requirements are described in 10 CFR Part 26. See Staff Requirements Memorandum for SECY-05-0197, February 22, 2006.

4 DEFINITIONS

Note: These definitions expand upon but do not replace those found in regulatory documents. As used herein, any term that is not defined in this document but is defined in 10 CFR Part 26 has the meaning given in 10 CFR Part 26.

Accident—An incident including a:

- Work-related injury/illness—An injury or illness, resulting in an OSHA Recordable Incident,;
- Work-related motor vehicle accident—A significant on-site accident that occurs while an individual is in a vehicle performing construction site entity business, as defined the construction entity's procedures; or
- Radiation Exposure or Release of Radiation—For any event resulting in a radiation exposure or release of radiation in excess of regulatory limits.

Construction Site—The defined physical location (as pictorially illustrated or described in a construction site entity procedure) within or near the footprint of the new power reactor where safety- and security-related SSCs will be installed and operated when the plant begins operation. Nearby areas include, but are not limited to areas used to fabricate, erect, integrate, and test any safety- or security-related SSC's or materials used to fabricate, erect, integrate, and test safety- or security-related SSC's (e.g. producing the concrete to be used for the foundation of the reactor building in a facility).

Construction Site Workforce—Those personnel performing construction or directing the construction of safety or security-related SSCs. The personnel in the construction site workforce may be changed (not to be reduced further than those persons required by 10 CFR26.4(f)) for purposes of practical implementation.

First Level Supervisors—The first level supervisory position that does not perform manual work.

Management and Oversight—Personnel including:

- security personnel required by the NRC,
- those who perform quality assurance/quality control/quality verification activities related to safety- or security-related construction activities,
- individuals directly involved in witnessing or determining inspections, tests, and analyses (ITAAC) certification,
- designated individuals to monitor the fitness of individuals,
- individuals responsible for oversight and implementation of the licensee fitness-for-duty and access authorization programs, and
- second-level and higher supervisors and managers.

To excess—An individual:

- consumed alcohol within the 5-hour abstinence period or while on the construction site;
- consumed alcohol any time before entering the construction site and has a blood alcohol concentration of 0.02 BAC or higher; or
- is unfit for duty as determined by a 10 CFR 26.419 suitability and fitness evaluation.

Significant illness or personal injury—A determination or diagnosis made by a physician or other licensed healthcare professional.

Significant property damage—Damage, during construction, to any safety- or security-related SSC in excess of \$100,000.

OSHA Recordable Incident—A significant illness or personal injury to the individual which within 4 hours after the event is recordable under the Department of Labor standards contained in 29 CFR 1904.7.

5 DRUG AND ALCOHOL POLICY & PROCEDURES

5.1 DRUG AND ALCOHOL POLICY

5.1.1 Policy Statement Performance Objectives

Each construction site entity who implements an FFD program shall ensure that a clear, concise, written FFD policy statement is provided to individuals who are subject to the program. The policy statement must be written in sufficient detail to provide affected individuals with information on what is expected of them and what consequences may result from the failure to adhere to the policy.

The construction site entity must develop a policy statement written to address the FFD performance objectives of 10 CFR 26.23. The performance objectives include the following:

- 1 That individuals are trustworthy and reliable as demonstrated by the avoidance of, for example, substance abuse;
- 2 That individuals are not under the influence of any substance, legal or illegal, or mentally or physically impaired from any cause, which in any way adversely affects their ability to safely and competently perform their duties;
- 3 That measures are established and implemented for the early detection of individuals who are not fit to perform their duties; the construction site is free from the presence and effects of illegal drugs and alcohol;
- 4 That the work places are free from the presence and effects of illegal drugs and alcohol; and,
- 5 That the effects of fatigue and degraded alertness on an individual's ability to safely and competently perform their duties are managed commensurate with maintaining public health and safety.

5.1.2 Policy Statement Details:

- 1 At a minimum, the written policy statement must state that:

- a. Using, selling, manufacturing, purchasing, transferring, dispensing, distributing, or possessing illegal drugs by any individual while on the construction site is strictly prohibited.
 - b. Using, selling, purchasing, transferring, dispensing, distributing, or possessing alcohol by an individual subject to this program while on a construction site is strictly prohibited.
Consumption of alcohol onsite or within 5 hours of performing construction work to safety-related or security-related SSCs is strictly prohibited. Abstinance from alcohol for the 5 hours preceding any scheduled work is considered to be the minimum that is necessary, but may not be sufficient, to ensure an individual is fit for duty
 - c. An individual subject to the provisions of this document is required to notify the construction site entity of any legal action involving drugs or alcohol as required by the construction site entity policies.
- 2 Describe the consequences of the following actions:
 - a. The use, sale, or possession of illegal drugs on or off site;
 - b. The abuse of legal drugs and alcohol;
 - c. The use or possession of alcohol on site
 - 3 Describe the requirement that individuals who are notified that they have been selected for random testing must report to the collection site within the time period specified by the licensee or other entity construction site entity;
 - 4 Describe the actions that constitute a refusal to provide a specimen for testing; the consequences of a refusal to test; as well as the consequences of subverting or attempting to subvert the testing process;
 - 5 Prohibit the consumption of alcohol, at a minimum
 - a. Within an abstinence period of 5 hours preceding the individual's arrival at the construction site, and
 - b. During the period of any tour of duty;
 - 6 Convey that abstinence from alcohol for the 5 hours preceding any scheduled tour of duty is considered to be a minimum that is necessary, but may not be sufficient, to ensure that the individual is fit for duty;
 - 7 Describe the consequences of violating the policy;
 - 8 Describe the individual's responsibility to report legal actions;
 - 9 Describe the responsibilities of management and oversight personnel to report FFD concerns;
 - 10 Describe the individual's responsibility to report FFD concerns;
 - 11 Describe the circumstances that constitute a significant on-site accident; and
 - 12 Describe the appeal/review process.

5.2 PROCEDURES

Construction site entity procedures must provide reasonable assurance that the individuals are fit to safely and competently perform their duties, and are trustworthy and reliable, as demonstrated by the avoidance of substance abuse. Construction site entities shall develop, implement, and maintain written procedures that address:

- 1 The identification of individuals that compose the construction site work force.
- 2 The methods used to identify persons subject to FFD testing.
- 3 The method of determining who is on the construction site and subject to testing.
- 4 The methods and techniques to be used in testing for drugs and alcohol, including procedures for protecting the privacy of an individual who provides a specimen, procedures for protecting the integrity of the specimen, and procedures used to ensure that the test results are valid and attributable to the correct individual. These methods, techniques, and procedures shall comply with the requirements contained in 10 CFR Part 26, Subparts E, F and G.
- 5 The immediate and follow-up actions that will be taken, and the procedures to be used, in those cases in which individuals who are subject to the FFD program are determined to have:
 - a. Been involved in the use, sale, or possession of illegal drugs;
 - b. Consumed alcohol to excess before or while constructing or directing the construction of safety- or security-related SSCs, as determined by a test that accurately measures blood alcohol concentration (BAC) ;
 - c. Attempted to subvert the testing process by adulterating or diluting specimens (in vivo or in vitro), substituting specimens, or by any other means;
 - d. Refused to provide a specimen for analysis; or
 - e. Had legal action taken relating to drug or alcohol use; and
- 6 The process to be followed if an individual's behavior or condition raises a concern regarding the possible use, sale, or possession of illegal drugs on or off site; the possible use or possession of alcohol while constructing or directing the construction of safety- or security-related SSCs; or impairment from any cause which in any way could adversely affect the individual's ability to safely and competently perform his or her duties. The behavioral observation program, for instance, must cover and focus on those persons described in 10 CFR 265.4(f) and not merely on the subset of individuals who are in the random testing pool.
- 7 Control access to FFD-related software and hardware systems and FFD site and personal databases to protect personal information and the integrity of the FFD program. These controls include, but are not limited to:
 - a. Access control rights (i.e., which individuals can access specific FFD resources) and access control privileges (i.e., what these individuals can do with the FFD resources when accessed);
 - b. Change control processes to control and identify revision of: random testing pool and determination protocols; personal and privacy information; drug and alcohol test results; and Medical Review Officer (MRO) and Substance Abuse Expert (SAE) communications; and,

- c. Controls to ensure that all persons who are required to be in the random testing pool are in the pool and that these persons have an equal probability of being selected and tested.
- 8 Conduct of behavioral observations, review processes, audits, and suitability and fitness evaluations.

Note: A construction site entity 10 CFR 26.407 BOP procedure should account for how an effective program can be implemented as the reactor power plant transitions through construction to an operational mode. For example, a construction site entity should consider a risk-informed element of its BOP to account for safety-significant activities, such as:

- pre-operational testing of installed security- or safety-related structures, systems, and components (e.g., safety-related instrument and controls),
- reactor physics and coolant system hydrostatic pressure testing, and
- ITAAC (inspections, tests, analyses, and acceptance criteria) SSCs.

In addition the Behavioral Observation program must simultaneously account for the routine/continuous observations to detect and appropriately address impairment and adverse behaviors conditions of the construction site work force, in general, accounting for large influxes of new workers or short-duration/transient construction workers.

- 9 Address the case in which a person is offsite in a work status for a portion of day (e.g., the person was selected for random testing while offsite in training mode or retrieving equipment from a warehouse) but will be returning or has been directed to return to the construction site later that shift.
- 10 If applicable, provide adequate instructions for the conduct of point-of-collection (POC) alternate specimen collection and alcohol testing.
- 11 Describe the records to be retained and the period of retention.
- 12 Define the staff involved in day-to-day operations of the FFD program.

Note: Staff personnel involved in the day-to-day operations of the FFD program does not include persons within the construction entity's line organizations responsible for constructing and directing the construction of safety- and security-related SSCs. These persons, such as managers, supervisors, and secretaries, may have an implementation role in the FFD notification process; however, they are not involved in the day-to-day operations of the FFD program. For example, the shop secretary or supervisor who receives the phone call from the FFD program personnel notifying the shop that a particular welder is required to report for testing is not an FFD program person, as described in 10 CFR 26.4(g).

5.3 CONSENT

Individuals requiring access to the construction site shall sign a Consent form (e.g., see NEI Standard (STD) FORM 08-06-01, *Consent*, Figure 5-1, NEI 08-06, *Nuclear Power Plant Access Authorization and Fitness-for-Duty Forms*)

A signed Consent authorizes the entry of general, non-negative information into an industry data-sharing database, its transfer to another authorized user, the conduct of a background investigation, including verification of certain information self-disclosed by the individual through the conduct of a suitable inquiry information obtained from employers as required by 10 CFR Part 26 to verify the accuracy and completeness of the information provided. In addition, the Consent identifies who the parties to whom the information may be released, including the NRC.

The individual's signature on the Consent confirms that the individual has read and understands the Consent, and has voluntarily agreed to authorize the construction site entity obtaining the information and the individuals and entities releasing information to take the actions set out in the Consent for purposes of complying with the provisions of 10 CFR Part 26.

5.4 SANCTIONS

The construction site entity shall establish sanctions for FFD policy violations that, at a minimum, prohibit the individuals from being assigned to construct or direct the construction of safety- or security-related SSCs unless or until the construction site entity determines that the individual's condition or behavior does not pose a potential risk to public health and safety or the common defense and security. If an individual is notified to report for random testing and fails to report at the collection location in the specified time period, the individual's supervisor and FFD management will be notified; and the individual will be prohibited from being assigned to construct or direct the construction of safety- or security-related SSCs until it is determined whether there was a valid reason (e.g. verifiable and/or documented medical reason, weather condition, accident, or vehicle maintenance condition) for not reporting for testing. If it is determined that the individual intentionally avoided random testing or the individual's condition or behavior poses a potential risk to public health and safety or the common defense and security, the individual's access to the construction site will be denied or unfavorably terminated.

A refusal to submit to testing or failing to comply with the FFD program requirements will result in termination of access to the construction site.

5.5 DRUG AND ALCOHOL TESTING

The construction site entity shall employ urinalysis, saliva oral fluid testing, breath tests, or other methods as permitted by 10 CFR Part 26, Subparts E, F and G, to determine fitness for duty, including but not limited to pre-assignment or pre-access, for-cause, and random testing. At a minimum, the construction site entity shall test specimens for marijuana metabolite, cocaine metabolite, opiates (codeine, morphine, 6-acetylmorphine),

amphetamines (amphetamine, methamphetamine), phencyclidine, adulterants, and alcohol at the cutoff levels specified herein, or comparable cutoff levels if specimens other than urine are collected for drug testing.

An individual must consent to submit to such tests as a condition of access to the construction site entity and refusal to consent shall result in denial or unfavorable termination of access to the construction site.

5.5.1 Drug Testing

Testing of urine specimens for drugs and validity, except validity screening and initial drug and validity tests that may be performed by a licensee testing facility compliant with 10 CFR Part 26, Subpart F, must be performed in a laboratory that is certified by HHS as described in 10 CFR Part 26, Subpart G. Any initial drug test performed by a construction site entity must use an immunoassay that meets the requirements of the Food and Drug Administration for commercial distribution. Urine specimens that yield positive, adulterated, substituted, or invalid initial validity or drug test results must be subject to confirmatory testing by the HHS-certified laboratory in accordance with 10 CFR 26.161 and 10 CFR 26.163, except for invalid specimens that cannot be tested.

Other specimens that yield positive initial drug test results must be subject to confirmatory testing by a laboratory that meets stringent quality control requirements that are comparable to those required for certification by the HHS.

Confirmatory drug testing is performed using GC/MS (gas chromatography) techniques. Specimens that are negative on the confirmatory test are reported as negative and are not subject to further testing unless they are suspected of having been adulterated substituted, invalid, or diluted.

5.5.2 Alcohol Testing

Testing for alcohol will be conducted through breath measurement or oral fluids (e.g., saliva). The initial test for alcohol performed at the collection site shall be conducted by a breath measurement device or by using oral fluids (e.g., saliva) using acceptable alcohol screening devices (ASDs) which meet the requirements of the National Highway Traffic Safety Administration (NHTSA) standards and any applicable State statutes and are listed on the most recent version of NHTSA's Conforming Products List (CPL). Confirmatory tests for alcohol must be conducted by an evidential breath measurement device (EBT). Evidential breath testing devices listed in the NHTSA CPL for evidential devices that meet the requirements of 10 CFR 26.91 (c) must be used to conduct confirmatory alcohol tests, and may be used to conduct initial alcohol tests. Note that, among the devices listed in the CPL for EBTs, only those devices listed without an asterisk (*) may be used for confirmatory alcohol testing.

For the initial alcohol tests that are negative, no confirmatory tests are required.

5.5.3 Initial Cut-off Levels

Table 5-1 depicts the initial cutoff levels that shall be used when testing specimens to determine whether they are negative for the indicated substances, except, for example, if validity testing indicates that the specimen is dilute, the construction entity has established a more stringent cutoff, or the cutoff levels provided in 10 CFR 26.163(a) were amended.

Note: The following do not apply to drug test results obtained through testing methods that use saliva specimens other than urine.

Table 5-1—Initial Test Cutoff Levels

Substance	Cutoff level
Marijuana metabolites	50 ng/mL
Cocaine metabolites	300 ng/mL
Opiate metabolites	2000 ng/mL ¹
Phencyclidine	25 ng/mL
Amphetamines	1000 ng/mL
Alcohol ²	0.02 % BAC³

¹ 25 ng/mL is immunoassay specific for free morphine.

² Applicable only for breath measurement devices and ASDs.

³ If the initial test result is less than 0.02 percent BAC, the test result shall be declared negative for the purposes of meeting 10 CFR Part 26 requirements.

Construction site entities may specify more stringent cutoff levels as well as additional illegal drugs as necessary. However, results shall be reported for both levels in such cases.

5.5.4 Confirmatory Cut-Off Levels

Confirmatory testing for alcohol must be conducted using an EBT.

Confirmatory testing for drugs or drug metabolites must be conducted by a HHS-certified laboratory.

If a specimen has been determined as being positive on an initial drug test, the following confirmatory test cutoff levels for drugs and drug metabolites depicted in Table 5-2 shall be used to confirm a positive test result for the class(es) of drugs for which the specimen initially tested positive.

NOTE: The following do not apply to testing conducted by oral fluid testing methods.

Table 5-2—Confirmatory Test Cutoff Levels

Substance	Cutoff level
Marijuana metabolites	15 ng/mL ¹
Cocaine metabolites	150 ng/mL ²
Opiate: Morphine	2000 ng/mL
Opiates: Codeine	2000 ng/mL
Opiates: 6-acetylmorphine	10 ng/mL ³

Phencyclidine	25 ng/mL
Amphetamines: Amphetamine	500 ng/mL
Amphetamines: Methamphetamine	500 ng/mL ⁴
Alcohol ⁵	0.02 % BAC ⁶

¹ As Delta-9-tetrahydrocannabinol-9-carboxylic acid

² As Benzoylcegonine

³ Test for 6-AM when the confirmatory test shows a morphine concentration exceeding 2,000ng/mL

⁴ Specimen must also contain amphetamine at a concentration equal to or greater than 200 ng/mL

⁵ Applicable only for breath measurement devices

⁶ If, for example, the confirmatory test result is greater than or equal to 0.01 percent BAC, the construction site entity shall implement the section titled "Determining Positive Test Results for Alcohol," as described below.

In addition, construction site entities may specify more stringent cutoff levels. Results shall be reported for both levels in such cases.

5.5.5 DETERMINING POSITIVE TEST RESULTS FOR ALCOHOL

A confirmed positive test result for alcohol must be declared under any of the following conditions:

- 1 When the result of the confirmatory test for alcohol is 0.04 percent BAC or higher;
- 2 When the result of the confirmatory test for alcohol is 0.03 percent BAC or higher and the donor had been in a work status for at least 1 hour at the time the initial test was concluded (including any breaks for rest, lunch, dental/doctor appointments, etc.); or
- 3 When the result of the confirmatory test for alcohol is 0.02 percent BAC or higher and the donor had been in a work status for at least 2 hours at the time the initial test was concluded (including any breaks for rest, lunch, dental/doctor appointments, etc.).

When the result of the confirmatory test for alcohol is equal to or greater than 0.01 percent BAC but less than 0.02 percent BAC and the donor has been in a work status for 3 hours or more at the time the initial test was concluded (including any breaks for rest, lunch, dental/doctor appointments, etc.), the collector shall declare the test result as negative and inform FFD program management. The construction site entity shall prohibit the donor from performing any duties that require the individual to be subject to the program herein and may not return the individual to performing such duties until the donor is determined fit to safely and competently perform his or her duties.

6 DRUG AND ALCOHOL TESTING PROCEDURE

6.1 CONSENT FORM

Individuals are required to sign the Consent Form (NEI STANDARD FORM 08-06-01) as a condition of access to the construction site. Included in the consent form is the agreement to submit to periodic unannounced (random) testing during the course of their access to the

construction site. Refusal to cooperate with or submit to such testing shall result in immediate denial or unfavorable termination of access to the construction site.

6.2 TYPES OF TESTING

The construction site entity shall ensure the following testing is performed as part of the FFD program:

6.2.1 Pre-Access

Each worker who will construct or direct the construction of safety- or security-related SSCs shall have negative drug and alcohol test results prior to the start of the worker's construction, or direction of the construction of any safety- or security-related SSCs. These drug and alcohol tests must be administered no more than 30 days prior to the start of the worker's constructing or directing the construction of a safety- or security-related SSC. Once it has been determined that an individual has a negative drug and alcohol test result, the individual may be eligible to gain access to the construction site. A construction site entity can maintain an individual in this status as long as the person remains in the construction site entity random fitness for duty testing program for new plant construction and is subject to a behavioral observation program.

6.2.2 For Cause

6.2.2.1 Post Accident

As soon as practical after an event involving a human error that was committed by an individual subject to this plan where the human error may have caused or contributed to the accident, the construction site entity shall test the individual(s) who committed the error(s), and need not test individuals who were affected by the event but whose actions likely did not cause or contribute to the event. Individuals involved in a work-related accident shall be required to submit to a drug and alcohol test at a designated testing facility.

Drug and alcohol for-cause testing may be delayed only if necessary to seek urgent medical care. "Urgent medical care" could include, but is not limited to: head trauma; broken bones; internal organ problems; and burns and other wounds requiring a medical doctor, paramedic, or nursing care.

6.2.2.2 Occupational Injury and Illness Resulting in an OSHA Recordable Incident

Note: The qualifying phrase "within 4 hours after the event" is utilized in 10 CFR10 CFR26.31(c)(3)(i) and 26.405(c)(3)(i) because, in some cases, it will be difficult to detect illnesses and injuries that meet the threshold for post-accident (i.e., post-event) testing and to conduct testing within that 4-hour window. Therefore, the determination of whether the event is recordable must be made within 4 hours and the post-accident/for-cause testing must commence as soon as practical after the event occurred. The 4-hour window should not be

misinterpreted as requiring post-event testing to be completed within 4 hours after the event.

The injured individual must notify their onsite supervisor of the injury or illness, if able.

- 1 The construction site entity management shall make arrangements for the individual to submit for a drug and alcohol test at a designated testing facility.
- 2 The MRO-reviewed positive, adulterated, substituted, and invalid confirmatory drug and validity test results and alcohol test results shall be submitted to the construction site entity management.

6.2.2.3 Significant Property Damage

The supervisor shall notify the respective construction site entity management that an incident has occurred that resulted in damage to safety- or security- related SSC in excess of \$100,000.

CFR 26.405(c), requires that drug and alcohol post-accident testing be accomplished “as soon as practical after an event,” therefore determination of the monetary value of an accident should not be unnecessarily complex or burdensome as to cause an unacceptable delay in post-accident testing. This determination should be made by an individual authorized by the construction entity (i.e., a person who can make an informed determination, who did not cause or contribute to the event, or who did not direct the activities leading up to the event) and be documented in sufficient detail to enable post-event reviews. Examples include but are not limited to the following:

A human error that causes:

1. A load to be dropped onto or moved across a seismically-engineered floor or foundation that exceeds its evaluated structural capacity;
2. A fire or flood that adversely affects a safety- or security related SSC;
3. A dropped safety- or security-related structure or system; or,
4. The retraction of a 10 CFR 52.99(c)(1) notification, could be examples that meet the 10 CFR 26.405(c)(3)(ii) post-accident testing requirement for “Significant damage, during construction, to any safety- or security-related SSC.”

Construction site entity management shall make arrangements for the individuals involved in the damage to submit for a drug and alcohol test at a designated testing facility.

The MRO-reviewed positive, adulterated, substituted, and invalid confirmatory drug and validity test results and alcohol test results shall be submitted to the construction site entity management.

6.2.2.4 Observed Behavior

Management and oversight personnel shall notify the construction site entity about any FFD concerns about individuals, as a minimum:

If observed behavior or a physical condition creates a reasonable suspicion of possible substance abuse, the construction site entity shall perform drug and alcohol testing. The results must be negative before the individual returns to performing on work SSCs.

If credible information is received that an individual is engaging in substance abuse, the construction site entity shall perform drug and alcohol testing

If there is the smell of alcohol with no other behavioral or physical indications of impairment, then only an alcohol test is required.

For other indications of possible impairment that do not create a reasonable suspicion of substance abuse, the construction site entity may permit the individual to return to work only after the impairing or questionable conditions are resolved and the MRO has determined that the individual is fit to safely and competently perform his or her duties.

6.2.3 Follow-up

For individuals covered by a follow-up plan, the construction site entity must conduct follow-up testing to verify an individual's continued abstinence from substance abuse.

6.3 RANDOM DRUG AND ALCOHOL TESTING

6.3.1 Random Testing Frequency

Random testing shall be performed at an annual rate of at least 50% of the construction site workforce.

Testing will be conducted during all types of work periods, including weekends and holidays and at various times of the day or night throughout the calendar year. There should be no "safe time or day" with regard to random testing. If an individual is selected and is not at work on the day of testing, the individual is not required to report for the purposes of random testing; and the construction site entity will randomly select another individual for testing. Test selection is statistically random and unannounced, so that all individuals in the population subject to testing have an equal probability of being selected and tested. Testing will be administered in a manner that provides reasonable assurance that individuals are unable to predict the time periods during which specimens will be collected.

Random testing for individuals concurrently authorized Unescorted Access to an operating power reactor shall be deemed adequate to maintain access to a construction site without being subject to additional random testing.

6.3.2 Random Testing Population

The population of individuals subject to random testing (i.e., the random testing pool) includes all individuals in the construction site workforce as defined in Section 4.

An individual cannot construct or direct construction of safety- or security-related SSCs unless he/she is in the random testing pool for the time period he/she is actively constructing or directing the construction of safety- or security-related SSCs. Since the construction site workforce is expected to change often, the construction site entity will make a determination of the current construction site workforce and then generate its random testing selection list. Then, the construction site entity will conduct random testing on at least a weekly basis consistent with the random testing frequency.

Recognizing that individuals may move into or out of the category of random test-eligible individuals that will form a particular testing population, the construction site entity must account for all workers who are constructing or directing the construction of safety- or security-related SSCs during the time random pool is created.

The construction site entity's methodology must ensure that the required random testing rate is met.

The construction site entity should not change the size of its random testing population in an effort to reduce the occurrence of positive test results and should implement appropriate procedure instructions (i.e., reviews and approvals) to manage changes to the construction site population.

Individuals to be tested (hereinafter the referred to as "subject") shall be chosen by use of a method which randomly selects the number of subjects from the current random testing pool. Several methods can be used that will satisfy this requirement. The construction site entity is required to define the methodology in its procedures and provide a general description of its process in its COL for NRC review.

The construction site entity must ensure that the selection method is not predictable based on either the time of day or frequency.

6.3.3 Random Selection Notification Process

At the time of random drug and alcohol testing, the following steps shall be taken:

1. A record of the individuals selected for random testing shall be documented in the construction site entity's records, maintained and controlled by the FFD program personnel and include those individuals selected for testing, but were not on-site on the construction site and available for testing. A record must include the following:
 - The time the notifications were made to the construction line organization for the individuals selected for testing, and

- the times the individual was tested.
2. The construction site entity shall notify the subject individuals and direct them to report to the collection site as soon as practicable after notification and within the time period specified in the construction site entity's FFD program. If the individual's supervisor determines that the selected individual is performing safety- or security-related construction work in which relief is not reasonably possible or safe (i.e., the immediate disruption of such work would have a high likelihood of causing an unsafe or unsecure work environment), then the individual should be permitted to report for testing immediately upon the next break or immediately after his/her shift, but in every case, prior to leaving the construction site at the end of the work shift. If the testing facility is located off-site, the construction site entity must provide a reasonable amount of travel time to the testing facility and the timeframe shall be documented within licensee procedures. Some example activities that may require greater time reporting allowance than the construction site entity's normal expectation include but are not limited to the following:
 - performing activities within an atmosphere requiring OSHA respiratory-controls;
 - welding a reactor coolant pressure boundary (including time-sensitive weld preparation);
 - manipulating crane controls during a heavy lift; or
 - implementing security contingency response actions).
 3. Individuals selected for testing from the random pool must be immediately available to be selected the next time the random list is generated.

6.3.4 Individual Fails To Report For Random Testing

If an individual is notified to report for random testing and fails to report at the collection location in the specified time period:

1. the individual's supervisor and FFD management will be notified; and
2. the individual will be prohibited from being assigned to construct or direct the construction of safety- or security-related SSCs until it is determined whether there was a valid reason (e.g. verifiable and/or documented medical reason, weather condition, accident, or vehicle maintenance condition) for not reporting for testing.

6.3.5 Failure to comply with Random Testing Program Requirements

If it is determined that the individual intentionally failed to comply with the and report for testing when notified; otherwise avoided or disregarded the random testing notification; or the individual's condition or behavior poses a potential risk to public health and safety or the common defense and security, the individual's access to the construction site will be denied or terminated unfavorably.

6.3.6 Construction Site Entity Actions When an Individual Fails To Comply

If an individual refuses to submit to the testing, the onsite supervisor shall inform the individual that access to the construction site shall be terminated unless he/she submits to testing. In the individual still does not comply, the supervisor will remove the individual from the work site and contact the construction site entity's FFD program manager.

6.3.7 Random Test Reporting Exceptions

An individual selected for random testing that is not onsite the day testing is conducted will not be subject to that day's random testing requirement unless:

1. they have been directed to report back to the construction site to complete their assigned work shift on the day they are randomly selected or
2. they are selected for random testing again or are required to submit to testing under Sections 6.2.2 or 6.2.3 herein.

In the case of an individual who is offsite in a work status for a portion of day (e.g., the person was selected for random testing while offsite in training mode or retrieving equipment from a warehouse) but will be returning or has been directed to return to the construction site later that shift. This person shall not be informed of the need to report for random testing until he/she arrives back on the construction site but the random testing must be conducted prior to the individual constructing or directing the construction of safety- or security-related SSCs.

Once the test results have been reviewed by the the Medical Review Officer (MRO), the MRO will forward a written report to the construction site entity FFD program personnel transmitting drug testing results that yield a positive, adulterated, substituted, and invalid confirmatory drug and validity test. When the construction site entity FFD program personnel receive the report, the construction site entity FFD program personnel shall evaluate the MRO-provided information and take appropriate action in accordance with its FFD program.

6.4 SPECIMEN COLLECTION AND LABORATORY SPECIMEN ANALYSIS

6.4.1 Collector Site and Collector Qualifications:

The construction site entity may establish a collection site that meets the requirements of the current version of 49 CFR Part 40, "*Procedures for Department of Transportation Workplace Drug and Alcohol Testing Programs*," as amended, and ensure the following:

6.4.1.1 Urine collector qualifications:

Urine collectors (and alternate collectors as provided in 10 CFR 26.85(c)) shall be knowledgeable of the requirements of the construction site FFD policy and procedures and shall keep current on any changes to urine collection procedures.

Collectors shall receive qualification training that meets the requirements 10 CFR 26.85 and demonstrate proficiency in applying the requirements 10 CFR 26.85 before serving as a collector. At a minimum, qualification training must provide instruction on the following subjects:

1. All steps necessary to complete a collection correctly and the proper completion and transmission of the custody-and-control form;
2. Methods to address “problem” collections, including, but not limited to, collections involving “shy bladder” and attempts to tamper with a specimen;
3. How to correct problems in collections; and
4. The collector’s responsibility for maintaining the integrity of the specimen collection and transfer process, carefully ensuring the modesty and privacy of the donor, and avoiding any conduct or remarks that might be construed as accusatorial or otherwise offensive or inappropriate.

6.4.1.2 Alcohol collector qualifications:

Alcohol collectors shall be knowledgeable of the requirements of the construction site FFD policy and procedures and shall keep current on any changes to alcohol collection procedures. Collectors shall receive qualification training meeting the requirements of 10 CFR 26.85 and demonstrate proficiency in applying the requirements before serving as a collector. At a minimum, qualification training must provide instruction on the following subjects:

1. The alcohol testing requirements of 10 CFR Part 26;
2. Operation of the particular alcohol testing device(s) [i.e., the alcohol screening devices (ASDs) or EBTs] to be used, consistent with the most recent version of the manufacturers’ instructions;
3. Methods to address “problem” collections, including, but not limited to, collections involving “shy lung” and attempts to tamper with a specimen;
4. How to correct problems in collections; and
5. The collector’s responsibility for maintaining the integrity of the specimen collection process carefully ensures the privacy of the donor, and avoiding any conduct or remarks that might be construed as accusatorial or otherwise offensive or inappropriate.

6.4.2 Alternative Collection Sites

Construction site entities may rely on a local hospital or other organization that meets the requirements of the current version of 49 CFR Part 40, “*Procedures for Department of Transportation Workplace Drug and Alcohol Testing Programs*” to collect urine specimens and conduct alcohol tests for the FFD program listed herein.

6.4.3 On-site Licensee Testing Facility

The construction site entity may use an on-site licensee testing facility, whether located on or off site that meets the requirements of 10 CFR Part 26, Subpart F. If used, the licensee testing facility shall have an individual to be responsible for day to-day operations and to supervise the testing technicians. This individual(s) shall have at least a bachelor's degree in the chemical or biological sciences or medical technology or equivalent. He or she shall have training and experience in the theory and practice of the procedures used in the licensee testing facility, resulting in his or her thorough understanding of quality control practices and procedures; the review, interpretation, and reporting of test results; and proper remedial actions to be taken in response to detecting aberrant test or quality control results.

6.4.4 Initial and Confirmatory Testing Methods

Any initial test performed by a licensee testing facility or a HHS-certified laboratory and the confirmatory test performed by a HHS-certified laboratory shall use a process which meets the requirements of the Food and Drug Administration (FDA). Testing for drugs and drug metabolites will be conducted through the analysis of urine specimens or other process which meets the requirements of the FDA. Testing for alcohol will be conducted through breath measurement or oral fluids (e.g., saliva)

Analytic methods used for testing will be urinalysis, saliva oral fluid analysis, or any other method approved in 10 CFR Part 26. Testing that indicates the presence of alcohol, specific drugs, or drug metabolites, may or may not be an indication of impairment due to substance use. The final determination is made by the MRO. **Note**, as an example, a person who confirmed positive for a Schedule I drug of Section 202 of the Controlled Substances Act [21 U.S.C. 812] is considered unfit for duty, even if the drug was legally prescribed and used under State law.

Initial analysis and validity testing will be performed by either a licensee testing facility, a HHS-certified laboratory, or a HHS-certified instrumented initial test facility. Confirmatory analysis is performed by a HHS certified laboratory. Breath analysis may be performed at the construction site entity collection site or other site (e.g., local hospitals) as described herein that meets the requirements of 49 CFR Part 40, as amended.

6.4.5 Point-of-collection (POC) Alternate Specimen Collection and Alcohol Testing

The construction site entity:

1. May elect to conduct, for example, oral fluid drug or alcohol screening as long as its collection procedures and testing of oral fluids meet or exceed the requirements in Subpart K regarding, in part, specimen integrity, cutoffs for drugs and drug metabolites, quality controls, protection of information, and chain of custody.

2. Should ensure that the use of its selected POC apparatus tests drugs and drug metabolites at cutoffs specified in 10 CFR 26.133 or at comparable levels. For example, some POC equipment may not be optimized to detect delta-9-tetrahydrocannabinol-9-carboxylic acid (THC-COOH) because of cross reactivity to other metabolites. Therefore, the oral fluid result would not be comparable to a urine result as required by 10 CFR 26.405(d) and the construction site entity would need to establish an appropriate POC cutoff. This same type of comparable analysis is required by 10 CFR 26.405(f) if the construction site entity utilizes a laboratory that is comparable to an HHS-certified laboratory for confirmatory analysis.
3. Should establish in procedures other alternate specimen collection considerations, such as: dry mouth, oral/salivary contamination, privacy, specimen security, preservation, information protection, custody, collection, and other considerations to meet the requirements of Subpart K.
4. Should establish in procedures the process to be followed if an initial drug and/or alcohol screening test indicates the need for confirmatory analysis per 10 CFR 26.405(f).

Note: Where applicable, construction site entities, should assess whether their POC procedure requirements for POC testing (e.g., performed for follow-up, for cause, pre-assignment/pre-access, etc.) might need to be different than that established for continual (e.g., random) POC testing to provide reasonable assurance that the FFD Program for Construction remains effective.

6.4.6 Interpretation of Testing Results and Follow-up Activities

Those specimens that test negative on the initial test are not subject to further testing unless they are suspected of having been substituted, invalid, adulterated or diluted.

Specimens with a confirmed positive laboratory result for drugs, other than alcohol, will be evaluated by the MRO who must determine whether there is a legitimate medical reason for the presence of that drug in that specimen. This may involve review of medication history, physical examination and/or personal interview.

A contractor/vendor (C/V) approved by the construction site entity to conduct testing in accordance with NEI 06-06 shall comply with the provisions of this guidance through the development and use of detailed procedures approved by the construction site entity..

6.5 SPECIMEN PROCESSING

Construction site entity shall arrange for urine specimen collections and initial alcohol tests to be performed at the collection location as specified in the construction site entity procedures. The testing should be done as soon as practicable after appropriate medical

care if required is rendered, as discussed in Section 6.6.2, “*For Cause*,” subsections “*Post Accident*” and “*Notification Procedures*.”

Collection site personnel shall arrange for the transfer of collected urine specimens to either the licensee testing facility or HHS-certified laboratory. The construction site entity shall take appropriate and prudent actions to minimize false negative results from specimen degradation. Specimens that have not been shipped to the HHS-certified laboratory or a licensee testing facility within 24 hours of collection and any specimen that is suspected of having been substituted, adulterated, or tampered with in any way must be maintained cooled to not more than 6 °C (42.8 °F) until they are shipped to the HHS-certified laboratory. Specimens must be shipped from the collection site to the HHS-certified laboratory or a licensee testing facility as soon as reasonably practical but, except under unusual circumstances, the time between specimen shipment and receipt of the specimen at the licensee testing facility or HHS-certified laboratory should not exceed two business days.

The specimen collection and alcohol testing process will be detailed in the construction site entity procedures and will meet or exceed the requirements of specimen collection as stated in 10 CFR Part 26. For alternative methods not described in 10 CFR Part 26 the construction site entity will develop detailed collection and specimen testing procedures which shall be provided to the NRC for approval.

6.6 POSITIVE RESULTS

A positive confirmatory breath alcohol test indicates a violation of the FFD program.

A positive initial drug test result does not always indicate a violation of the FFD program. The MRO must review positive test results from the HHS-certified confirmatory analysis, determine whether a legitimate medical reason exists for the positive result, and make the final determination as to whether the test is a “confirmed positive” and the individual has violated the FFD program. If the MRO determines that there is a legitimate medical explanation for the confirmed positive test result from the HHS certified confirmatory analysis, and the drug was used in the manner and dosage prescribed, the MRO shall report the result as negative that no FFD policy violation has occurred. In this instance, a determination of fitness should also be performed if the MRO determined that the individual’s medical condition may pose a potential risk to the individual’s ability to safely and competently perform their assigned duties in a trustworthy and reliable manner.

Adulterated, substituted, diluted and invalid confirmatory drug and validity test results will also be subject to MRO review for final determination.

Only the MRO can authorize the reanalysis of the original specimen, or the analysis of an aliquot of a split sample. The donor must request the MRO to authorize reanalysis. Such reanalysis shall be conducted by an HHS-certified laboratory.

The MRO shall report all confirmed positive results (and for which analyte), adulterated, substituted, diluted, and invalid results to the construction site entity management person

responsible for the FFD program, without disclosing quantitative test results, and except as permitted in 10 CFR 26.411. The construction site entity shall ensure that appropriate action is taken as defined in the construction site entity procedures to deny the individual access to the construction site..

6.7 APPEAL/REVIEW PROCESS

The construction site entity shall have an appeal/review process that is objective and impartial. Construction site entity appeal/review programs are not intended to modify, subjugate, or abrogate any review rights that currently exist for individuals with their respective employers.

An individual who has been denied access to the construction site or whose access has been terminated due to a violation of the FFD program shall:

1. Be provided the basis for the denial of access;
2. Have an opportunity to provide additional information and/or correct incorrect information contained on the record, and;
3. Be provided the opportunity to have the decision, together with any additional information, reviewed in accordance with the construction site entity appeal/review process as defined in the construction site entity's procedures. For example the appeal/review process may entail a separate review by another construction site entity manager who is equivalent or senior to and independent of the individual who made the decision to deny or terminate access to the construction site due to the program violation.
4. The determination from this independent review is final.

6.8 BEHAVIORAL OBSERVATION PROGRAM

The construction site entity's Behavioral Observation Program is the primary means to detect behavior that may indicate possible use, sale, or possession of illegal drugs; use or possession of alcohol on site or while on duty; or any physical impairment or any cause that, if left unattended, may constitute a risk to public health and safety or the common defense and security.

Management and oversight personnel, identified in Section 2 of this document, that are responsible for observing individuals subject to a Behavioral Observation Program shall report any FFD concerns about individuals to the personnel designated in the construction site entity's policy.

Management and oversight personnel that are responsible to observe individuals subject to the Behavioral Observation Programs must be trained to have sufficient awareness and sensitivity to detect degradation in performance which may be the result of being under the influence of any substance, legal or illegal, physical or mental impairment which in any way may adversely affect their ability to safely and competently perform their duties. Training shall communicate the expectation of promptly reporting noticeable changes in

behavior or FFD concerns about other individuals to the construction site entity designated personnel for appropriate evaluation and action in accordance with the FFD policy.

6.9 CONFIDENTIALITY OF INFORMATION

Personal information, whether electronic or hardcopy, must not be disclosed to unauthorized persons. The construction site entity shall obtain a signed consent that authorizes the disclosure of the personal information collected and maintained under the construction site entity's FFD program before disclosing the personal information, except for disclosures to the following persons who are authorized:

1. A licensee's or other entity's representatives who have a need to have access to the information to perform their assigned duties under the FFD program, including determinations of fitness, FFD program audits, or some human resources functions;
2. NRC representatives;
3. Assigned MROs and MRO staff;
4. Appropriate law enforcement officials under court order;
5. The subject individual or his/her representative who has been designated in writing;
6. Persons deciding matters on review or appeal;
7. The presiding officer in a judicial or administrative proceeding initiated by the subject individual (see note below), or
8. Other persons pursuant to court order.

Note: For example, the presiding officer and a licensee's or other entity's attorneys of record defending the licensee in an alternative dispute resolution, judicial, or administrative proceeding that is initiated by the subject individual regarding a wrongful termination claim or action resulting from a violation of the licensee's FFD policy. The information disclosed to the presiding officer and the licensee's or other entity's attorneys must be limited to the subject individual's personal FFD information that is at issue in the proceeding, the information disclosed to the presiding officer must be identical to the information disclosed to the licensee's or other entity's attorneys, and the discloser of the information to the presiding officer and the licensee's or other entity's attorneys must include a binding stipulation that the presiding officer and the licensee's or other entity's attorneys will not make the information publicly available.

6.10 RECORDS

The construction site entity must establish and maintain a system of files and procedures that clearly indicate that test records and associated documentation, including personal information about an individual collected for the purpose of complying with Subpart K, shall be retained and used with the highest regard for individual privacy and confidentiality.

6.10.1 Five Year Records Retention

The construction site entity shall maintain for at least five (5) years after the construction site entity terminates or denies and individual's authorization **or** until the completion of all related legal proceedings, whichever is later records that, include:

- A list of the random pool (including all updates), a list of individuals selected for random testing for each day of testing, including those individuals selected but not tested, and the reason individuals were not tested.
- superseded versions of the written FFD policy and procedures
- procedures involving behavioral observation, protection of information, reviews conducted for FFD policy violations, audits, suitability and fitness evaluations, sanctions, and drug and alcohol selection, collection, testing (e.g., pre-assignment/pre-access, random, for-cause, post-accident, and follow-up), evaluation; test results;
- MRO evaluations;
- information used to make pre-assignment (i.e., authorization, access, consent, and termination) decisions including self disclosures, employment histories and suitable inquiries;
- Records pertaining to the determination of a violation of the FFD policy and related management actions;
- Records of any determinations of fitness;
- technical information and evaluations used to justify or support the conduct of alternate specimen sampling and licensee-selected drug and drug metabolite cutoff levels; and
- information, data, and reports necessary to implement the requirements of 10 CFR 26.417.
- NRC Operations Center reports by telephone within 24 hours; and
- Annual program performance reports for the FFD program.

6.10.2 Three (3) Year Records Retention

The construction site entity shall maintain for at least three (3) years records that, include:

- Records of FFD training and examinations
- Records of audits, audit findings and corrective actions

6.10.3 Forty (40) Years or until the NRC Determines Records are no longer needed

The construction site entity shall maintain for forty (4) years or Until the NRC determined the records are not longer needed any Five (5) Year denial of authorization or any permanent denial.

6.10.4 Life of Agreement

The construction site entity shall maintain until the life the of the agreement or until completion of all legal proceedings, whichever is later, written agreements for the provision of services supporting the FFD program.

6.10.5 For the length of employment by or contractual relationship with the construction site entity

The construction site entity shall maintain for the length of employment by or contractual relationship with the construction site entity background investigations, credit and criminal history checks, and psychological assessments of FFD program personnel for the length of the individual's employment by or contractual relationship with the licensee or other entity, or until the completion of all related legal proceedings, whichever is later.

6.10.6 For the time the FFD program follows tests for drugs in addition to those specified in 10 CRR Part 26

The construction site entity shall maintain records for the FFD program includes tests for drugs in addition to those specified in 10 CFR 26 or for those that used more stringent cutoff levels than 10 CFR 26 required for the time the FFD program follows these practices or until the completion of all related legal proceedings, whichever is later

6.10.7 Electronic Format Records

For information stored or transmitted in electronic format, access to personal information will be controlled by password protection to control access to personal data and limiting data entry to each authorized individual's area of responsibility.

6.10.8 Hardcopy Records

Hard copy records shall be maintained in secured storage or lockable file cabinets when not in review. Access to the FFD area where files and file cabinets are contained is limited to those authorized above.

6.11 REPORTING

Construction site entities shall make reports to the NRC Operations Center by telephone within 24 hours after the entity discovers any intentional act that casts doubt on the integrity of the FFD program and any programmatic failure, degradation, or discovered vulnerability of the FFD program that may permit undetected drug or alcohol use or abuse by individuals who are subject to the FFD program. These events must be reported under 10 CFR 26.417, rather than under the provisions of 10 CFR 73.71; and.

Construction site entities, for example, should exercise prudent judgment in determining whether to report a particular construction-related FFD issue to the NRC Operations Center. The following examples are guidance to assist construction site entity reportability determinations:

1. An “intentional act that casts doubt on the integrity of the FFD program” could involve, but is not limited to, the following examples:
 - the unapproved notification of a person, to subvert the FFD program’s normal notification procedure, that he/she will be selected for drug or alcohol testing on a certain day or at a certain time;
 - any actual unapproved diversion or subversion of a drug or alcohol specimen or its documentation while in construction site entity custody;
 - any actual tampering or unapproved alteration of onsite instrumentation or equipment used to analyze or store a drug or alcohol specimen; and
 - any actual collusion between any person with FFD-related program management access or authorization (e.g., an instrument calibration technician, computer software/hardware technician, FFD program personnel, supervisors, etc.) and any person subject to drug or alcohol testing to subvert the test.

2. Any programmatic failure, degradation, or discovered vulnerability of the FFD program that may permit undetected drug or alcohol abuse by individuals who are subject to the FFD program, could involve, but is not limited to, the following examples include the failure to:
 - conduct behavioral observation or perform pre-assignment/pre-access or random testing of persons who constructed or directed the construction of safety- or security-related SSCs;
 - implement an effective suitability and fitness evaluation (10 CFR 26.419) process that enabled unfit persons to construct or direct the construction of safety- or security-related SSCs; and
 - provide reasonable assurance that one or more of the 10 CFR 26.23, “Performance objectives,” are met.

Note: Single occurrences or non-related multiple occurrences not representing a programmatic failure should not be reported.

3. Construction site entities should also consider making a report for the following persons, if found and confirmed to be unfit for duty during the onsite conduct of the described duty(ies):
 - a person maintaining or has applied to the NRC for a 10 CFR Part 55 license who directed or performed a safety-significant activity;
 - a Certified Fuel Handler (see 10 CFR Part 50.2) who directed or manipulated nuclear fuel;
 - (c) a security person performing NRC-required duties; or,

- (d) a person who performed quality assurance/verification activities on an ITAAC-designated SSC.
4. If a construction site entity identifies that a particular 10 CFR Part 26, Subpart G, laboratory has a significant quality issue or a collection contractor has trustworthy and reliability concerns, and the issue meets the criteria in 10 CFR 26.417;
 5. A person who did enter the construction site in possession or “constructive possession” of more than a personal-use quantity (e.g., a quantity established by State law) of an illegal drug, the issue should be reported.

FFD-reportable occurrences should be evaluated and documented (with appropriate protection of information, 10 CFR 26.411) by the construction site entity for the implementation of corrective actions (10 CFR 26.415(b)) to help assure the continuing effectiveness of the FFD program and to enable NRC inspection (10 CFR 26.417(a)).

6.12 ANNUAL PROGRAM PERFORMANCE REPORTS FOR THE FFD PROGRAM

For the annual report:

1. The construction site entity should submit its FFD performance data for its construction site population excluding individuals covered under a co-located operating reactor site population.
2. If a construction site and an operating reactor site share employees, these shared persons should be reported (i.e., included) in the operating reactor FFD performance report.
3. The construction site entity should coordinate the reporting of C/V personnel with the C/V entity in order to preclude double counting of C/V personnel in the construction site entity’s, licensee’s and NRC’s FFD databases.

Note: If the reporting protocol of 1-3 above are not implemented, the construction site entity should, inform the NRC of the its particular reporting protocols in its 10 CFR 26.417 report so that the NRC’s FFD database can be annotated.

4. If implementing electronic reporting, the construction site entity will need to submit the “Single Positive Test Form” for each occurrence, “Annual Reporting Form for Drug and Alcohol Tests,” and the “Annual Fatigue Reporting Form,” to satisfy the 10 CFR 26.417 reporting requirement.
5. The electronic reporting of the “Single Positive Test Form” will not satisfy the 24-hour telephone report to the NRC Operations Center pursuant to 10 CFR 26.417(b)(1).
6. If implementing electronic reporting, the FFD e-forms provide space and drop-down menus for the submittal of voluntary information. This voluntary information is currently not required by regulation (see 10 CFR 26.8, “Information collection requirements: OMB approval”). However, construction site entities should consider submitting this information as it will enhance consistency across the industry, the

NRC's FFD database, and the quality of NRC's assessment of construction site entity FFD performance.

7. The construction site entity shall ensure that the information protection requirements pursuant to 10 CFR 26.411 are applied to all FFD-related communications and correspondence. Privacy information and other personally identifiable information shall not be included on any reports or forms required by 10 CFR 26.417.

6.13 AUDITS

Construction site entities who implement an FFD program shall ensure that audits are performed to assure the continuing effectiveness of the FFD program, including FFD program elements that are provided by C/Vs, and the FFD programs of C/Vs that are accepted by the licensee or other construction site entity.

Construction site entity shall ensure that these programs are audited at a frequency that assures their continuing effectiveness and that corrective actions are taken to resolve any problems identified. Construction site entities may conduct joint audits, or accept audits of C/Vs conducted by others, so long as the audit addresses the relevant C/Vs' services.

The following audits are required.

1. An audit evaluating a majority of the 10 CFR Part 26, Subpart B, program elements:
 - Within 12 months of the start of safety- or security-related construction
 - Prior to the earlier of when the Commission makes its 10 CFR 52.103(g) finding, the licensee's receipt of fuel assemblies on site, or when the protected area is established.
 - If performance data indicates an adverse trend that challenges a performance objective listed in 10 CFR 26.23, for the elements of concern.
2. An audit evaluating specific or functionally-related FFD program elements (such as: specimen collection and chain-of-custody; behavioral observation and for-cause testing; or MRO and SAE evaluations, documentation, and communication).
 - Within 3 months of initiating construction activities, an audit of pre-access/pre-assignment and random testing, determination of the random testing population, selection and notification, and specimen collection.
 - Program elements (10 CFR 26.403 through and including 10 CFR 26.419) on a periodic schedule, not to exceed a nominal 24 months period, as determined by the construction site entity.
3. Audits can be combined and performance dates managed in accordance with construction site entity procedures.
4. If adverse performance data exists necessitating the conduct of an audit, the construction site entity should schedule the conduct of its audit(s) as soon as reasonably practicable to maintain reasonable assurance that the FFD program

- provides on-going detection and deterrence of substance abuse to help ensure that persons constructing or directing the construction of safety- or security-related SSCs are fit for duty, trustworthy, and reliable commensurate with the potential risk to public health and safety and the common defense and security.
5. Persons performing FFD audits must be independent of the FFD functional area being audited.
 6. The audit report, findings, observations, and recommendations must be reported to management at a level above that of the FFD program manager.

Construction site entities need not audit HHS-certified laboratories or the specimen collection and alcohol testing services that meet the requirements of the current version of 49 CFR Part 40, "Procedures for Department of Transportation Workplace Drug and Alcohol Testing Programs".