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Chapter 173-230 WAC
Certification of operators of wastewater treatment plants

Last Update: 12/1/99

WAC Sections

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DISPOSITIONS OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

- 173-230-030 Duties of the board. [Statutory Authority: RCW 70.95B.040, 87-22-006 (Order 87-36), § 173-230-030, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-030, filed 10/11/78; Order 73-30, § 173-230-030, filed 11/9/73.] Repealed by 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
- 173-230-050 Certification prerequisites. [Statutory Authority: RCW 70.95B.040, 87-22-006 (Order 87-36), § 173-230-050, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW, 82-09-056 (Order DE 82-07), § 173-230-050, filed 4/16/82. Statutory Authority: RCW 70.95B.040, 78-11-016 (Order DE 78-16), § 173-230-050, filed 10/11/78; Order 73-30, § 173-230-050, filed 11/9/73.] Repealed by 99-24-117 (Order 98-18), filed 12/1/99, effective 1/1/00. Statutory Authority: Chapter 70.95B RCW.
- 173-230-060 Applications. [Order 73-30, § 173-230-060, filed 11/9/73.] Repealed by 82-09-056 (Order DE 82-07), filed 4/16/82. Statutory Authority: Chapter 70.95B RCW.

173-230-010

What is the purpose of this regulation?

When wastewater treatment plants are properly operated, public health and the state's waters are protected. Operators must meet minimum standards to assure they are competent to operate and maintain wastewater treatment plants. This rule establishes the requirements for obtaining a wastewater certificate and for the level of certificate required for an operator in responsible charge of a treatment plant. An operator in responsible charge of a wastewater treatment plant must be certified at a level that is equal to or greater than the classification of the wastewater treatment plant.

[Statutory Authority: Chapter 70.95B RCW, 99-24-117 (Order 98-18), § 173-230-010, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040, 87-22-006 (Order 87-36), § 173-230-010, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW, 82-09-056 (Order DE 82-07), § 173-230-010, filed 4/16/82. Statutory Authority: RCW 70.95B.040, 78-11-016 (Order DE 78-16), § 173-230-010, filed 10/11/78; Order 73-30, § 173-230-010, filed 11/9/73.]

173-230-020

Definitions.

(1) "Activated sludge process" means a biological wastewater treatment process in which a mixture of wastewater and activated sludge is agitated and aerated. The activated sludge is subsequently separated from the treated wastewater by sedimentation and wasted or returned to the process as needed.

(2) "Biofiltration" means the process of passing a liquid through a biological filter that contains fixed media on surfaces

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which develop zooglycal films that absorb and adsorb fine suspended, colloidal, and dissolved solids and release end products of biochemical action.

(3) "Certificate" means the certificate of competency issued by the director stating that an individual has met the requirements for a specific classification in the wastewater treatment plant operator's certification program.

(4) "Certificate holder" means the individual to whom a certificate is issued.

(5) "CEU" means continuing education unit that is a nationally recognized unit of measurement similar to college credit. One CEU is awarded for every ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

(6) "College credits" means credits earned toward a college degree or in course work that is relevant to the operation of a wastewater treatment plant. College credit also means CEUs. Forty-five CEUs equals forty-five quarter credits equals thirty semester credits.

(7) "Department" means the Washington state department of ecology.

(8) "Director" means the director of the department of ecology or the director's designee.

(9) "Extended aeration" means a modification of the activated sludge process that uses long aeration periods and long mean cell residence times for aerobic digestion of the biological mass by endogenous respiration and promotes the growth of nitrifying organisms.

(10) "GED" means a General Education Development certificate issued by a recognized education institution. A GED is equivalent to a high school diploma.

(11) "Group" and "class" for the purpose of operator certification and wastewater treatment plant classification are the same.

(12) "Lagoon" means any large holding or detention pond, usually with earthen dikes that is used to contain wastewater while sedimentation and biological stabilization occurs.

(13) "OIT" means operator-in-training. This is the entry level certification classification offered by the department.

(14) "Operating experience" means the routine performance of duties, on-site in a wastewater treatment plant, that affect plant performance or effluent quality.

(15) "Operator" means an individual who performs routine duties, on-site at a wastewater treatment plant, that affect plant performance or effluent quality.

(16) "Operator in charge of each shift" means the individual on-site at a wastewater treatment plant whose primary responsibility is to operate the wastewater treatment plant on a regularly run shift. The operator in charge of each shift is subordinate to the operator in responsible charge.

(17) "Operator in responsible charge" means the individual who is routinely on-site and in direct charge of the overall operation of a wastewater treatment plant.

(18) "Owner" means in the case of:

? A town or city, the city or town acting through its chief executive officer or the lessee if operated under a lease or contract;

? A county, the chairman of the county legislative authority or the chairman's designee;

? A sewer district, board of public utilities, association, municipality or other public body, the president or chairman of the body or the president's or chairman's designee;

? A privately owned wastewater treatment plant, the legal owner.

(19) "Primary wastewater treatment" means unit processes consisting of one or more of the following: Screening, comminution and grinding, flotation, precipitation, sludge pumping, and disinfection. Treatment consists of clarification followed by removal, treatment, and disposal of sludge.

(20) "Reciprocity" means the exchange of a valid out-of-state wastewater treatment plant operator's certificate achieved by passing a written examination for an equivalent level of certification without further examination.

(21) "Tertiary" means advanced physical/chemical or biological treatment of wastewater significantly beyond the

conventional secondary stage to remove additional suspended and dissolved substances. These substances may include phosphorus and nitrogen, a high percentage of suspended solids, dissolved inorganic solids, toxic compounds, microorganisms, and complex organic compounds.

(22) "Wastewater certification program coordinator" means an employee of the department who is appointed by the director and who administers the wastewater treatment plant operator certification program.

(23) "Wastewater collection system" means any system of lines, pipes, manholes, pumps, liftstations, or other facilities used to collect and transport wastewater.

(24) "Wastewater treatment plant" means a facility used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial or industrial origin, and that, by its design, requires the presence of an operator for its operation. It does not include any facility used exclusively by a single family residence, septic tanks with subsoil absorption, industrial wastewater treatment plants, or wastewater collection systems.

(25) "Wetlands treatment" means those wetlands intentionally constructed and managed for the primary purpose of wastewater treatment.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-020, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-020, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-020, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-020, filed 10/11/78; Order 73-30, § 173-230-020, filed 11/9/73.]

173-230-040

To whom does this rule apply?

This rule applies to anyone who owns or operates a wastewater treatment plant.

The operator in charge of the wastewater treatment plant must be certified at least at a level equal to or higher than the classification of the plant. When the plant is operated on more than one daily shift, the operator in charge of each shift must be certified at a level not lower than one level below the classification of the plant.

All individuals operating wastewater treatment plants who are not required to be certified are encouraged to seek certification.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-040, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-040, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-040, filed 4/16/82. Statutory Authority: RCW 70.95B.040. 78-11-016 (Order DE 78-16), § 173-230-040, filed 10/11/78; Order 73-30, § 173-230-040, filed 11/9/73.]

173-230-061

Levels of certificates and qualifications.

(1) There are five levels of certification offered by the department to individuals who meet minimum qualifications. Those minimum qualifications include required levels of education and experience.

(2)

Qualification Requirements for Operator Certification

Certification	Education	Experience	Substitutions allowed for	Substitutions allowed
level	required	required	education	for experience
Operator-in-Training	High school diploma or GED	3 months	One year of excess operating experience may be used for one	May use 3 college credits or CEUs in course work

			year of high school or two years of grade school.	related to wastewater treatment plant operation for experience.
Group I	High school diploma or GED	1 year	One year of excess operating experience may be used for one year of high school or two years of grade school.	None.
Group II	High school diploma or GED	3 years	One year of excess operating experience may be used for one year of high school or two years of grade school.	May use relevant work experience or credits or CEUs for one year and six months of the operating experience.
Group III	High school diploma or GED and 2 years of college (90 credits or CEUs)	4 years with at least 2 years operating experience at a Class II plant	May use excess operating experience for college at a rate of one year of excess operating experience for half of the college (one year). Three years of excess operating experience may be used for the second year of college.	May use relevant work experience and/or excess credits for 2 years of the operating experience.
Group IV	High school diploma or GED and 4 years of college (180 credits or CEUs)	4 years with at least 2 years at a Class III plant	May use excess operating experience for college at a rate of one year of excess operating experience for one year of college for up to half of the college (two years). Three years of excess operating experience may be substituted for one year of college. This rate may be used for the remaining two years of college.	May use excess operating experience for credits. May use related work experience and/or excess credits for 2 years of the operating experience.

(3) Relevant work experience may be substituted for up to one-half of the operating experience required to qualify for the Group II, III and IV levels. This includes:

- (a) Environmental or operations consultant;
- (b) Environmental or an engineering branch of federal, state, county, or local government;
- (c) Wastewater collection system operator;
- (d) Water distribution system operator and/or manager;
- (e) Wastewater pump station operator; or
- (f) Water treatment plant operator.

Other related work experience may include building and equipment maintenance, boiler operation, machinist, laboratory technician, engineering, welding, or other related fields on a case-by-case basis with a written description of the duties performed on the job by the applicant.

(4) College credits substituted for an operating experience requirement cannot also be applied to the education requirement.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-061, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-061, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-061, filed 4/16/82.]

How do I apply?

Any person seeking certification must submit a completed application and fees to the department. Application forms are available from the wastewater certification program coordinator.

Applicants must meet minimum education and experience requirements to be eligible for examination or reciprocity. Applicants accepted for examination will be scheduled and notified of the date, place, time, and cost of the examination.

If the application is denied, the applicant will be notified of the reason for the denial.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-065, filed 12/1/99, effective 1/1/00.]

173-230-070 Examination.

(1) The department will use written examinations to determine the competency of operators. If examinations are prepared by an organization other than the department, the applicant shall pay any costs associated with the use of the exam.

(2) Examinations will be held at least three times annually at places and times set by the department.

(3) The wastewater certification program coordinator or designee will score all exams. The applicant will be notified of the score. Examinations will not be returned to the applicant.

(4) Certificates will be issued to applicants who pass a written examination.

(5) An applicant who fails to pass the examination must reapply for further examination. No individual will be allowed to retake the same examination more than twice consecutively.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-070, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-070, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-070, filed 4/16/82; Order 73-30, § 173-230-070, filed 11/9/73.]

173-230-080

Certificate term and renewal conditions.

An owner may request a temporary certificate for an individual when the designated certified operator unexpectedly vacates the position. This request must be made in writing to the wastewater certification coordinator and must include an application and fee. The department may issue a temporary certificate at its discretion. A temporary certificate may not exceed a one-year period, is nonrenewable, and cannot be transferred to another individual.

(1) Except for a temporary certificate, a certificate is valid from January 1 until December 31 of the same year or the year designated by the department.

(2) Except for a temporary certificate, a certificate is renewable only when the certificate holder demonstrates and provides documentation to the department of continued professional growth in the field. The department will mail renewal notices to all certificate holders eligible to renew before the certificate expires.

(3) Each certificate holder must accomplish one of the following activities during a three-year period ending December 31, 1979, and each three-year period after that date.

(a) Accumulate a minimum of three CEUs or college credits in coursework relevant to the field;

(b) Advance by exam to a higher level of certification in Washington's wastewater treatment plant operator's certification program. Advancement from OIT to Group I certification will not fulfill this requirement;

(c) Achieve certification by examination in the waterworks certification program administered by the Washington department of health in the water treatment plant operator, water distribution manager, or the cross connection control specialist classifications;

(d) Achieve certification by examination or advance by examination to a higher level in Washington's voluntary wastewater collection system operator's certification program administered by the Washington Wastewater Collection System Personnel Association.

(4) It is the responsibility of each certificate holder to meet the professional growth requirement and document that growth to the department before December 31 of the last year of the three-year period described in subsection (3) of this section. The department will mail a written notice to each certificate holder who has not fulfilled the continued professional growth requirement. If this requirement is not satisfied, the certificate is not renewable. Failure to renew a certificate for any reason will be handled as described in WAC 173-230-100.

(5) The department may collect renewal fees for a period not to exceed three calendar years. The department will notify certificate holders who are eligible for renewal as described in subsection (2) of this section the amount of fees owed and the date the fees must be paid.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-080, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-080, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-080, filed 4/16/82; Order 73-30, § 173-230-080, filed 11/9/73.]

173-230-090

Fees.

(1) Applications for certification by examination or reciprocity or a temporary certificate will be accepted for processing only when accompanied by a fee of fifty dollars.

(2) Applications for reexamination will be accepted for processing only when accompanied by an application fee. The department may waive a portion of the application fee for reexamination.

(3) Application fees are nonrefundable.

(4) Applications for certificate renewals will be accepted for processing only when accompanied by a renewal fee of thirty dollars for each year of renewal.

(5) All receipts will be paid into the state general fund.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-090, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.090 (1) and (2) and chapter 70.95B RCW. 91-13-058 (Order 90-61), § 173-230-090, filed 6/17/91, effective 7/18/91. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-090, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-090, filed 10/11/78; Order 73-30, § 173-230-090, filed 11/9/73.]

173-230-100

Suspension and revocation of a certificate.

(1) When a certificate is not renewed, the director will notify the certificate holder that the certificate is suspended for sixty days. If the certificate is not renewed during the suspension period, the director will mail a written notice of revocation to the owner of the wastewater treatment plant employing the individual as last known by the department and to the certificate holder at the address last known by the department. The notice of revocation mailed to the certificate holder will be sent by certified mail. If, during the revocation notice period, the certificate is not renewed, the certificate will be revoked ten days after the notice is mailed.

(2) Certificates may also be revoked when the director finds:

(a) Fraud or deceit in obtaining the certificate.

(b) Gross negligence in the operation of a wastewater treatment plant.

(c) Violation of the requirements of this chapter or the statute it implements or of any lawful rule, regulation or order of the department.

(3) No revocation will be made under subsection (2) of this section unless the operator has been notified that revocation is proposed, been advised of the reason and been given an opportunity to appear before the director and be heard on the matter.

(4) A certificate will be suspended immediately when the director is notified by the department of social and health services that a person is not in compliance with a support order or a residential or visitation order. If the person has continued to meet all other requirements for reinstatement during the suspension, the certificate will be reissued when the director is notified by the department of social and health services that the person is in compliance with the order.

If a certificate is revoked, the individual must meet all conditions of certification including application, fees, and passing a written examination to become certified.

(5) If revocation was made due to subsection (2) of this section, the operator will not be eligible to reapply for a certificate for one year from the date the revocation became final.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-100, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040, 87-22-006 (Order 87-36), § 173-230-100, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-100, filed 4/16/82. Statutory Authority: RCW 70.95B.040, 78-11-016 (Order DE 78-16), § 173-230-100, filed 10/11/78; Order 73-30, § 173-230-100, filed 11/9/73.]

173-230-110 Reciprocity.

The director may waive examinations for applicants holding valid wastewater treatment plant operators certificates or licenses issued by other states that have equivalent standards as determined by the department or its designee.

(1) Applications for reciprocity will be considered for approval only when the department receives confirmation from the certifying authority of the state or province in which the applicant is certified that the certificate is currently valid and was earned by passing a written examination. A copy of the exam passed by the applicant must also be released for review by the department or its designee.

(2) Certificates will be issued to each reciprocity applicant who meets the minimum education and experience requirements for the certification level requested and who passes a written examination comparable to Washington's exam as determined and approved by the director.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-110, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040, 87-22-006 (Order 87-36), § 173-230-110, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-110, filed 4/16/82; Order 73-30, § 173-230-110, filed 11/9/73.]

173-230-120 Appeals.

Decisions of the director under this chapter may be appealed within thirty days from the date of notice to the pollution control hearings board as required by chapter 43.21B RCW and chapter 371-08 WAC.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-120, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-120, filed 11/9/73.]

173-230-130
Violations.

Violation of this chapter is a misdemeanor. Each day of operation in violation constitutes a separate offense. Upon conviction, violators are subject to fines not exceeding one hundred dollars for each offense. Injunctions may be obtained for continuing violations.

[Statutory Authority: Chapter 70.95B RCW, 99-24-117 (Order 98-18), § 173-230-130, filed 12/1/99, effective 1/1/00; Order 73-30, § 173-230-130, filed 11/9/73.]

173-230-140
Classification of wastewater treatment plants.

The director shall classify all wastewater treatment plants according to the following criteria.

Treatment Plant Classification Criteria		
Treatment type	Design flow MGD	Classification
Primary	≤ 1	I
	$> 1 \leq 10$	II
	$> 10 \leq 20$	III
	> 20	IV
Lagoon (Nonaerated)	All	I
Lagoon (Aerated)	≤ 1	I
	> 1	II
Biofiltration	≤ 1	II
	$> 1 \leq 10$	III
	> 10	IV
Extended aeration	≤ 5	II
	> 5	III
Activated sludge	≤ 1	II
	$> 1 \leq 10$	III
	> 10	IV
Wetlands	≤ 1	I
	$> 1 \leq 5$	II
	> 5	III
Tertiary	≤ 5	III
	> 5	IV

Plants may be classified in a group different than indicated in this section if:

- (1) They have characteristics that make operation less complex or more difficult than other similar plants of the same flow range; or
- (2) The conditions of flow or the use of the receiving waters require an unusually high degree of plant operational control; or
- (3) They use an approved method of wastewater treatment that is not included in this section.

Beginning January 2000, the department may issue a one-time provisional certificate to the certified operator in responsible charge of a plant or the certified operator in charge of a shift at the plant only if the plant's rating level increased solely due to the adoption of the treatment type and design flow rating system. The provisional certificate will not apply if the rating of a plant increases due to an upgrade, to a change to treatment processes, or to flow. The provisional certificate will be issued only for the operation of a specific plant and may not be transferred if that certified operator leaves employment with that plant.

The holder of a provisional certificate must continue to meet all certificate renewal requirements.

[Statutory Authority: Chapter 70.95B RCW. 99-24-117 (Order 98-18), § 173-230-140, filed 12/1/99, effective 1/1/00. Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-140, filed 10/23/87; 78-11-016 (Order DE 78-16), § 173-230-140, filed 10/11/78; Order 73-30, § 173-230-140, filed 11/9/73.]

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Environmental Quality

Environmental Protection and Enhancement

Headquarters
Department of the Army
Washington, DC
21 February 1997

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SUMMARY of CHANGE

AR 200-1

Environmental Protection and Enhancement

This revision--

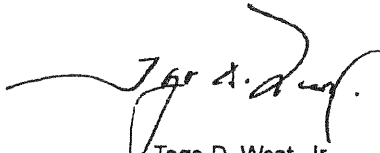
- o Extracts technical and procedural information found in each of the program areas for incorporation into the corresponding DA Pamphlet 200-1 (forthcoming), making this AR strictly a responsibility and policy document (chaps 1 through 15).
- o Reflects the transfer of responsibilities previously assigned to the Assistant Chief of Engineers to the Assistant Chief of Staff for Installation Management (ACSIM). (chap 1)
- o Includes Civil Works activities under the jurisdiction of the U.S. Army Corp of Engineers (USACE).
- o Establishes responsibilities for environmental training (chap 1).
- o Requires installations to develop and implement water and wastewater management plans and water conservation plans. Requires installations to develop a groundwater protection plan to include Federal, state and local groundwater protection programs (chap 2).
- o Incorporates the requirements established by the Oil Pollution Act (chap 3).
- o Allows installation commanders more latitude on disposal of hazardous waste while guarding against improper disposal and future liability (chap 5).
- o Reflects a new emphasis on the requirements of the Clean Air Act (chap 6).
- o Outlines the scope and policy revisions of requirements governing emissions to the atmosphere, including guidance on ozone-depleting chemicals (chap 6).
- o Reflects changes in environmental noise management policy (chap 7).
- o Includes asbestos management (chap 8).
- o Includes the Radon Reduction Program (chap 9).
- o Outlines pollution prevention policy in a new chapter which addresses pollution prevention planning requirements for Army activities (chap 10).
- o Includes BRAC Environmental Restoration Program policy (chap 11).
- o Establishes new Environmental Technology Program policy and responsibilities (chaps 1 and 12).
- o Addresses the increasing automated reporting requirements of the Army Automated Environmental Management Systems (chap 13).

- o Defines the Army's increasing environmental requirements OCONUS (chap 14).
- o Elaborates on other Environmental Programs (chap 15).

Environmental Quality

Environmental Protection and Enhancement

By Order of the Secretary of the Army:



Togo D. West, Jr.
Secretary of the Army

contractor activities, and lessees performing activities in direct support of the Army located on real property under Department of the Army jurisdiction. Installations in foreign countries shall comply with this regulation as noted in Chapter 14 of this regulation. Contracts to operate Government-owned facilities shall reference this regulation and will designate by specific citation the applicable provisions of this regulation.

Proponent and exception authority.

The proponent of this regulation is the Assistant Chief of Staff for Installation Management. The proponent has the authority to approve exceptions to this regulation that are consistent with law or regulation. Proponents may delegate the approval authority, in writing, to a director or division chief under their supervision within the proponent agency who holds the grade of colonel or the civilian equivalent.

Army management control process.

This regulation contains management control provisions in accordance with AR 11-2 and contains checklists for conducting management control reviews.

Supplementation. Supplementation to

this regulation and establishment of command and local forms by Army military organizations are prohibited without prior approval from the Director of Environmental Programs (DAIM-ED). The requirements of such supplements and forms must be consistent with and no less stringent than the requirements in this regulation.

Suggested improvements. Users are

invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the chain of command to HQDA, DAIM-ED, 0600 Army Pentagon, Washington, DC 20310-0600.

Distribution. Distribution of this regulation

is made in accordance with initial distribution number (IDN) 093190, intended for command levels D and E for Active Army, Army National Guard, and U.S. Army Reserve.

History. This printing publishes a revision of this publication. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This regulation covers environmental protection and enhancement.

Applicability. This regulation applies to Active Army, Army National Guard, U.S. Army Reserve, and civil works activities that are under the jurisdiction of the U.S. Army Corps of Engineers. It also applies to tenants, such as other Federal agencies,

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f. Consistent with the procedures established in the ISA, provide representatives of regulatory agencies appropriate access to any facility or activity.

1-30. Managers of GOCO Facilities

Managers of GOCO Facilities will—

- a.* Ensure that operating contractors assume sole responsibility for management and disposal of contractor-generated solid and hazardous waste.
- b.* Enforce the environmental aspects of the existing contract.
- c.* Prohibit the use of on-site hazardous waste treatment, storage, and disposal facilities for non-DOD owned hazardous wastes unless authorized pursuant to 10 USC 2692.
- d.* Prohibit, storage, treatment, or disposal of non-DOD hazardous material on installations/facilities in accordance with 10 USC 2692.

1-31. Facility Managers or Commanders of Sub-Installations and Supported Facilities

Facility Managers or Commanders of Sub-Installations and Supported Facilities will—

- a.* Be responsible for environmental compliance for operations under their control.
- b.* Identify environmental resource needs.
- c.* Identify and report noncompliance situations to the host installation or Civil Works facility (CWF) for resourcing and resolution.
- d.* Serve as the local point of contact for regulatory authorities on environmental issues.
- e.* Provide information to the host installation to complete required reports.
- f.* Appoint and train environmental compliance officers at appropriate organizational levels to ensure compliance actions take place. Supporting IC may waive this requirement on a case-by-case basis if the facility has insufficient staff or there are no known environmental issues associated with the particular facility.
- g.* Execute environmental requirements as they affect the facility.

1-32. Unit Commanders

Unit Commanders will—

- a.* Comply with installation environmental policies and legally applicable and appropriate Federal, state, and local laws and regulations or country specific Final Governing Standards (FGS).
- b.* Promote environmental stewardship.
- c.* Ensure environmental concerns are addressed throughout the training cycle.
- d.* Develop a standard operating procedure covering environmental considerations.
- e.* Ensure environmental training required by law, regulation, or command policy is conducted as required, so all personnel can perform their duties in compliance with environmental laws and regulations and can respond properly in emergencies. This training may be combined with related mandatory safety and occupational health (SOH) training to avoid duplication of effort.
- f.* Appoint and train environmental compliance officers at appropriate organizational levels to ensure compliance actions take place.

1-33. Supervisors

Supervisors will—

- a.* Comply with installation environmental policies and legally applicable and appropriate Federal, state, and local laws and regulations, or country specific FGS.
- b.* Promote environmental stewardship.
- c.* Develop a standard operating procedure covering environmental considerations.
- d.* Ensure environmental training required by law, regulation, or command policy is conducted as required so all personnel can perform their duties in compliance with applicable laws and regulations, and can respond properly in emergencies. This training may be conducted with related mandatory SOH training to avoid duplication of effort.

Chapter 2

Water Resources Management Program

2-1. Scope

- a.* The Army's water resource management objective is to ensure the availability, conservation, and protection of water resources. It encompasses water supply and pollution abatement at fixed and field facilities.
- b.* Applicable laws are: the Safe Drinking Water Act (SDWA), as amended; the Clean Water Act (CWA), as

amended; Federal Facility Compliance Act of 1992; Marine Protection, Research, and Sanctuaries Act; Coastal Zone Management Act (CZMA); Energy Policy Act of 1992; and state and local laws.

c. The control of oil and hazardous substance spills is discussed in chapter 3 of this regulation.

d. Specific guidance on implementing water resource management policy is provided in DA PAM 200-1.

2-2. Policy

The Army will comply with legally applicable and appropriate Federal, state, and local regulations regarding water resources management. The Army promotes the establishment of management plans to support these requirements. The Army will:

a. Obtain and comply with all required waterworks permits.

b. Provide drinking water which meets applicable laws and regulations, or satisfies Army standards developed for field environments and other military-unique situations.

c. Conserve water resources, including wetlands, estuaries, watersheds, and groundwater.

d. Control or eliminate sources of pollutants and contaminants to protect water resources.

e. Obtain and comply with wastewater discharge permits.

f. Identify and implement pollution prevention initiatives.

g. Participate with regional authorities in the development and implementation of water resource initiatives.

h. Incorporate non-point source (e.g., stormwater runoff, soil erosion) abatement measures in construction, facility operations, and land management activities.

i. Encourage the beneficial reuse of wastewater and sludge.

j. Use regional or municipal water supply and wastewater collection and treatment systems, when economically feasible.

2-3. Drinking Water

a. The Army will provide drinking water to fixed facilities in accordance with the requirements of the SDWA and applicable state and local regulations. Drinking water provided for the field environment and other military-unique operations will meet The Army Surgeon General directives. Drinking water provided on Army watercraft will meet the drinking water quality standards of the SDWA.

(1) The major provisions outlined in the SDWA include:

(a) Primary and Secondary Drinking Water Standards.

(b) Limits on allowable lead content in materials used to distribute water.

(c) Lead Contamination Control Act.

(d) Groundwater source protection programs.

(2) The major provisions of applicable state and local regulations include:

(a) Criteria for operation and maintenance practices.

(b) Plans/programs to safeguard drinking water quality and quantity, both at the source and in the distribution system.

b. Installations and civil works facilities (CWF) will develop and implement water conservation measures in accordance with the Energy Policy Act of 1992, Subpart F (Public Law 102-486), and Executive Order (EO) 12902.

c. The Army will obtain and comply with all necessary National Pollutant Discharge Elimination System (NPDES) permits, water appropriation and use permits, or other permits which may be required for the operation of drinking water treatment systems at both fixed and field facilities.

d. Military installations and activities will monitor, operate, maintain, repair, and upgrade Army water supply, treatment, distribution, and storage systems according to:

(1) AR 40-5.

(2) AR 420-46.

(3) AR 700-136.

(4) TB MED 576.

(5) TB MED 577.

(6) TM 5-660.

(7) TM 5-810-5.

(8) TM 5-813-1 through TM 5-813-8.

(9) USACHPPM TG-179.

2-4. The Clean Water Act

a. The Army will comply with all requirements, substantive and procedural, for control and abatement of water pollution, as outlined in the CWA. The major provisions of the CWA include:

(1) National Pollution Discharge Elimination System (NPDES) Permits.

- (2) Pretreatment Standards for discharges to Publicly-Owned Treatment Works (POTWs).
 - (3) Toxic Water Pollutants.
 - (4) Sewage Sludge Requirements.
 - (5) Stormwater.
 - (6) Non-point Source Pollution Control.
 - (7) Dredge and Fill Operations.
- b.* Installations will obtain and comply with all necessary NPDES or state discharge permits.
 - c.* Discharges from industrial activities to Federally-Owned Treatment Works (FOTWs) will comply with the substantive pretreatment requirements applicable to POTWs under the CWA. Army activities should develop a pretreatment program to ensure NPDES permit requirements are met and to improve opportunities for the beneficial use of sewage sludge.
 - d.* Army activities will provide tenant activities information on pretreatment and wastewater guidelines for non-domestic wastewater discharges to FOTWs and POTWs.
 - e.* Discharges to surface waters will be sufficiently free of toxic pollutants such that the discharge will not have an adverse impact on human health and aquatic life or result in the violation of a NPDES permit.
 - f.* Army activities will follow state approved plans for non-point source water pollution control where applicable and appropriate.
 - g.* Army activities will develop a Stormwater Discharge Prevention Plan in accordance with 40 CFR Part 125.
 - h.* Army activities will develop a Spill Prevention Control and Countermeasures Plan (SPCCP) in accordance with the CWA Section 311(j).
 - i.* Ship-board or shore-side oil/water separation will be performed before the discharge of ballast water from watercraft. Effluent limitations from watercraft are prescribed by:
 - (1) The U.S. Coast Guard (33 Code of Federal Regulations (CFR) 159).
 - (2) The Environmental Protection Agency (EPA) (40 CFR 140).
 - (3) Individual states.
 - (4) Technical Bulletin (TB) 55-1900-206-14.
 - j.* Proposed military or civil works activities involving the discharge of dredged or fill material into waters of the United States, including wetlands, will be coordinated with the local USACE district.
 - k.* Army activities will evaluate the use of innovative/alternative technologies for the treatment of wastewater when proposing projects to construct or upgrade wastewater treatment facilities. Each military construction programming document should reflect the fact that innovative or alternative technology was considered.
 - l.* Active Army, Army Reserve, and Army National Guard installations and facilities will provide copies of all final NPDES permits received from the EPA, or an authorized state, to their major Army commands, State Adjutants General (where appropriate), and the U.S. Army Environmental Center (USAEC). Civil works activities will provide a copy of final NPDES permits to their district Environmental Compliance Coordinator.
 - m.* Military installations and activities will monitor, operate, maintain, repair, and upgrade Army water treatment and collection systems according to:
 - (1) AR 40-5.
 - (2) AR 420-46.
 - (3) TM 5-665.
 - (4) TM 5-814-1 through 5-814-3.

2-5. Recreational Waters

Guidance on the management of recreational waters at military installations is included in AR 40-5, TB MED 575, and TM 5-662.

2-6. Water Resource Protection and Management

- a.* The Army will comply with legally applicable and appropriate Federal, state, and local regulations to protect water resources, including wetlands, estuaries, watersheds, and groundwater.
 - (1) Wetlands and Estuaries.
 - (a)* Any action affecting wetlands will require an environmental assessment in accordance with AR 200-2 (military installations) or ER 200-2-2 (CWF), and applicable and appropriate Federal, state and local laws and regulations. Proposed military or civil works activities involving the discharge of dredged or fill material into wetlands or other waters of the United States will be coordinated with the local USACE district.
 - (b)* EO 11988 and EO 11990 address the actions Federal agencies will take to identify and protect flood plains and wetlands.
 - (c)* The CZMA requires that activities within the coastal zone of any state must be consistent with the state's coastal zone management plan.
 - (2) Watersheds.

(a) Army activities that affect, water quality within a watershed planning unit will be carried out in a manner that is consistent with the policies established in a plan approved under the CWA.

(b) Army activities will prepare watershed management/protection plans as required by the Surface Water Treatment Rule of the SDWA and in accordance with AR 420-46.

(c) Army activities will ensure that all construction or earth moving operations meet the applicable and appropriate Federal, state or local requirements for soil erosion control.

(d) Installations will take action to reduce natural soil erosion and thereby protect nearby water quality.

(3) Groundwater. Installations will comply with all applicable and appropriate state Wellhead Protection Program requirements, Underground Injection Control Program requirements, and Sole Source Aquifer requirements. Installations should prepare a groundwater protection plan to compile the above requirements and other locally required or pro-actively established measures designed to protect groundwater sources from contamination.

b. Installations will prepare a Water Resources Management Plan (WRMP) in accordance with AR 420-46. The WRMP will include an emergency/contingency plan and a water conservation plan that meet all Federal, state and local regulations pertaining to such plans.

2-7. Certification and Training

a. Operators of water, wastewater, and industrial treatment plants will receive necessary training and meet applicable operator certification requirements or in accordance with applicable OCONUS requirements.

b. Analytical laboratories will be certified per applicable Federal, state, local or OCONUS regulations.

2-8. Municipal/Regional Water System Connections

Army policy is to use regional or municipal water supply and wastewater collection and treatment systems, when economically feasible, rather than construct or operate Army water supply and wastewater systems. Army owned wastewater collection and treatment systems will not be used to serve local communities. A life-cycle cost analysis will be performed whenever the up-grade or construction of a new water supply or wastewater treatment facility is considered. Guidelines for military installations to perform the cost analysis are contained in AR 420-46.

2-9. Regulatory Inspections

When EPA, state, or local regulatory agencies inspect a military activity they will be accompanied by a technical representative designated by the IC, Regional Support Command (RSC), or State Adjutant General. Copies of Enforcement Action(s) (ENF's)/NOV's received as a result of the inspections will be forwarded within 48 hours to the MACOM.

2-10. Technical Assistance

Technical assistance relating to health and environmental aspects of water resources can be obtained from USACHPPM. Technical assistance relating to facility management can be obtained from the U.S. Army Center for Public Works (USACPW).

Table 2-1
Respiratory Protection Equipment for Regulated Areas¹

OCCUPATIONAL SCENARIO	Employee Exposure Potential Agents (mg/m ³)				
	GD	GA/G	VX	H,HD,HT	L
Unmasked Agent Workers	≤.00003	≤.0001	≤.00001	≤.003	≤.003
Masked Personnel in Routine Operations ²	>.00003 to ≤.06	>.0001 to ≤.2	>.00001 to ≤.02	(See para 2-5 for mustard and Lewisite operations.)	
Personnel Conducting Emergency Operations or Operations in Unknown Agent Concentrations or in Agent Concentrations which exceed the Concentrations Listed ³	>.06	>.2	>.02	>.003	>.003

Notes:

¹ A full facepiece, chemical canister, air-purifying protective mask will be onhand for escape. (The M9-, M17, or M40-series masks are acceptable for this purpose. Other masks certified as equivalent may be used.)

² NIOSH/MSHA approved pressure demand, full facepiece, SCBA or air supplied respirator with escape air cylinders may be used. Alternatively, a full-facepiece, chemical-canister air-purifying protective mask is acceptable for this purpose (for example, M9-, M17-, or M40-series mask or other mask certified as equivalent) is acceptable.

³ NIOSH/MSHA approved pressure demand, full facepiece, SCBA or air supplied respirator with HQDA approved protective ensemble. (See paragraph 2-5 for a detailed discussion of specific operational restrictions and monitoring requirements.)

22

Army Regulation 200-1

Environmental Quality

Environmental Protection and Enhancement

Headquarters
Department of the Army
Washington, DC
13 December 2007

UNCLASSIFIED

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SUMMARY of CHANGE

AR 200-1

Environmental Protection and Enhancement

This administrative revision, dated 13 December 2007--

- o Updates the policy regarding Army Program Guidance Memorandum (para 15-1).
- o Corrects typographical errors throughout the publication.


Environmental Quality

Environmental Protection and Enhancement

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:


JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army

History. This publication is an administrative revision. The portions affected by this administrative revision are listed in the summary of change.

Summary. This regulation covers environmental protection and enhancement and provides the framework for the Army Environmental Management System.

Applicability. This regulation addresses environmental responsibilities of all Army organizations and agencies. Specifically, this regulation applies to—

- (a) Active Army, Army National Guard/Army National Guard of the United States, and United States Army Reserve.
- (b) Tenants, contractors, and lessees performing functions on real property under jurisdiction of the Department of the Army (for example, Army and Air Force Exchange Service (AAFES), Defense Commissary Agency (DECA)).
- (c) Activities and operations under the purview of the Army even when performed off of installations.
- (d) Formerly used defense sites (FUDS) and other excess properties managed by the Army. As used throughout this regulation, the term Army National Guard includes the Army National Guard of the United States.

Installations and facilities in foreign countries will comply with requirements of this regulation that specifically prescribe overseas requirements.

Contracts to operate Government-owned facilities will reference this regulation and will designate by specific citation the applicable provisions.

This regulation does not apply to civil works (CW) functions under the jurisdiction of the U.S. Army Corps of Engineers (USACE).

The terms "Army environmental programs" and "Army Environmental Program" must be read in context. All Army organizations, regardless of their organizational level or chain of command, have environmental responsibilities as part of their functions; these environmental responsibilities must be incorporated into the planning, programming, budgeting, and execution of their respective missions. The Assistant Chief of Staff for Installation Management, working through the Director of Environmental Programs (see Responsibilities, para 1-13x), has specific and more narrowly defined responsibilities that are planned, programmed, budgeted, and executed via assigned accounts. These accounts resource specifically prescribed and focused environmental efforts. Each organization must program and fund its environmental activities from the appropriate account of the proponent's operating budget, not necessarily an environmental account. Being mindful of the context in which requirements are articulated will help define the scope of the "program" being addressed and will preclude inappropriate resourcing decisions or expectations.

Proponent and exception authority. The proponent of this regulation is the Assistant Chief of Staff for Installation Management. The proponent has the authority to approve exceptions or waivers

to this regulation that are consistent with law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

Army management control process. This regulation contains management control provisions and identifies key management controls that must be evaluated.

Supplementation. Supplementation of this regulation and establishment of command or local forms are prohibited without prior approval from Assistant Chief of Staff for Installation Management, 600 Army Pentagon, Washington, DC 20310-0600.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the chain of command to HQDA, DAIM-ED, 600 Army Pentagon, Washington, DC 20310-0600.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States and the United States Army Reserve.

*This regulation supersedes AR 200-1, dated 28 August 2007.

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- i. Identify and coordinate non mission-specific environmental requirements with the GC.
- j. Pay environmental fines and penalties resulting from their mission activities.
- k. Immediately report spills or releases of hazardous substances to the on-scene coordinator (OSC). Pay or reimburse costs associated with cleanup and spill response if not covered in the standard installations services or the ISSA.
- l. Report all instances of non-compliance and notification of enforcement actions to the GC immediately.
- m. Ensure that non-DOD hazardous material is not stored, treated, or disposed of on the installation unless approved by the OASA (I&E), his or her designee, or higher authority.

1-27. Commanders of Government-Owned, Contractor-Operated facilities

The Commanders of Government-Owned, Contractor-Operated (GOCO) facilities will—

- a. In coordination with the contracting officer, ensure that contracts include provisions for operations at GOCO facilities to meet and remain compliant with environmental legal mandates to protect the Army from liability and/or fines assessed due to contractor operations.
- b. Comply with installation policies, applicable Federal, State, and local environmental laws, regulations, and EOs.
- c. Ensure that contractors assume responsibility for management and disposal of contractor-generated solid and HW.
- d. Ensure that non-DOD hazardous material is not stored, treated, or disposed of on the installation unless approved by the OASA (I&E), his or her designee, or higher authority.
- e. Deposit all proceeds from Conservation Reimbursable Programs as outlined in 10 USC 2665, 10 USC 2667, and 16 USC 670b.
- f. Execute EMS responsibilities in accordance with contract provisions.
- g. Assess the long-term resource impacts of all environmental agreements in coordination with the acquisition community. Coordinate resource implications for agreements through command channels as appropriate prior to approval.
- h. Ensure that all contractor personnel receive appropriate levels of training on environmental awareness, hazardous material/waste management, and the installation EMS.

1-28. Unit commanders

The unit commanders will—

- a. Instill an environmental ethic in soldiers and civilians under their command.
- b. Ensure personnel receive required environmental training.
- c. Comply with installation policies, applicable Federal, State, and local environmental laws, regulations, EOs, and overseas FGS.
- d. Report noncompliance and spills through appropriate channels to the GC.
- e. Incorporate environmental responsibilities and environmental risk management into unit SOPs and operation orders (OPORDs) as appropriate; integrate environmental considerations into the planning and execution processes in accordance with FM 3-100.4.
- f. Appoint and train environmental officers at appropriate organizational levels to ensure compliance actions take place (see FM 3-34.500 for environmental officer responsibilities).
- g. Support the installation-wide EMS.

Chapter 2 Environmental Policy

2-1. Commitment to Environmental Stewardship

a. The Army is committed to environmental stewardship in all actions as an integral part of its mission and to ensure sustainability.

b. This regulation supports the *Army Strategy for the Environment*, 1 October 2004, which presents the Army's environmental vision as sustainable operations, installations, systems, and communities enabling the Army mission. Under the strategy, the Army's environmental mission is to sustain the environment to enable the Army mission and secure the future. In doing so, all Army organizations and activities will—

- (1) Foster an ethic within the Army that takes us beyond environmental compliance to sustainability.
- (2) Strengthen Army operational capability by reducing our environmental footprint through more sustainable practices.
- (3) Meet current and future training, testing and other mission requirements by sustaining land, air, and water resources.
- (4) Minimize impacts and total ownership costs of Army systems, materiel, facilities, and operations by integrating the principles and practices of sustainability.

(5) Enhance the well being of our soldiers, civilians, families, neighbors, and communities through leadership in sustainability.

(6) Use innovative technology and the principles of sustainability to meet user needs and anticipate future Army challenges.

2-2. Army Environmental Policy Statement

a. All Army organizations and activities will comply with applicable Federal, State, and local environmental laws, regulations, executive orders (EOs), or overseas Final Governing Standards (FGS) (see para 15-8 for additional specific overseas requirements); develop and implement pollution prevention and control strategies; and establish environmental priorities in consideration of the benefits to the sustainment of missions and operations.

b. All Army organizations and activities will strive to achieve continual improvement in overall environmental performance and supporting management systems.

c. All Army organizations will ensure that this policy is implemented, maintained, and communicated to all military and civilian employees and supporting contractors. In addition, this policy will be made readily available to the public upon request.

d. All contracts and contract modifications will specify that contractors are liable for any enforcement actions, fines, and/or penalties resulting from their failure to comply with applicable environmental requirements.

2-3. Legal Requirements

All references to legal requirements in this regulation are intended to refer to laws, regulations, and executive orders that, in the opinion of legal counsel, are applicable to the Army. While most environmental laws apply to the Army, some include exemptions (or provisions for requesting exemptions) for military activities under certain conditions. It is essential that Army counsel, including but not limited to the Office of the Judge Advocate General, Army Environmental Law Division, JALS-EL), be consulted on the applicability of all laws, regulations, initiatives, and executive orders. Similarly, all permits, agreements, notices of violations, enforcement actions, especially reports of potential liability under paragraph 16-4, require early and close coordination with Army legal counsel that is responsible for direct support to the command or activity. As necessary, legal counsel at the installation level will coordinate issues and positions within the appropriate Army legal chain. Precedent-setting opinions, all enforcement actions, and agreements must be coordinated with JALS-EL. The requirement to consult with legal counsel supporting a command or activity is considered an essential part of effectively using this regulation. Additionally, this regulation prescribes program requirements in terms of "will" and "must", which mean that the actions are mandatory. All Army organizations will incorporate environmental considerations and requirements into all aspects of the organization's mission.

Chapter 3

Planning and Implementation

3-1. Installation strategic planning

a. Environmental considerations must be incorporated into installation plans, including installation strategic plans. Installation strategic planning incorporates the concepts and philosophy of sustainability, the ultimate objective in strategic planning, and must be applied to and supported by all functional areas within the command.

b. Installation strategic planning is the long-term planning process that establishes the baseline and direction for all other plans and planning processes, including real property master plans (RPMPs), human resource plans, information technology (IT) and knowledge management plans, environmental management plans, functional business plans, etc. Guidance for these plans is provided by Headquarters, Installation Management Command (HQ, IMCOM), National Guard Bureau - Army National Guard (NGB-ARNG), and for special installations, owning Army Commands (ACOMs), Army Service Component Commands (ASCCs) and Direct Reporting Units (DRUs). This includes synthesizing and aligning pertinent information from The Army Plan, Army strategic planning guidance, Army programming and budgeting guidance, policies, and other sources of strategic guidance with the organizational mission, vision, values, principles, strategy maps, balanced scorecards, and so forth. The garrison commander (GC) applies this guidance to his or her own operations through the installation strategic planning process.

3-2. Activities, products, and services

a. The Army mans, equips, trains, sustains, mobilizes, deploys, and demobilizes the force as needed to support the combatant commanders.

b. Achieving the foregoing requires the Army to undertake a number of activities and to provide various products and services that include, but are not limited to (listed by mission/functional area):

(1) Weapons System Acquisition - including the major systems acquisition phases of concept and technology development, system development and demonstration, production and deployment, operations and support, and demilitarization and disposal.

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DECLARATION OF [REDACTED]

I, [REDACTED] hereby declare the following under penalty of perjury:

1. I currently work for Versar, a Government contractor providing non-personal services to the Fort Lewis Directorate of Public Works. I have been working in the Fort Lewis Solid Waste Program since 2004. Prior to that, I worked in the area of solid waste management for Tacoma Pierce County Department of Health (TPCHD) as a regulator.
2. When I came to Fort Lewis, the method for disposing of biosolids was to send them to Fire Mountain Farms in Cinebar, Washington. Fire Mountain is a permitted solid waste handling facility that took Class B biosolids and applied them to the land under restricted conditions. The primary restriction prohibited public access to the land on which it was applied. Fort Lewis stopped shipping its biosolids to Fire Mountain at the end of 2005. Since then they have been sent to the Pierce County Landfill under a Waste Disposal Authorization issued by TPCHD or taken to the Fort Lewis Earthworks recycling facility for composting.
3. Fort Lewis Earthworks, which has been in existence since 2004, has a Solid Waste Handling Permit issued by TPCHD. The Earthworks runs a variety of recycling programs and produces a number of products. One of the products we produce is a Class A compost considered to be of exceptional quality and may be used by the general public.
4. Our compost is made by taking the Waste Water Treatment Plant (WWTP) biosolids and mixing them with other organic materials. The micro organisms that naturally occur in the piles break down undesirable contents such as petroleum products. The compost goes through a process to further reduce pathogens. This includes heating the product to 131 degrees Fahrenheit for at least three days. The compost is then mixed with topsoil to create what is called amended topsoil. This amended topsoil is now being used by Fort Lewis Public Works and other Government contractors for construction projects on Fort Lewis. The amended topsoil is not being provided to either the Family Housing developer or the general public. Family Housing is provided topsoil (screened dirt) but not the amended product.
5. Although the Earthworks continues to expand its composting program, it still does not recycle all of the biosolids produced by the WWTP. Biosolids are still sent to the Pierce County Landfill approximately once per year. It is our goal to increase the amount of compost produced by treating it onsite at the WWTP and testing and developing additional uses for our product which will eliminate the need to landfill Fort Lewis biosolids.

[REDACTED]
[REDACTED]
6/30/2008

Tah
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24

From: [REDACTED]
Sent: Monday, April 21 2008 2:54 PM
To: [REDACTED]

Subject: RE: Thursday4/10/08 VTC - OSC/Ft. Lewis (UNCLASSIFIED)

Follow Up Flag: Follow up
Flag Status: Yellow

Attachments: Fort_Lewis_draft_(ctj_040608).doc; 2004_Annual_Biosolids_Report.pdf



Fort_Lewis_draft_(2004_Annual_Biosolids_Report.p...
ctj_040608).... ids_Report.p... [REDACTED]

As best as I can tell from my notes and other sources, I have 4 due outs from the VTC.

1. I added information regarding the MEO and A-76 process to the command climate section of your report using track changes at pages 10 and 13.
2. Current information on Al Long has been added to the background section of your report using track changes at page 10.
3. The 2004 Annual Bio-solids Report is attached. It shows that bio-solids went to either Fire Mountain Farms or to the composting facility at Fort Lewis. I don't believe we have any bio-solid usage records because we technically never applied them to the land at least since we have been permitted and required to file reports. In early 2006, Joyce Chavez, who had just arrived at Fort Lewis as the Water Programs Manager, was reviewing the bio-solids permit and decided, given the command emphasis on sustainability, that we would stop sending the bio-solids off the installation and see if we could compost them all. She recalls that this was prior to becoming aware of the problems with Alki and the OSC complaint. Under our composting permit bio-solid are treated to Class A standards and used in making top-soil used on Fort Lewis.
4. I'm still working on getting the SOPs for testing, monitoring and reporting at the WWTP. I should have something in the next couple days.

v/r
[REDACTED]

-----Original Message-----

From: [REDACTED]
Sent: Friday, April 11, 2008 8:13 AM
To: [REDACTED]

Subject: FW: Thursday4/10/08 VTC - OSC/Ft. Lewis (UNCLASSIFIED)

Thank you all for participating in yesterday's VTC. It worked out great to have us all participating in the invaluable dialog that took place yesterday on the Army's draft report to OSC. We couldn't have accomplished so much in so "little" (3-1/2 hours worth of "little") time without your commitment to this effort. I know that COL Tozzi was impressed with the collective effort! We really polished things up in my mind during our discussion and will be better able to capture our collective wisdom in this team effort. So many details, so many nuances...

Tok
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DEPARTMENT OF THE ARMY
HEADQUARTERS, 1 CORPS AND FORT LEWIS
BOX 339500 Building 2012
FORT LEWIS, WASHINGTON 98433-9500

31 January 2005

REPLY TO
ATTENTION OF:

Public Works

**ANNUAL BIOSOLIDS REPORT
FOR PERIOD 1 JAN 04 to 31 DEC 04
FORT LEWIS, WASHINGTON**

Washington State Department of Ecology
Solid Waste & Financial Assistance Program
Attention: Biosolids Coordinator
P.O. Box 47600
Olympia, Washington 98504-7600

1. This report is being submitted pursuant to the requirements of WAC 173-308-295.
2. Between 1 January 2004 and 31 December 2004, 110 dry tons of biosolids were treated and processed at the Fort Lewis Wastewater Treatment Plant. All biosolids produced from 16 June 2002 through 15 June 2004 were treated, dried and stored at the Fort Lewis WWTF, then transferred to Fire Mountain Farms Inc., 856 Burnt Ridge Road, Cinebar, WA 98533 during September 2004 (242 dry tons) or to the Fort Lewis Composting Pilot Facility, Bldg 7600, Fort Lewis, WA 98433 (6.2 dry tons).
3. Enclosed with this report are: Laboratory results that verify compliance with the requirements of WAC 173-308-160(4) Tables 1 and 3 for pollutant concentrations; summaries of operation logs (including the biosolids being held from 2002 and 2003) and the Department of Ecology Annual Biosolids Reporting form. This form has been completed except for information that is specific to Fire Mountain Farms operations.
4. All sludge was processed in accordance with the requirements of WAC 173-308-290(3)(b) for pathogen reduction. Minimum drying times were in excess of 90 days. Average monthly ambient temperatures were above 0 degrees C during drying. Records showing mean detention times for primary and secondary digesters are enclosed.
5. If you have questions about this report, please contact me at [REDACTED] or email [REDACTED]

Sincerely,

Enclosures

cc:
Biosolids Coordinator
Department of Ecology
SW Regional Office
PW Box 47775

Olympia WA 98504-7775

EPA Region X
NPDES Compliance Unit
Irene Hopkins
MS-OW 133
1200 6th Avenue
Seattle WA 98101

Fort Lewis Wastewater Treatment Plant
ATTN: IMNW-LEW-PWO, MS17 (Ben McConkey)
Box 339500
Fort Lewis WA 98433-9500



Annual Biosolids Report Wastewater Treatment Facilities

This annual biosolids report is for wastewater treatment facilities and must be submitted as required by WAC 173-308-295. The due date for the annual report is March 1. The information reported must be from the previous calendar year, January 01–December 31. Please call the regional biosolids coordinator if you have any questions. Please use N/A where appropriate.

SECTION A: FACILITY INFORMATION

Year for this report: 2004

Facility name: Fort Lewis Wastewater Treatment Facility

Authority/owner name: US Army Fort Lewis

Facility address: Bldg 7500 Solo Point Road City: Fort Lewis State: WA Zip: 98433

Mailing address: DPW, IMNW-LEW-PWO, MS-17 City: Fort Lewis State: WA Zip: 98433

Facility operator: [REDACTED] Phone: [REDACTED] Fax: 253-967-2547 Email: [REDACTED]

Responsible official: [REDACTED] Phone: [REDACTED] Fax: _____ Email: _____

Primary contact person: [REDACTED] Phone: [REDACTED] Fax: _____ Email: [REDACTED]

CHECK ONE OF THE FOLLOWING STATEMENTS:

- This facility has a maximum design flow equal to or greater than 1 million gallons per day or serves 10,000 people or more (Major facility)
- This facility has a maximum design flow less than 1 million gallons per day and serves less than 10,000 people (Minor facility)

COMPLETE:

NPDES Permit #: WA002195-4 Issuance Date: 01 Feb 2004 Expiration Date: 01 Feb 2009

or
State Waste Discharge Permit #: _____ Issuance Date: _____ Expiration Date: _____

SECTION B: BIOSOLIDS PRODUCTION, UTILIZATION, AND QUALITY

1. Please include the following: (Round off to no more than one decimal point, i.e., 95.1)
 - A. Total annual biosolids production: 110 dry tons
 - B. Total amount of biosolids at your facility that has been or is expected to be stored on site for more than two years and not stored in a lagoon: 0 dry tons. If this is a change in the number of dry tons stored from last year, is it an increase (+) or a decrease (-) and by how much: -137? How much went from storage to land application this year: 242 dry tons?
 - C. Total amount of biosolids transported to another facility for further treatment (this does not include biosolids transported for direct land application, e.g. to a biosolids beneficial use facility; however, biosolids sent to composting facilities for further treatment should be included): 6.2 total dry tons

Facility Name: Fort Lewis Compost Pilot Facility 6.2 dry tons transported

Facility Name: _____ _____ dry tons transported

D. Total amount of biosolids received from another facility: 0 total dry tons

Facility Name: N/A _____ dry tons received

Facility Name: _____ _____ dry tons received

2. **Biosolids sold or otherwise distributed to persons other than the preparer or the preparer's agents:**
- Bulk biosolids sold or given away by the preparer to a person other than an agent of the preparer for application to the land _____ dry tons
 - The amount of biosolids in a compost or blended product sold or given away by the preparer in a bag or other container (capacity of one ton or less) for application to the land _____ dry tons
 - Biosolids sold or given away by the preparer in a bag or other container (capacity of one ton or less) for application to the land _____ dry tons
3. **Biosolids utilized, disposed, incinerated, or stored by the preparer or the preparer's agents (includes biosolids sent to a biosolids beneficial use facility for direct land application):**
- Bulk to agricultural land _____ dry tons (total for all agricultural land types below)
 - Food crop _____ dry tons (subtotal of agricultural land)
 - Fiber crop _____ dry tons (subtotal of agricultural land)
 - Feed crop _____ dry tons (subtotal of agricultural land; total for feed crops)
 - Range land _____ dry tons (subtotal for feed crops)
 - Pasture _____ dry tons (subtotal for feed crops)
 - Bulk to forest land _____ dry tons
 - Bulk to public contact site _____ dry tons
 - Bulk to land reclamation site _____ dry tons
 - Bulk to lawn or home garden _____ dry tons
 - Biosolids that are disposed in a landfill _____ total dry tons
Landfill Name & County: _____ dry tons disposed
 - Biosolids that are incinerated _____ dry tons
 - Biosolids stored in a lagoon for a period longer than 2 years _____ dry tons
4. **Pathogen reduction class and method (see WAC 173-308-170):**
- Class A - Alternative 1 *Time and Temperature*
 - Class A - Alternative 2 *pH Temperature and Time*
 - Class A - Alternative 3 *Process verification*
 - Class A - Alternative 4 *Batch verification*
 - Class A - Alternative 5 *Process to Further Reduce Pathogens*
 - Composting
 - Heat drying
 - Heat treatment
 - Thermophilic aerobic digestion
 - Beta ray irradiation
 - Gamma ray irradiation
 - Pasteurization
 - Class A - Alternative 6 *Equivalency determination* Describe: _____
 - Class B - Alternative 1 *Seven Samples 12 Geometric mean in MPN/dry gram*
 - Class B - Alternative 2 *Process to Significantly Reduce Pathogens*
 - Aerobic digestion
 - Air drying
 - Anaerobic digestion
 - Composting
 - Lime stabilization
 - Class B - Alternative 3 *Equivalency determination* Describe: _____
 - Does not meet pathogen reduction requirements Explain: _____
5. **Vector attraction reduction method (see WAC 173-308-180 and 210(3), 220(3), and 240(3)):**
- Alternative 1 - *38% volatile solids reduction*
 - Alternative 2 - *Bench test for anaerobically digested biosolids*
 - Alternative 3 - *Bench test for aerobically digested biosolids*
 - Alternative 4 - *SOUR test*
 - Alternative 5 - *Aerobic treatment meeting time (14 day)/temperature (>40° C)*
 - Alternative 6 - *pH adjustment*
 - Alternative 7 - *75% or greater solids content for biosolids containing only stabilized solids*

- Alternative 8 - 90% or greater solids content for biosolids containing any unstabilized solids
- Alternative 9 - Injection below the surface of the ground
- Alternative 10 - Incorporation into soil within 6 hours after application
- Does not meet vector attraction reduction requirements Explain: _____

Answer the following questions regarding the concentration of pollutants in biosolids produced at your facility (see WAC 173-308-160):

- A. How many monitoring events did your facility carry out during the past year? 3
- B. At any time did the monthly average of a pollutant exceed the value in Table 3 of WAC 173-308-160?
 Yes No
 If yes, identify the pollutant(s) and explain: _____

- C. At any time did the concentration of a pollutant exceed the value in Table 1 of WAC 173-308-160?
 Yes No
 If yes, identify the pollutant(s) and explain: _____

6. Submit the required documentation and information pertaining to pollutant concentrations, pathogen reduction, and vector attraction reduction requirements as stated in WAC 173-308-290(3):

- Copies of analytical data for pollutant concentrations (unless previously submitted)
- Copies of analytical data for pathogen reduction (unless previously submitted)
- Copies of analytical data for vector attraction reduction (unless previously submitted)
- Signed and dated certification statement with applicable clauses according to WAC 173-308-290(3)(d)(i) or (ii)

SECTION C: LAND APPLICATION SITE INFORMATION
ALL FACILITIES WHO PRODUCED AND LAND-APPLIED NON-EXCEPTIONAL QUALITY BIOSOLIDS ARE REQUIRED TO SUBMIT THIS INFORMATION—UNLESS YOUR BIOSOLIDS WERE MANAGED BY A BIOSOLIDS BENEFICIAL USE FACILITY THAT HAS SUBMITTED THE INFORMATION IN THEIR ANNUAL REPORT.

1. For each site where you or your agents are responsible for the application of non-exceptional quality biosolids, include the following information (attach additional sheets if necessary):

A. Site name: N/A

Site address: _____

Section: _____ Township: _____ Range: _____

Vegetation grown: _____

Vegetation nitrogen requirement: _____ pounds/acre/year Area applied to: _____ acres

Application rate: _____ dry tons/acre/year Total applied: _____ dry tons

2. If 90% or more of any of the cumulative pollutant loading rates in Table 2 of WAC 173-308-160 have been reached at a site:

- Include the information in WAC 173-308-290(4)(c)(i) through (v)
- Submit a description of how the requirement to obtain information under WAC 173-308-160(2)(b) was met
- Include the appropriate signed and dated certification statement from WAC 173-308-290(4)(d)(i) and (ii)

SECTION D: BIOSOLIDS AND BIOSOLIDS PRODUCTS SOLD OR GIVEN AWAY IN A BAG OR OTHER CONTAINER WITH A CAPACITY OF ONE TON OR LESS

1. If the pollutant limits in Table 3 or Table 1 of WAC 173-308-160 were met, submit the following:

- Laboratory analysis data showing that those limits were met
- Monitoring and/or laboratory analysis data showing that the Class A Pathogen Requirements in one of WAC 173-308-170(2)(a) through (f) were met, along with a signed and dated certification statement according to WAC 173-308-290(5)(d)
- Monitoring and/or laboratory analysis data showing that the Vector Attraction Reduction requirements in one of WAC 173-308-180(2) through (7) were met, along with a signed and dated certification statement according to WAC 173-308-290(5)(d)

2. If a biosolids product which is sold or given away in a bag or other container exceeds the pollutant concentration limits in Table 3 of WAC 173-308-160, the product is subject to the limits of Table 4 of WAC 173-308-160, and the following information must be submitted:

- The concentration in the biosolids of each pollutant listed in Table 4 of WAC 173-308-160
- The annual whole biosolids application rate that does not cause the annual pollutant loading rates in Table 4 of WAC 173-308-160 to be exceeded
- Signed and dated certification statement according to WAC 173-308-290(5)(e)

SECTION E: CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: _____ Title: _____ Date: _____

SUBMITTING YOUR ANNUAL REPORT

- The original report to the biosolids coordinator at the regional office of the Department of Ecology where biosolids will be treated or applied to the land
- One copy to the biosolids coordinator at the headquarters office of the Department of Ecology
- One copy to the local health department in the county(ies) where biosolids will be treated or applied to the land
- If your facility is a major facility or a "Class 1" facility, one copy to the EPA Region 10 office by February 19.

Department of Ecology
Central Regional Office (509) 575-2490
15 West Yakima Avenue, Suite 200
Yakima, WA 98902
Attention: Biosolids Coordinator

Department of Ecology
Eastern Regional Office (509) 329-3400
North 4601 Monroe
Spokane, WA 99205-1295
Attention: Biosolids Coordinator

Department of Ecology
Northwest Regional Office (425) 649-7000
3190 - 160th Avenue S.E.
Bellevue, WA 98008-5452
Attention: Biosolids Coordinator

Department of Ecology
Southwest Regional Office (360) 407-6300
PO Box 47775
Olympia, WA 98504-7775
Attention: Biosolids Coordinator

Department of Ecology
Headquarters Office (360) 407-6000
PO Box 47600
Olympia, WA 98504-7600
Attention: Biosolids Coordinator

USEPA Region 10
NPDES Compliance Unit (OW-133)
Biosolids Reports
1200 Sixth Avenue
Seattle, WA 98101

If you require this publication in an alternate format, please contact the Solid Waste & Financial Assistance Program at 360-407-6900 or TTY (for the speech and hearing impaired) at 711 or 800-833-6388.

2004 Annual Biosolids Data Summary

Month	Avg. Ambient Temp. F.	Avg. Primary Dig. Temp. C.	Avg. Sludge Pumped/Day Gal.	Pri. Dig. Detention Time Days	Avg. Sec. Dig. Temp. C.	Bed Pours Avg. Gal./Day	Sec. Dig. Detention Time Days
January	41	35	10277	73	30	933	41
February	43	36	10471	72	27	997	40
March	47	37	8419	89	27	1837	45
April	52	36	11283	66	28	934	38
May	55	37	11642	64	29	1895	34
June	63	36	12261	61	30	2983	30
July	69	37	14225	53	31	1954	28
August	68	36	17623	43	31	1954	23
September	60	36	12603	60	32	1024	34
October	52	36	13094	57	31	875	33
November	44	36	11880	40	31	964	36
December	42	36	10920	44	29	1050	38

2004 Annual Averages	53	36	12058	60	30	1450	43
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BED LOG

					LABORATORY				SLUDGE REMOVAL		
Initials	Date Tested	T.S. (%)	V.S. (%)		Date Hauled	From Bed #	Initials				
VL	1/9/04	4.0	65.2		22-Sep-04	10	BWM				
GI	2/17/04	4.4	64.7		22-Sep-04	10	BWM				
RJ	3/8/04	4.4	66.3		22-Sep-04	10	BWM				
RR	3/28/04	4.5	64.4		22-Sep-04	10	BWM				
JL	4/20/04	5.0	63.9		22-Sep-04	10	BWM				
RJ	5/11/04	5.1	65.1		22-Sep-04	10	BWM				
JL	5/15/04	5.2	64.0		22-Sep-04	7	BWM				
GI	6/3/04	5.3	66.2		22-Sep-04	18	BWM				
RK	6/10/04	5.0	66.4		22-Sep-04	4	BWM				
RR	6/22/04	No Data Available									
RR	7/8/04	4.8	64.7								
BG	7/27/04	5.4	61.9								

Bed Volume = Depth X 1807.8 Common Pours: 15" = 27,117; 15.5" = 28,021; 16" = 28,925; 16.5" = 29,829; 17" = 30,732; 17.5" = 31,637

BED LOG

				LABORATORY				SPREADING TIME		SLUDGE REMOVAL		
Initials	Date Tested	T.S. (%)	V.S. (%)					Date Hauled	From Bed #	Initials		
GI	1/9/03	4.2	65.2					22-Sep-04	8	BWM		
JL	1/24/03	4.2	65.3					22-Sep-04	8	BWM		
RR	1/28/03	4.1	65.3					22-Sep-04	8	BWM		
JL	2/26/03	4.3	64.7					22-Sep-04	8	BWM		
JL	3/18/03	4.6	65.6					22-Sep-04	10	BWM		
BG	4/3/03	4.2	65.1					22-Sep-04	10	BWM		
JL	4/30/03	4.2	65.6					22-Sep-04	10	BWM		
JL	6/10/03	4.6	66.6					22-Sep-04	9	BWM		
JL	6/12/03	4.7	65.2					22-Sep-04	8	BWM		
JJ	7/2/03	4.6	66.0					22-Sep-04	9	BWM		
RJ	8/14/03	4.5	66.0					22-Sep-04	8	BWM		
BG	8/23/03	4.4	65.1					22-Sep-04	9	BWM		

Bed Volume = Depth X 1807.8 Common Pours: 15" = 27,117; 15.5" = 28,021; 16" = 28,926; 16.5" = 29,829; 17" = 30,732; 17.5" = 31,637

BED LOG

OPERATION						LABORATORY				SLUDGE REMOVAL		
Initials	Date	Bed #	Depth	Volume	Depth	Initials	Date Tested	T.S. (%)	V.S. (%)	Date	From Bed #	Initials
JL	9/5/03	23	15.5"	30,732	7.0"	JL	9/5/03	5.0	63.1	22-Sep-04	10	BWM
RJ	10/2/03	10	15.5"	30,732	7.0"	RJ	10/2/03	4.1	65.2	22-Sep-04	10	BWM
RR	10/28/03	10	15.5"	30,732	7.0"	RR	10/28/03	4.2	66.3	22-Sep-04	10	BWM
JC	11/18/04	9	15.5"	28,021	7.0"	JC	11/18/04	3.5	67.9	22-Sep-04	9	BWM
VL	12/8/03	9	15.5"	28,021	7.0"	VL	12/8/03	4.4	65.6	22-Sep-04	9	BWM

Bed Volume = Depth X 1807.8 Common Pours: 15" = 27,117; 15.5" = 28,021; 16" = 28,925; 16.5" = 29,829; 17" = 30,732; 17.5" = 31,637

BED LOG

				LABORATORY				SLUDGE REMOVAL		
Initials	Date	Depth	Notes	Initials	Date Tested	T.S. (%)	V.S. (%)	Date Hauled	From Bed #	Initials
				JL	7/26/02	4.4	66.5	22-Sep-04	9	BWM
				RR	08/20/02	4.0	65.0	22-Sep-04	9	BWM
				RR	09/16/02	4.5	66.5	22-Sep-04	9	BWM
				VL	09/24/02	4.2	64.6	22-Sep-04	9	BWM
				RR	10/11/02	4.5	66.1	22-Sep-04	9	BWM
				BG	10/17/02	4.4	65.7	22-Sep-04	9	BWM
				JL	11/05/02	4.5	65.5	22-Sep-04	9	BWM
				BG	11/26/02	4.2	66.4	22-Sep-04	9	BWM
				BG	12/11/02	4.4	66.0	22-Sep-04	9	BWM

Bed Volume = Depth X 1807.8 Common Pours: 15" = 27,117; 15.5" = 28,021; 16" = 28,925; 16.5" = 29,829; 17" = 30,732; 17.5" = 31,637

Digestion Solids Data Year 2004

Date	% Total Solids Raw Sludge	% Volatile Solids Raw Sludge	% Total Solids Digested Sludge	% Volatile Solids Digested Sludge	Through Primary Digestion
Averages for 2004	3.62	82.8	1.79	66.2	% Reduction of Volatile Solids
Decimal		0.828		0.662	59.3

Date	% Total Solids Raw Sludge	% Volatile Solids Raw Sludge	% Total Solids Bed Biosolids	% Volatile Solids Bed Biosolids	Through Beds
Averages for 2004	3.62	82.8	4.97	64.1	% Reduction of Volatile Solids
Decimal		0.828		0.641	62.9

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FORT LEWIS

BLDG 2012--AFZH-PWE-MS17
FORT LEWIS, WA 98433

Project: WASTE WATER TREATMENT PLANT

Certificate of Analysis

Total Metals - Method EPA 6020/200.8

Sample Name:	BED #9	Analyte	Result	Units	PQL	Method
Sample Location:		Arsenic	11.0	mg/Kg	0.8	EPA 6020
Sampling Date:	8/18/2004	Cadmium	9.5	mg/Kg	0.8	EPA 6020
Sampling Time:		Chromium	30.6	mg/Kg	0.8	EPA 6020
Date Received:	8/24/2004	Copper	850	mg/Kg	0.8	EPA 6020
Lab #:	04X2176-05	Lead	69.7	mg/Kg	0.8	EPA 6020
Matrix:	BIOSOLID	Mercury	3.64	mg/Kg	0.08	EPA 7471A
Analysis Date:	8/30/2004	Molybdenum	16.2	mg/Kg	0.8	EPA 6020
Analyst:	RAS	Nickel	21.1	mg/Kg	0.8	EPA 6020
% Solid:	69.3	Selenium	10.8	mg/Kg	0.8	EPA 6020
		Silver	7.7	mg/Kg	0.8	EPA 6020
		Zinc	1680	mg/Kg	0.8	EPA 6020

Sample Name:	BED #10	Analyte	Result	Units	PQL	Method
Sample Location:		Arsenic	8.0	mg/Kg	0.8	EPA 6020
Sampling Date:	8/18/2004	Cadmium	8.9	mg/Kg	0.8	EPA 6020
Sampling Time:		Chromium	29.7	mg/Kg	0.8	EPA 6020
Date Received:	8/24/2004	Copper	717	mg/Kg	0.8	EPA 6020
Lab #:	04X2176-06	Lead	85.0	mg/Kg	0.8	EPA 6020
Matrix:	BIOSOLID	Mercury	3.60	mg/Kg	0.08	EPA 7471A
Analysis Date:	8/30/2004	Molybdenum	16.4	mg/Kg	0.8	EPA 6020
Analyst:	RAS	Nickel	19.4	mg/Kg	0.8	EPA 6020
% Solid:	76.7	Selenium	11.6	mg/Kg	0.8	EPA 6020
		Silver	8.4	mg/Kg	0.8	EPA 6020
		Zinc	1470	mg/Kg	0.8	EPA 6020

Lab Supervisor: _____

Report Date: 14-Sep-04

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FORT LEWIS

Project: WASTE WATER TREATMENT PLANT

BLDG 2012-AFZH-PWE-MS17
FORT LEWIS, WA 98433

Certificate of Analysis

Sample Name: BED #9 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-05 Sampling Time:
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Organic Matter (TVS)	55.9	% of dry	0.1	9/1/2004	MBW	EPA 160.4
pH	5.72	pH Units		8/31/2004	MBW	EPA 150.1
TKN	35500	mg/Kg	860	8/27/2004	MAS	SM4500NorgC
Total P	11500	mg/Kg	80	8/31/2004	MAS	SM4500PF
NH3-N	1730	mg/Kg	15	8/27/2004	MAS	SM4500NH3G
Nitrate/N	1970	mg/Kg	40	8/31/2004	RAS	EPA 300.0
Potassium	1620	mg/Kg	80	8/30/2004	RAS	EPA 6020
Percent Solids	69.3	%	Results above are dry weight basis			

Sample Name: BED #10 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-06 Sampling Time:
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Organic Matter (TVS)	58.4	% of dry	0.1	9/1/2004	MBW	EPA 160.4
pH	6.48	pH Units		8/31/2004	MBW	EPA 150.1
TKN	28100	mg/Kg	770	8/27/2004	MAS	SM4500NorgC
Total P	10200	mg/Kg	80	8/31/2004	MAS	SM4500PF
NH3-N	1550	mg/Kg	15	8/27/2004	MAS	SM4500NH3G
Nitrate/N	940	mg/Kg	40	8/31/2004	RAS	EPA 300.0
Potassium	1460	mg/Kg	80	8/30/2004	RAS	EPA 6020
Percent Solids	76.7	%	Results above are dry weight basis			

Lab Supervisor: _____

Report Date: 14-Sep-04

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Project: WASTE WATER TREATMENT PLANT

BLDG 2012-AFZH-PWE-MS17
FORT LEWIS, WA 98433

Certificate of Analysis

Sample Name: BED #3 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-01 Sampling Time: 10:35
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	<2	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #4 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-02 Sampling Time: 10:33
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	14	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #5 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-03 Sampling Time: 10:30
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	<2	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #7 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-04 Sampling Time: 10:25
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	14	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #9 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-05 Sampling Time:
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	<2	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #10 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-06 Sampling Time:
Matrix: BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	<2	MPN/g	2	9/3/2004	KAS	SM 9221E

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FORT LEWIS

Project: WASTE WATER TREATMENT PLANT

BLDG 2012-AFZH-PWE-MS17
FORT LEWIS, WA 98433

Certificate of Analysis

Sample Name: BED #11 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-07 Sampling Time: 10:44
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	<2	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #15 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-08 Sampling Time: 10:45
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	772	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: BED #17 Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-09 Sampling Time: 10:37
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	27	MPN/g	2	9/3/2004	KAS	SM 9221E

Sample Name: ALL SAMPLES Date Received: 8/24/2004
Sample Location: Sampling Date: 8/18/2004
Lab Sample Number: 04X2176-10 Sampling Time:
Matrix BIOSOLID

Analyte	Result	Units	PQL	Analysis Date	Initials	Method
Fecal Coliform	379	MPN/g	2	9/3/2004	KAS	SM 9221E


Lab Supervisor: _____

Report Date: 14-Sep-04



December 30, 2004

Fort Lewis PW-ENRD
 Public Works Division: AFZH-PWE MS-17
 Fort Lewis, WA 98433-9500

Project Manager: 
 Project #: WWTP Biosolids
 Date Received: 12/9/04

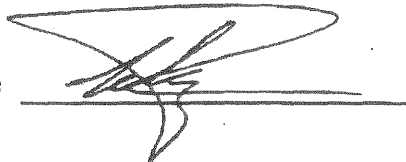
Laboratory Project #: 04X3280

Sample: WW-Biosolids-Dec 04

Sample results are dry weight basis unless indicated. ND = Not Detected

Analyte	Result	Units	PQL	Method	Analysis Date
Total Solids (% of Wet)	13.2	%	0.1		12/16/2004
Total Volatile Solids (% of Dry)	63.7	%	0.1	EPA 160.4	12/16/2004
pH	7.3			EPA 150.1	12/22/2004
TKN	27900	mg/Kg	10	EPA 351.3	12/15/2004
NO3-N	ND	mg/Kg	5	EPA 300.0	12/21/2004
NH3-N	5520	mg/Kg	1	EPA 350.2	12/15/2004
Total P	25800	mg/Kg	100	EPA 365.2	12/16/2004
Potassium	1950	mg/Kg	1	EPA 6020	12/21/2004
Arsenic ✓	9	mg/Kg	1	EPA 6020	12/21/2004
Cadmium	9	mg/Kg	1	EPA 6020	12/21/2004
Chromium	37	mg/Kg	1	EPA 6020	12/21/2004
Copper	888	mg/Kg	1	EPA 6020	12/21/2004
Lead	77	mg/Kg	1	EPA 6020	12/21/2004
Mercury	3.7	mg/Kg	0.1	EPA 7471A	12/21/2004
Molybdenum	19	mg/Kg	1	EPA 6020	12/21/2004
Nickel	19	mg/Kg	1	EPA 6020	12/21/2004
Selenium	15	mg/Kg	1	EPA 6020	12/21/2004
Silver	8.0	mg/Kg	1	EPA 6020	12/21/2004
Zinc	1900	mg/Kg	1	EPA 6020	12/21/2004
Benzo(a)pyrene	ND	mg/Kg	1	EPA 8270C	12/17/2004
Dimethyl nitrosoamine	ND	mg/Kg	1	EPA 8270C	12/17/2004
Hexachlorobenzene	ND	mg/Kg	1	EPA 8270C	12/17/2004
Trichloroethylene	ND	mg/Kg	0.1	EPA 8260B	12/22/2004
PCB's (total)	ND	mg/Kg	0.5	EPA 8082	12/30/2004
Hexachlorobutadiene	ND	mg/Kg	1	EPA 8270C	12/17/2004
Toxaphene	ND	mg/Kg	0.5	EPA 8081A	12/30/2004
Aldrin+Dieldrin	ND	mg/Kg	0.05	EPA 8081A	12/30/2004
Chlordane	ND	mg/Kg	0.05	EPA 8081A	12/30/2004
DDT+DDE+DDD	ND	mg/Kg	0.05	EPA 8081A	12/30/2004
Heptachlor	ND	mg/Kg	0.05	EPA 8081A	12/30/2004
Lindane	ND	mg/Kg	0.05	EPA 8081A	12/30/2004

Approved by:



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DECLARATION OF [REDACTED]

I, [REDACTED] hereby declare the following under penalty of perjury:

1. I am currently the Deputy Director of Public Works (PW), U.S. Army Garrison, Fort Lewis, Washington.
2. The Fort Lewis Waste Water Treatment Plant (WWTP), a facility for which PW is responsible, is "staffed" 24 hours per day seven days per week (24/7). "Staffing" means that we have people on staff to respond to a variety of WWTP systems. These systems include collection and pumping systems inside and outside of the plant proper.
3. For years, our WWTP staff has responded to pump station alarms off location (plant proper) during periods of minimal manning. This means that the plant could be left unattended for short periods. Should the problem be more than the operator can address, they are instructed to clear as much of the problem (alarm) as they can, return to the plant and call for additional resources.
4. There is a difference between "staffing" and "manning." In PW, "manning" 24/7 means that a facility or complex is physically "manned" or someone is present all of the time, with no off-site responsibilities. I have no facilities at PW that are "manned" 24/7, except during crisis events (such as the Nisqually earthquake) or exercises.
5. Our regulators are aware of this operational condition and have voiced no objection to our methods.
6. In August 2007, as a result of [REDACTED]'s AR 15-6 investigation into management practices at the WWTP and Water Treatment Plant, the Fort Lewis Garrison Commander directed that I review "staffing" levels at the WWTP and determine if a 24/7 manning requirement is prudent or necessary to effectively and efficiently execute WWTP operations. After reviewing the situation, I found that 24/7 "manning" is not required by regulation, the NPDES permit or other special circumstances at the WWTP and determined that WWTP staffing levels and procedures for responding to off-site emergencies would remain unchanged. This was a risk management decision.
7. In response to [REDACTED]'s recommendation, that we order sufficient quantities of the proper lubrication oil for the compressor at the WWTP, we researched, ordered and currently have on hand the proper oil. However, it should be noted that the oil cooled compressor that generated this complaint was replaced in September 2007 by a water cooled compressor eliminating the need for this oil.
8. I am not aware of any dumping of petroleum products in manholes by members of the Environmental Division. Some time ago, I became aware of this rumor and recall asking [REDACTED] to look into it. Nate reported to me that he was unable to obtain enough specific facts to justify continuing the investigation. It is my belief that if anyone had

seen environmental personnel dumping anything into a manhole, it was not a petroleum product. Occasionally they are authorized to discharge certain substances to the sanitary sewer. These could include something like IDW (investigation derived waste), which is usually purge water from a monitoring well that has been determined to be harmless. It could also be residual water from pumping an oil water separator that might have had a trace of petroleum. These could have been drummed, and an untrained observer might thus conclude, (erroneously), that they contained a petroleum product.

9. With respect to the repair of the digester lid and compressor system, at the end of the fiscal year, we awarded a \$4.6 million contract for the repairs of digesters 1 & 2, related compressor systems and the non-potable water system. Construction efforts are underway with an estimated construction period of 320 days.

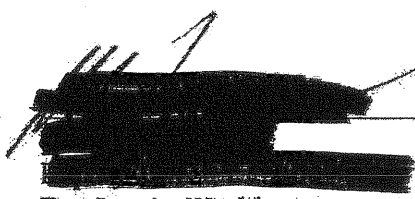
10. Over the past year and a half, a number of personnel and organizational changes have been made in the WWTP and Water Treatment Branch. In April 2007, I replaced [REDACTED] with [REDACTED] as the supervisor of the WWTP. There were a number of allegations against Mr. Long and I believed it prudent to take him out of that situation. He remained the supervisor of the Water Treatment Plant and the Water and Sewer Shop. [REDACTED] was detailed to the position because of his strong managerial skills and his expertise in water systems. Although he did not possess a WWTP Operator's Certificate, I believed the fact that he was a licensed engineer with considerable experience in water systems more than made up for his lack of an operator certification. I therefore chose to make a temporary exception to the PW policy of requiring a Class III Operator's Certificate. In March 2008, [REDACTED] left the WWTP and went back on active duty with the Army. He was replaced by [REDACTED] on a 120 day temporary promotion. That expired in June and [REDACTED] was given the opportunity to supervise. On June 26, 2008, [REDACTED] was selected as the permanent supervisor. He reported for work on August 4, 2008. He supervises only the WWTP. The supervision of the WWTP and the Water Treatment Plant required two different sets of knowledge and skills. When added to the fact that they were geographically separate units and the supervisory span of control was so great, I decided to separate them. It should also be noted that [REDACTED] has left federal service, effective 1 Sep. 2008. Currently, the Water Treatment Plant Supervisor is being filled by a temporary promotion of an internal candidate while the position is out for advertisement and selection.

11. Under recent review of the OMB Circular A-76 Most Efficient Organization (MEO) that was implemented and Maintenance and Repair (M & R) Division manning levels, I have determined that the span of control for the Chief of that division is simply too great. In response to this finding, I have directed that a new position be created to supervise that division, and that it be filled with a senior engineer. This position will directly supervise the Foreman of the WWTP, the Foreman of the WTP and the current chief of M&R Division who will become the Foreman of a new M & R Operations Branch. This organizational layout will reduce the uppermost span of control, place an engineer having the correct background over the WWTP and WTP, and will allow for a more focused approach for the plants. Until this individual is hired, I have assumed second line supervision of the WWTP.

12. With respect to the certifications of the WWTP employees at the time Mr. Long was selected, I received the information in the table below from the Chief, M & R Division.

Candidate	WA Driver's License	Group III Wastewater Certification	Water Distribution Manager III (w/in 2 years)	Water Treatment Plant Operator II (w/in 2 years)
Al Long		Group II	WDM III	WTPO III
Robert Koden		Group III	WDM I	WDM I
Rhonda Rounds		Group IV		
Judith Lancy		Group III		
Ron Johnston		Group III		
Jerry Lienes		Group II		

13. With respect to the problem of tool accountability mentioned in [REDACTED] 15-6 report, I directed that all highly pilferable items be placed on the local hand receipt and inventoried in accordance with the applicable supply management regulations.



29 Oct 2008

Date

Fort Lewis, Washington

26



DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT COMMAND
UNITED STATES ARMY GARRISON, FORT LEWIS
BOX 339500, MAIL STOP 1AA
FORT LEWIS WASHINGTON 98433-9500

REPLY TO
ATTENTION OF

S: 6 August 2007
S: 25 October 2007

IMWE-LEW-ZA

25 July 2007

MEMORANDUM FOR Director, Public Works, Fort Lewis, WA 98433

SUBJECT: AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

1. As you are aware, I directed that an AR 15-6 Investigation occur to review the hiring actions taken in reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and specific management practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP).
2. The investigating officer completed the investigation and I concur and approve the recommendations. All recommended actions are to be fully acted upon and completed within 90 days. Additionally, I want you to provide me bi-weekly updates in person beginning NLT 6 August 2007.
 - a. Ensure all supervisory personnel complete the HR for Supervisors Course offered by CPAC. Prevent DPW supervisors from functioning as hiring officials until they complete the HR for Supervisors Course.
 - b. Work in coordination with CPAC to develop a targeted training class for Administrative Support Assistants which focuses on what you can and cannot do to assist an individual with the resume, self-nomination and hiring process. Ensure all DPW Administrative Support Assistants receive training.
 - c. Appointing official request CPAC initiate notice of proposed removal for Mr. Long for failure to meet a condition of employment.
 - d. Appointing official determine whether formal disciplinary action is warranted for Mr. Robinson.
 - e. Order sufficient quantities of the proper oil so that there is enough on-hand supplies to deal with unplanned maintenance emergencies.
 - f. Educate WWTP employees on what oil type and weight is required and proper frequency of use.

Tob
26a

IMWE-LEW-ZA

SUBJECT: AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

- g. Visibly post what oil type and weight is required on or in close proximity to the WWTP gas compressor.
- h. Ensure [REDACTED] and all WWTP employees complete annual EEO and EO training.
- i. Train [REDACTED] and WWTP personnel on how to complete the WWTP daily entry logs.
- j. Implement a single testing standard for all sludge bed pours.
- k. Direct DPW to retrain all WWTP, WTP and Outside Water and Sewer personnel on proper safety procedures for repair work at the WWTP. Review all safety records within DPW to determine if any additional safety training is needed within sections and divisions.
- l. Appointing official determine whether formal disciplinary action is warranted for Mr. Long based on his disregard for the safety, health and welfare of his subordinate employees.
- m. Explore backup power solutions for lift stations so that future power outages do not lead to sewage back ups.
- n. Determine if a 24/7 manning requirement is prudent or necessary to effectively and efficiently execute WWTP operations. If prudent or necessary, DPW should modify the WWTP SOP to specify the 24/7 manning requirement and adjust manpower and lift repair call procedures accordingly.
- o. Once Centennial contractors completes their work on the Donovan Reservoir site, conduct thorough testing to ensure site cleanliness.
- p. Work with Army Corps of Engineers to develop and execute a collaborative oversight and quality assurance/quality control program administered by government employees for all individual job order contracts which are assessed as having the potential to negatively impact the environment.
- q. DPW managers to conduct a minimum of two site visits per year to each of their geographically separated work sites. Ensure at least one site visit a year is during swing shift or night shift hours.
- r. Supervisors and managers within DPW are to implement a work group process or procedure that keeps requesting employees informed as to the status of their requests for repair parts or equipment.
- s. Coordinate for Internal Review to conducts a 100% audit of GPCC records for Ms. Lancy's GPCC for FY2006 and FY2007.

IMWE-LEW-ZA

SUBJECT: AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

t. Remove the television and training materials from M [REDACTED] office and relocate the television and training materials to an area that is accessible to employees. Develop low cost training capability on each site so employees can train on location (costs of equipment should be reviewed by DPW).

u. Ms. Lancy is to be retrained on GPCC holder responsibilities through attendance at the Department of Contracting (DOC) sponsored GPCC holder class.

v. Appointing official determine whether formal disciplinary action is warranted for M [REDACTED] in accordance with USD Memorandum, Subject: Government Charge Card Disciplinary Guide for Civilian Employees dated 29 December 2003.

w. Complete construction of the new portable latrine dumping site by the end of FY2007.

2. If you have any questions or need additional guidance, please discuss with myself or Steve Perrenot, [REDACTED]

[REDACTED]
Commanding



DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT COMMAND
UNITED STATES ARMY GARRISON, FORT LEWIS
BOX 339500, MAIL STOP 1AA
FORT LEWIS WASHINGTON 98433-9500

REPLY TO
ATTENTION OF

IMWE-LEW-PW

25 Oct 2007

MEMORANDUM FOR Garrison Commander, ATTN: IMWE-LEW-ZA, Box 339500, Fort Lewis, WA 98433-9500

SUBJECT: AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

1. On 6 August 2007, you directed me to undertake a series of corrective actions in response to an AR 15-6 Investigation to review the hiring actions taken in reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and specific management practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP).

2. The purpose of this Memorandum is to summarize the actions taken to date in response to your letter of 6 Aug 2007:

a. Directed Action: Ensure all supervisory personnel complete the HR for Supervisors Course offered by CPAC. Prevent DPW supervisors from functioning as hiring officials until they complete the HR for Supervisors Course.

Response: Only those DPW supervisors that have successfully completed the HR for Supervisors Course are currently involved in the final hiring actions for any action that may fall in their respective areas. Additionally, a HR for Supervisors Refresher Course is being developed for future deployment to all PW supervisors. I am currently working with CPAC to determine the best way to deploy this additional training module. Deployment will likely include a series of one or two hour blocks of instruction using a variety of experts from across the installation. A draft copy of the course outline is located at Tab 1

b. Directed Action: Work in coordination with CPAC to develop a targeted training class for Administrative Support Assistants which focuses on what you can and cannot do to assist an individual with the resume, self-nomination and hiring process. Ensure all DPW Administrative Support Assistants receive training.

Response: Training for all DPW Administrative Support Assistants was completed on 14 Sep 2007. A copy of the outline used in this training is located at TAB 2.

Tab
26b

IMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

While this training reached the Administrative Support Assistant within PW as directed, after review of the course outline, I believe that more employees from within PW can benefit from this training. As such, I have directed that all secretarial and support personnel receive this training. This training will be completed NLT 15 Nov 2007 by CPAC personnel.

c. Directed Action: Appointing official request CPAC initiate notice of proposed removal for Mr. Long for failure to meet a condition of employment.

Response: After a thorough review of all documents, an appropriate disciplinary action of a 'change to a lower grade' is being proposed and will place Mr. Long into a non-supervisory position. This action is being proposed based on Mr. Long's inability to meet specific conditions of his job. Specifically, he has failed to obtain a Waste Water Treatment Plant Operator Class III License, as issued by the State of Washington. This proposed action has been verbally coordinated with SJA and CPAC, and both offices are in agreement with the course of action that should follow. The action is currently at CPAC for processing. I would estimate that I should be able to issue the proposed action to [REDACTED] within the next 15 days.

PW will be down two WTP operators by the end of the year. As these positions are difficult to fill, it is my opinion that the government will be best served by keeping Mr. Long employed as a fully licensed WTP operator rather than removal from civil service.

d. Directed Action: Appointing official determine whether formal disciplinary action is warranted for [REDACTED]

Response: I have not yet determined the appropriate level of action that should be taken in this particular case. I am currently coordinating with [REDACTED] and CPAC personnel concerning the appropriate response and the timing of such. No action on this matter can be taken without coordination with the Office of Special Counsel due to their pending investigation.

Additional research into this allegation has prompted me to issue a new PW Policy Statement which directs that all recruiting actions will be open for 10 working days, unless an urgent and compelling need is established by the Deputy Director or the Director.

e. Directed Action: Order sufficient quantities of the proper oil so that there is enough on-hand supplies to deal with unplanned maintenance emergencies.

Response: The correct type of synthetic oil has been purchased and is on hand for use. A 55 gallon drum of AW ISO 150 is on hand and is sufficient to last through the contact replacement. TAB 3 is the MSDS for this product. It should also be noted that the oil cooled compressor has been replaced by a water cooled compressor on 7 Sep 2007, eliminating the need for any oil.

IMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

f. Directed Action: Educate WWTP employees on what oil type and weight is required and proper frequency of use.

Response: All WWTP personnel have received special training on the correct type of oil to be used in the digester compression, fill methods, and routine maintenance checks.

g. Directed Action: Visibly post what oil type and weight is required on or in close proximity to the WWTP gas compressor.

Response: Signage was posted at the operator station in a timely manner however it has since been removed following the compressor change-out. TAB 4 is a copy of the posting.

h. Directed Action: Ensure [REDACTED] and all WWTP employees complete annual EEO and EO training.

Response: All WWTP employees, including [REDACTED] have completed the POSH Online Refresher Training. TAB 5 is the log sheet indicating the training dates for those employees in the WWTP.

i. Directed Action: Train [REDACTED] and WWTP personnel on how to complete the WWTP daily entry logs.

Response: All WWTP personnel have received the necessary training to ensure that they properly record the required information in the daily work log. All personnel have been fully training on the Daily Operating Procedures. Furthermore, the Daily Operating Procedures Document (PWU-105), has been updated and posted IAW ISO 14001, to reflect a properly completed log and the flow of information linked to the log. TAB 6 is the most current version of PWU-105, last modified on 3 May 2007

j. Directed Action: Implement a single testing standard for all sludge bed pours.

Response: The WWTP has a single standard for all sludge bed pours, as outlined in the WWTP Analytical Sampling Plan. I have personally reviewed this sampling plan and based on my knowledge of sampling and laboratory testing, I have concluded that this plan meets the applicable standards. Verbal reinforcements or instructions concerning the need to follow the plan are issued by the supervisor on a case-by-case basis and as needed. TAB 7 is a copy of the plan.

k. Directed Action: Direct DPW to retrain all WWTP, WTP and Outside Water and Sewer personnel on proper safety procedures for repair work at the WWTP. Review all safety records within DPW to determine if any additional safety training is needed within sections and divisions.

Response: DPW has conducted special safety training session for all the shops

IMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

in the water utilities sections on 16 Oct 2007. It highlighted safety procedures for any repair work, to include the WWTP. A copy of the sign-in roster is found in TAB 8. Prior to the more formal instruction on 16 Oct 2007, a number of lunch-box training sessions were held throughout the shops in which a variety of safety subjects were discussed. The use of training videos, hand outs, and talking papers were all used during these discussions. In addition, special confined space training was conducted on 30 July 2007, which led to all WWTP operators being certified for work in confined space areas. TAB 9 is the course attendance roster. TAB 10 is the course agenda for the confined space training. While a review of the PW safety records revealed no shortfalls, I have detected an increase in vehicle backing accidents within the PW shops. In response to these minor incidents, I have directed that vehicle operations be emphasized during the next series of safety sessions.

l. Directed Action: Appointing official determine whether formal disciplinary action is warranted for Mr. Long based on his disregard for the safety, health and welfare of his subordinate employees.

Response: After reviewing the statements, I believe that [REDACTED] did not put anyone other than himself at risk. I believe that [REDACTED] exercised poor judgment in the repair of the digester compressor by not having non-sparking tools available for his use or utilizing the appropriate lifting device. [REDACTED] has reported to me that he counseled [REDACTED] on this matter soon after receiving a call from the Safety Office.

m. Directed Action: Explore backup power solutions for lift stations so that future power outages do not lead to sewage back ups.

Response: We have recently installed backup power to the Eagle View lift station. Additional backup power for remaining critical lift stations is planned in our FY08 work plan.

n. Directed Action: Determine if a 24/7 manning requirement is prudent or necessary to effectively and efficiently execute WWTP operations. If prudent or necessary, DPW should modify the WWTP SOP to specify the 24/7 manning requirement and adjust manpower and lift repair call procedures accordingly.

Response: As a part of our Most Efficient Organization review, and after consultation with several supervisors, I have determined that 24/7 on-site manning is not required by regulation and the procedure for WWTP operators to respond to off-plant lift station alarms can remain unchanged. This review did identify an organizational change that will lessen the span of control for two key supervisors and provide more technical oversight of the WWTP and the WTP. TAB 11 is a representation of one draft organizational change that is currently being considered. This proposal, once approved by the GC, must be staffed through PAIO and up to DA as a change to our MEO, as it increases our manpower authorizations. We are actively working with DRM to generate the necessary documents to support this change as well as others in support of needed MEO changes. Furthermore, I have been in personal contact with IMCOM West and IMCOM HQ personnel concerning the

IMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

changes that I will be proposing, in an attempt to gain their support early on and to eliminate any questions that would need to be addressed via additional written communication. I fully expect to have all changes endorsed by the GC NLT 1 December 2007.

o. Directed Action: Once Centennial contractors completes their work on the Donovan Reservoir site, conduct thorough testing to ensure site cleanliness.

Response: The estimated completion date of the Donovan Reservoir repair project is 3 Jan 2008. Following completion of the repairs, thorough testing will be undertaken to ensure a fully compliant reservoir.

p. Directed Action: Work with Army Corps of Engineers to develop and execute a collaborative oversight and quality assurance/quality control program administered by government employees for all individual job order contracts which are assessed as having the potential to negatively impact the environment.

Response: The Army Corps of Engineers has a thorough quality assurance and quality control program administered by the government. This QA/QC program has been reviewed by the senior COE staff member to ensure the proper level of surveillance is present and is protective of the environment and meets our sustainability goals (TAB 12).

q. Directed Action: DPW managers to conduct a minimum of two site visits per year to each of their geographically separated work sites. Ensure at least one site visit a year is during swing shift or night shift hours.

Response: I have visited the WWTP twice during daylight hours since this action started (both times with [REDACTED]). I have also visited the External Water and Sewer Branch on several occasions, and led team building sessions at the WTP which resulted in several process improvements including better information flow, establishment of status boards, repair parts status, and procedures to repair the computerized telecommunications equipment. In addition, I recently spoke at a safety refresher course at the External Water and Sewer training room. On the 25th (notation placed in plant log), I visited the WWTP during the night shift and performed routine night shift plant checks with [REDACTED]. I plan to visit the WWTP during the swing-shift hours during the month of November, as well as a Saturday visit.

r. Directed Action: Supervisors and managers within DPW are to implement a work group process or procedure that keeps requesting employees informed as to the status of their requests for repair parts or equipment.

Response: A communication process has been implemented at the WWTP. This process includes weekly operational meetings conducted to update and keep employees informed of the actions. In addition, the plant has assigned additional duty appointments to empower the operators to manage separate programs and keep others informed. Additional duty assignments include the preventive maintenance manager,

JMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

hazardous materials technician, and repair parts manager. A sample of an additional duty appointment is located at TAB 13.

s. Directed Action: Coordinate for Internal Review to conduct a 100% audit of GPCC records for [REDACTED] PCC for FY2006 and FY2007.

Response: PW requested a full review of Ms. Lancy's credit card account. DOC requested that this be delayed until after the beginning of the new FY. On 23 Oct 2007, DOC reported that the initial review of the account was incomplete due to weather curtailment and a lack of documents to review. DOC continues to work the review and will provide a full report once completed (see TAB 14).

t. Directed Action: Remove the television and training materials from Mr. Long's office and relocate the television and training materials to an area that is accessible to employees. Develop low cost training capability on each site so employees can train on location (costs of equipment should be reviewed by DPW).

Response: DPW has removed the television and training materials from Mr. [REDACTED] office and relocated them to the water plant training room. This training room was recently used to conduct the safety refresher training for all O&M Division personnel in the WWTP, WTP, and External Water and Sewer sections.

u. Directed Action: [REDACTED] is to be retrained on GPCC holder responsibilities through attendance at the Department of Contracting (DOC) sponsored GPCC holder class.

Response: Ms. Lancy has been retrained by DOC in May 2007. In addition, until she is properly trained to input credit card data into MAXIMO, our corporate management program, she is restricted from purchasing or ordering any supplies and services.

v. Directed Action: Appointing official determine whether formal disciplinary action is warranted for [REDACTED] in accordance with USD Memorandum, Subject: Government Charge Card Disciplinary Guide for Civilian Employees dated 29 December 2003.

Response: After a complete review by DOC of all records associated with the credit cards in the WWTP area, I will be able to determine if additional action is warranted. Until this review is completed, I have suspended [REDACTED]'s credit card approval authority. DOC reports that they will have their full report completed NLT 1 Nov 2007. I will report to you on these findings as soon as they become available along with my recommendation.

w. Directed Action: Complete construction of the new portable latrine dumping site by the end of FY2007.

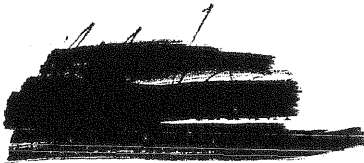
Response: The portable latrine dump station construction was completed in

IMWE-LEW-PW

SUBJECT: Response to AR 15-6 Investigation Concerning Hiring Actions Taken in Reference to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and Specific Management Practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP)

Jul 2007, in vicinity of 1C12. Procedures for using this facility are presented at TAB 15.

3. For those actions that remain outstanding, I will continue to give you timely updates as additional information becomes available.



HR FOR SUPERVISORS Fundamentals & Tools

Introduction to Human Resource (HR)

- Role of Supervisor & where HR fits
- Merit Principles, WPA & 5 USC Foundation
- EEO Aspects of Merit System
- OPM Videotape on Prohibited Personnel Practices
- CPAC & CPOC HR Responsibilities

Management/Employee Relations

- Performance Management
- Army Regulation 690-400
- Attendance and Leave
- Corrective Actions

Labor Relations

- Labor-Relations
- Supervisor's Guide/Labor Management Relations



DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT COMMAND
UNITED STATES ARMY GARRISON, FORT LEWIS
BOX 339500, MAIL STOP 1AA
FORT LEWIS WASHINGTON 98433-9500


REPLY TO
ATTENTION OF

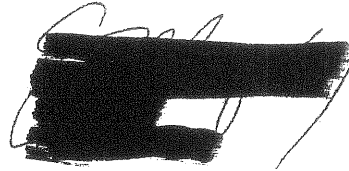
IMWE-LEW-ZA

25 July 2007

MEMORANDUM FOR Chief, Civilian Personnel Advisory Center, Fort Lewis, WA
98433

SUBJECT: AR 15-6 Investigation Concerning Hiring Actions

1. As you may be aware, I directed that an AR 15-6 Investigation occur to review the hiring actions in the Directorate of Public Works and specifically related to Army Vacancy WTEU5004308 for Utility Systems Repairer-Operator Supervisor, WS-4742-10 and specific management practices at the Fort Lewis Wastewater (WWTP) and Water Treatment Plants (WTP).
2. The investigating officer completed the investigation and I have directed DPW to implement multiple actions. However, I ask that the Civilian Personnel Advisory Center (CPAC) staff to assist with the following two specific areas:
 - a. Request CPAC modify local procedures to ensure conditions of employment are verified in writing for all recruit-fill and promotion actions regardless of the nature of recruit-fill or promotion action (i.e. competitive, non-competitive, temporary, or permanent). Recommend procedures include retention in the individual's official personnel file (OPF) or any written verifications that the individual meets the conditions of employment.
 - b. Develop a targeted training class for Administrative Support Assistants which focuses on what you can and cannot do to assist an individual with a resume, self-nomination and hiring process. Even though DPW specifically needs this type of training, I request that you provide this training to all Fort Lewis Garrison Administrative Support Assistants.
3. If you have any questions or need additional guidance, please discuss with myself or Steve Perrenot, 



CF: Director, Public Works

CPAC/ADMIN OFFICER MEETING AGENDA
DALLAS CONFERENCE ROOM
14 SEPTEMBER 2007
1300-1400

1. Welcome/Introductions (Pam)
2. Automation Update - CPOL Portal Applications (Aurora)
3. Training Update - OTA Lite/CHRTAS (Letau)
4. USERRA (Tina)
5. CHR Transformation Update (Pam)
6. Staffing Workload (RPA flow, gatekeeper, etc.)/Ft. Huachuca Interface; Conditions of Employment Statement (Pam)
7. Providing AO Assistance to Employees (Pam)
8. Questions/Concerns

Encl 2

No	Name	Organization	Email Address	Phone #	Signatures
1	[REDACTED]	GC office	[REDACTED]	[REDACTED]	[REDACTED]
2	[REDACTED]	BoTC	[REDACTED]	[REDACTED]	[REDACTED]
3	[REDACTED]	GC ofc	[REDACTED]	[REDACTED]	[REDACTED]
4	[REDACTED]	AB	[REDACTED]	[REDACTED]	[REDACTED]
5	[REDACTED]	DPTM 5	[REDACTED]	[REDACTED]	[REDACTED]
6	[REDACTED]	SSA	[REDACTED]	[REDACTED]	[REDACTED]
7	[REDACTED]	(DWEED)	[REDACTED]	[REDACTED]	[REDACTED]
8					
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harmful to internal organs if absorbed through the skin.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

SECTION 5 FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:

Flashpoint: (Cleveland Open Cup) 234 °C (453 °F) (Min)

Autoignition: No Data Available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Non-hazardous additive blend in refined oil	ACGIH	5 mg/m ³	10 mg/m ³	--	--
Non-hazardous additive blend in refined oil	OSHA 2-1	5 mg/m ³	--	--	--

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Brown

Physical State: Liquid

Odor: Petroleum odor

pH: Not Applicable

Vapor Pressure: <0.01 mmHg @ 37.8 °C (100 °F)

Vapor Density (Air = 1): >1

Boiling Point: >315.6°C (600°F)

Solubility: Soluble in hydrocarbon solvents; insoluble in water.

Freezing Point: Not Applicable

Melting Point: Not Applicable

Specific Gravity: 0.87 - 0.8 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)

Density: 0.88 kg/l - 0.9 kg/l @ 15°C (59°F)

Viscosity: 90 cSt @ 40°C (104°F) (Min)

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Name: NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

DOT Hazard Class: NOT APPLICABLE

DOT Identification Number: NOT APPLICABLE

DOT Packing Group: NOT APPLICABLE

Additional Information: NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

IMO/MDG Shipping Name: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER THE IMDG CODE

IMO/MDG Hazard Class: NOT APPLICABLE

IMO/MDG Identification Number: NOT APPLICABLE

IMO/MDG Packing Group: NOT APPLICABLE

SECTION 15 REGULATORY INFORMATION

- EPCRA 311/312 CATEGORIES:
- | | |
|---------------------------------------|----|
| 1. Immediate (Acute) Health Effects: | NO |
| 2. Delayed (Chronic) Health Effects: | NO |
| 3. Fire Hazard: | NO |
| 4. Sudden Release of Pressure Hazard: | NO |
| 5. Reactivity Hazard: | NO |

REGULATORY LISTS SEARCHED:

- | | |
|---------------------|----------------------|
| 01-IARC Group 1 | 03-EPCRA 313 |
| 01-2A-IARC Group 2A | 04-CA Proposition 65 |
| 01-2B-IARC Group 2B | 05-MA RTK |
| 02-NTP Carcinogen | 06-NJ RTK |
| | 08-PA RTK |

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
--	--

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

	B	F	X
2	MEO Structure / Position Titles	Personnel Assigned	POSH ONLINE REFRESHE R
200	WWTP and Water Treatment Plant Section	WATER	
201	Utility Sys Rpr-Op Supervisor WTP / W&S	Veith Long	8/19/07
202	Utility Sys Rpr-Op Supervisor WWTP	Nate Barto (Temp App't)	5/14/07
203	Utility Sys Rpr-Operator (Wastewater)	Brian Gibson	5/9/07
204		Gary Isaksen	5/8/07
205		Ron Johnston	5/9/07
206		Jerry Liedes	5/8/07
207		Rhonda Rounds	5/8/07
208		Farnham Cornia	DUE ←
209	Bio Science Lab Tech	J. C. Lancy	5/8/07
210	Purchasing Agent	vacant v Tucker	
211	Utility Systems Repairer-Operator (Water)	Andy Davis	
212		Frank Fleming	
213		Jeff Huston	
214		James Martin (Lt Duty)	
215	Utility Systems Repairer	Jim Scott (Lt Duty)	
216		Danny Rulledge (Lt Duty)	
217	Plumber Worker	Bobby Malone	
218		Jimmy Chambers (Lt Duty)	
219		vacant v Winston	
220	Maintenance Trades Helper	Gary Huff	
221			
222			
223			

INITIAL TNG REQ'D FOR
NEW EMPLOYEES; SCHEDULED
FOR 9/26 - 9/27

- i. If any equipment is not mission capable, tag out/lock out appropriately.
 - ii. If any equipment is on standby, update the board
 - c. Annotate the actual times of the inspection period.
 - d. Annotate the actual times for any other actions taken during the tour of duty, outside of the routine inspection period.
 - e. Annotate any significant discrepancies, especially any noncompliance of the EPA Permit, in the Log and note actions taken to correct each discrepancy. Actions taken include, but limited to:
 - i. SO: Call in any Service Orders for minor repair requests that need other Public Works shop support.
 - ii. IJO: Fill out the FEWR for any discrepancy requiring any outside support to correct.
 - iii. Purchase Requests: Fill out any repair parts requests necessary for the equipment. Be specific in identifying the equipment by make, model, serial number, etc that will help the purchasing agent.

4. Non-compliance Reporting: The operator on duty shall immediately report, to the proper authority, of any noncompliance events of the EPA Permit within 24 hours (see Enclosure 3).

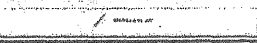
- a. Normal duty hours:
 - i. Contact the supervisor chain.
 - ii. If any of the supervisors are not available with the 24-hour window, contact the 24-hour Hotlines (see below). The DOH duty phone is (360) 236-3330.
- b. Non-normal duty hours:
 - i. For any exceedences of effluent limitation in the permit, **to include** any system overflows prior to the treatment works; contact the EPA NPDES Compliance Hotline number, (206) 553-1846.
 - ii. For any system overflows prior to the treatment works, untreated plant bypasses, or disinfection system failures, contact the Department of Health, Shellfish Protection Program, (360) 786-4183.
- c. The Water & Sewer shop is responsible for **timely** notification of the plant for any reporting of non-compliances of the collection system.

- ii. Day: 0600 – 1530 (except 8-hour Tuesdays)
 - iii. Swing: 1330 – 2300 (except 8-hour Tuesdays)
 - iv. Grave: 2200 – 0730 (except 8-hour Wednesdays)
- b. Eight hour days end an hour earlier than the end of the shift hours as noted above.
- c. Authorized within the shift period is a half hour lunch period, some time during the middle of the shift, along with two 15-minute breaks. One break shall be taken sometime during early part of the shift, while other shall be taken sometime during the later part of the shift. The supervisor will make adjustments, as necessary, of the break times, to promote employee welfare and/or plant operation.
- d. Weekly operations meeting will be held when majority of the employees are present, typically every Tuesday, 0630-0730 and 1400-1500.
- e. Monthly training meetings will be held at date and times to be determined and will address statuses of ongoing construction projects, capital improvement plans, PW-wide initiatives, and plant safety.
- f. Operators shall submit daily time sheet, and any unscheduled overtime and leave request forms into the supervisor.
- g. The operators are responsible for their own shift, until they are properly relieved. Operators are authorized to make direct coordinate within the shop for any coverage for planned and unplanned absences, and notify the supervisor at the next business day, unless supervisor involvement is necessary for immediate resolution.
- h. LeMay is scheduled for debris can pickup on Tuesdays and Fridays. If the screenings cans are full, contact LeMay for removal and dumping at (253) 537-8687.
- i. This procedure will, as a minimum, be reviewed annually and during any change of document ownership.

DOCUMENT REVISION SUMMARY

Original Document Issue Date: August 1995		
REVISION NUMBER	DATE OF REVISION	REVISION SUMMARY
	15 Nov 2002	No Revisions were made to this document upon this review.
6	15 Dec 2004	Document owner changed.
	1 Oct 2005	Document owner changed.

Enclosure 1
(Sample Operator Log)

DAILY STAFF JOURNAL OR DUTY OFFICER'S LOG <small>For use of this form, see AR 220-16; the approved agency is Office of The Deputy Chief of Staff for Operations & Plans</small>				PAGE NO. 1	NO. OF PAGES
ORGANIZATION OR INSTALLATION WWTP D-4TW-LEW-PWO MS17 FORT LEWIS, WA		LOCATION BUILDING 7500		PERIOD COVERED	
				FROM	TO
				HOUR 0730	DATE 0730
ITEM NO.	TIME		INCIDENTS, MESSAGES, ORDERS, ETC.	ACTION TAKEN	INL
	IN	OUT			
1	TIME		Assumed responsibility of the plant, "with no discrepancies," or "with following discrepancies as noted below:" Signatures: Outgoing operator Incoming operator		
2			Conducted plant inspection IAW Inspection Sheet	If any discrepancy found, Completed IJO, or Called in SO	
3			Conducted plant inspection IAW Inspection Sheet.	Completed IJO, or Called in SO	
4			Assumed responsibility of the plant, "with no discrepancies," or "with following discrepancies as noted below:" Signatures: Outgoing operator Incoming operator		
5			Conducted plant inspection IAW Inspection Sheet.	Completed IJO, or Called in SO	
6			Conducted plant inspection IAW Inspection Sheet.	Completed IJO, or Called in SO	
7			Assumed responsibility of the plant, "with no discrepancies," or "with following discrepancies as noted below:" Signatures: Outgoing operator Incoming operator		
8			Conducted plant inspection IAW Inspection Sheet.	Completed IJO, or Called in SO	
9			Conducted plant inspection IAW Inspection Sheet.	Completed IJO, or Called in SO	
TYPED NAME AND GRADE OF OFFICER OR OFFICIAL ON DUTY				SIGNATURE	
NATHAN E. BARTO, YD-2					

DA FORM 1594, NOV 1962

PREVIOUS EDITION OF THIS FORM IS OBSOLETE.

AFD PE 12.006's

Enclosure 3
(Non-compliance Notification Procedure)

1. Normal Duty Hours: Immediately contact the O&M division supervisor chain for call-in to the appropriate authorities.

2. Non-normal Duty Hours: Follow below procedures:

	Event/Exceedence	Responsible Party	Action
A.	Overflows prior to WWTP	Water Sewer Responder	Immediately contact the WWTP
A.1.	Overflow notification from Water & Sewer shop personnel	WWTP Operator	Contact EPA & DOH within 24 hours
B	Effluent exceedence at the WWTP	WWTP Operator	Contact EPA within 24 hours
C	Untreated bypass at the WWTP	WWTP Operator	Contact DOH within 24 hours
D	Disinfection system failure	WWTP Operator	Contact DOH within 24 hours

3. Contacts: Call the below numbers within 24 hours of the incident.

- a. EPA: NPDES Compliance Hotline number - (206) 553-1846.
- b. DOH: Shellfish Protection Program number - (360) 786-4183.

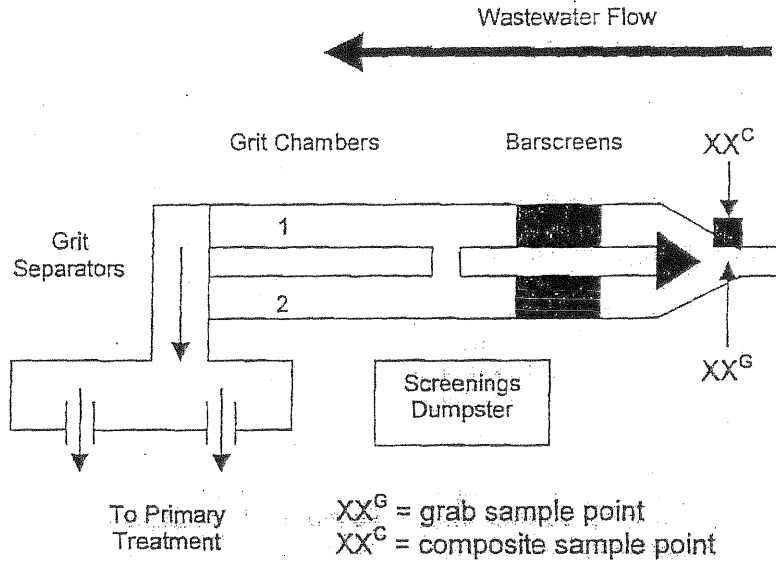
4. Message Format: "This is (Operator's name) from Fort Lewis, WA WWTP, operating under the EPA NPDES Permit Number WA-002195-4, calling to report the occurrence (applicable items below). Please contact the plant supervisor, at (253) 967-7453 for any further information."

- a. "An exceedence of effluent limitation of pH, BOD5, TSS, or Fecal Coliform Bacteria."
- b. "An overflow of collection system prior to the treatment works."
- c. "A collection system overflow, untreated plant bypass, or failure of the disinfection system."

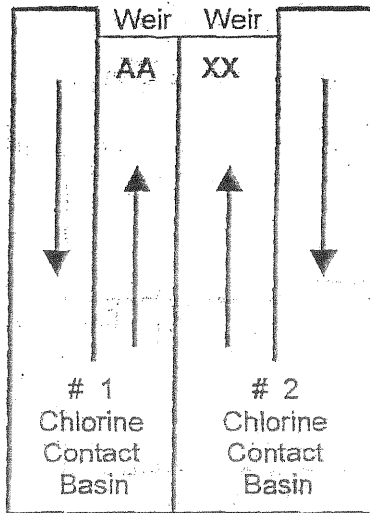
"The result of any testing method can be no better than the sample on which is performed"
 (Standard Methods part 1060)

Appendix A – WWTP Main Sample Points and Alternate Sample Points

WWTP Influent Sampling



WWTP Effluent Sampling



XX = Main Sample Point
 AA = Alternate Sample Point
 Sample points are for composite & grab samples

"The result of any testing method can be no better than the sample on which is performed"
 (Standard Methods part 1060)

Appendix C – Biosolids Sampling

Operations Background: Digested sludge (biosolids) is transferred from the plant's secondary digester to the drying beds approximately every three weeks (18 beds/year). Biosolids are dried by draining 4-6 inches of supernatant from the bed about 1 week after it is poured. During the next 90 + days the drying action is evaporation. Drying time is dependent on time of year and is assisted by mechanically (front end loader) mixing the biosolids until the water content is < 60%. The biosolids are then consolidated into 1 or 2 holding beds. The consolidated biosolids are removed once per year (generally September) and transported to Fire Mountain Farms in Lewis County.

Analytical Requirements: Total Metals and Fecal Coliform

Sampling for Total Metals: The sample collected for Total Metals shall be a composite sample, consisting of at least 25% of the beds poured during the year. Each year in December and June a grab sample of at least 100-mL will be taken from each bed poured since the previous sampling event. The individual grab samples will be combined (thoroughly mixed) into one composite sample, entered into the plant sample log, and delivered to the current commercial laboratory under contract with Fort Lewis Public Works for analysis.

Sampling for Fecal Coliform: The sampling for Fecal Coliform will be performed using the seven samples method. This sampling will be performed within 30 days of biosolids removal from Fort Lewis by the land applier under contract with Public Works. The sample method will consist of grabbing seven individual samples from the consolidated biosolids. The sample points will be random, at least 2 feet from bed walls, no closer than 12 feet from the previous sample point, and from various depths greater than 3 inches from the bed floor and 3 inches below the crusted biosolid surface. These samples will be individually entered into the plant sample log, noting approximate location of the grab (referencing layout below), and delivered to the current commercial laboratory under contract with Fort Lewis Public Works for analysis.

Fort Lewis WWTP Drying Bed Configuration											
South Side											
24	23	22	21	20	19	18	17	16	15	14	13
1	2	3	4	5	Parts & Equip. Storage	7	8	9	10	11	12
North Side											

5. HAZARD EVALUATION.

Check ALL hazards that could be present or encountered during the site/field visit or project activities. ALL potential hazards checked must include a brief of mitigation measures. Document each with the corresponding topic listed on Pages 6 and 7. After hazard and mitigation measures have been identified and addressed, continue completing paragraphs 6 thru 13.

- | | | |
|--|--|---|
| <input type="checkbox"/> Cold Stress | <input type="checkbox"/> Excavations | <input type="checkbox"/> Biological |
| <input type="checkbox"/> Heat Stress | <input type="checkbox"/> Work from Elevation | <input type="checkbox"/> Chemical |
| <input type="checkbox"/> Slip/Trips/Falls | <input type="checkbox"/> Material Handling | <input type="checkbox"/> Environment |
| <input type="checkbox"/> Squatting/Bending | <input type="checkbox"/> Water Hazards | <input type="checkbox"/> Wildlife |
| <input type="checkbox"/> Eye Hazard | <input type="checkbox"/> Confined Space | <input type="checkbox"/> Electrical |
| <input type="checkbox"/> Foot Hazard | <input type="checkbox"/> Weather | <input type="checkbox"/> Mechanical |
| <input type="checkbox"/> Overhead Hazard | <input type="checkbox"/> Insects | <input type="checkbox"/> Traffic Hazard |
| <input type="checkbox"/> Head Hazard | <input type="checkbox"/> Flammable Materials | <input type="checkbox"/> Tools |
| <input type="checkbox"/> Climbing Hazard | <input type="checkbox"/> Toxic Materials | <input type="checkbox"/> Terrain |
| <input type="checkbox"/> Noise Hazard | <input type="checkbox"/> Fauna | <input type="checkbox"/> Flora |
| <input type="checkbox"/> Hand Hazard | <input type="checkbox"/> Asbestos | <input type="checkbox"/> Lead |
| Other Hazards not listed: | <input type="checkbox"/> Dust | <input type="checkbox"/> Excrement |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

6. HAZARD EVALUATION RISK ASSESSMENT.

HIGH RISK MEDIUM RISK LOW RISK

Risk Assessment Levels:

High Risk -- Those activities or tasks that present significant risk to personnel, equipment, or property, even after precautionary measures have been taken. High Risk activities are not to be conducted during site visits. Contact the TL or SSHO for further direction.

Medium Risk -- Those activities or tasks that present greater risk to personnel, equipment, or property than normal site visit tasks, and require more than routine supervision.

Low Risk -- Those activities or tests that present no greater risk than normal site visit tasks. Routine supervision is appropriate.

7. COMMUNICATION. Means of communication shall be provided and identified below.

Cell Phone Two-Way Radio Desk Telephone Other: _____

NOTE: Test Communication devices at start of each shift to verify proper operation.

8. FIRST AID/CPR REQUIREMENTS. When a medical facility or physician is not accessible within five minutes of an injury to an employees for the treatment of injuries, at least one contractor/PW employee present at the site visit/project activities shall be qualified to administer First Aid and CPR and shall provide and make readily available a properly equipped First Aid Kit to treat their team members, as needed.

Special Note: Provide and Post a map with directions on how to get to the hospital.

First Aid/CPR Certified Person(s) on Team:

Name: _____	Tel: () _____
Name: _____	Tel: () _____
Name: _____	Tel: () _____
Name: _____	Tel: () _____

12. PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT (PPE).

- A. Appropriate clothing shall be worn to abate the hazards identified in Paragraph 5 above. Employees shall wear clothing suitable for the weather and work conditions. As a minimum, long trousers, a sleeved shirt, and leather, safety toe or other protective footwear are required. Footwear will be commensurate with hazards anticipated or identified.
- B. PW and Contractor employees shall, as a minimum wear:
 - 1. A hard hat on all construction and renovation jobs or where overhead hazards exist.
 - 2. Safety glasses with side shields are required when eye hazards exist.
 - 3. Hearing protection is required when sound levels reach or exceed allowable limits.

13. **ACCIDENT REPORTING.** In the event of an accident, the contractor/employee will notify the TL/SSHO/Supervisor IMMEDIATELY. The contractor is responsible for conducting accident investigations for their personnel. PW employees shall complete and submit to their supervisor, the appropriate CA accident report forms.


Confined Space Training

Date: 7/30/07

Print Name Clearly Last, First Mi.	Shop#
Ocasio Manuel J	612
CEPEDA, VINCENT T.	612
Clark Jerry	612
GARY Huff	642
JAMES B SCOTT	642
BARTO, NATHAN E.	546

Design and Use-caused Hazards


- Hazardous atmospheres
- Hazardous energies
- Engulfing material
- Sloping walls or floor
- Other serious hazards



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Making Permit Spaces Safe for Workers

- Identify permit spaces
- Assess hazards
- Determine how to manage/control hazards
- Train workers



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Entry Permit (cont.)


Most permits will list:

1. Permit Space	7. Hazards
2. Purpose of entry	8. Hazard control procedures
3. Date & duration	9. Emergency procedures
4. Entrants	10. Equipment
5. Attendants	11. Other information
6. Entry Supervisor	

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Work-caused Hazards


- Hazardous atmospheres
- Heat
- Noise
- Others



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Making Permit Spaces Safe for Workers (cont.)

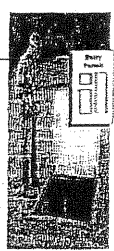
- Assign a supervisor to oversee entry.
- Assign an attendant.
- Provide rescue.
- Issue an entry permit.



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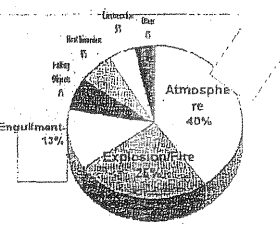
Entry Permit (cont.)

Permits must be posted at the entry to the space



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Causes of Confined Space Deaths

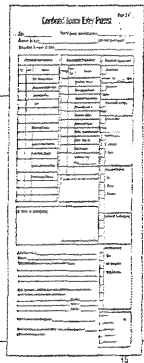


Cause	Percentage
Atmospheric	40%
Engulfment	13%
Explosion/Fire	13%
Other	5%
Hot Work	5%
Falling	5%

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Entry Permits

- Authorize workers to enter the space.
- Provide information about hazards.
- Provide information about managing the hazards.




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Hot Work Permits

Procedures needed to reduce the hazards of hot work


- Welding, brazing, grinding, etc.



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Module 1: Summary

- Characteristics of confined spaces
- Main hazards
- Permits and Hot Work Permits
- Responsibilities of entrants and attendants




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Isolation can include:

- Barricading
- Lockout/tag out
- Blank, bleed, double block
- Disconnecting mechanical linkages, securing moving parts.

The entry permit will specify isolation measures that must be taken.




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Heat Stress (cont).

If you begin to experience any of these conditions, you should:

- Leave the confined space and cool off.
- Drink plenty of water.




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Module 2: Hazards

This module covers:

- ♦ Isolating the permit space
- ♦ Heat stress and noise hazards
- ♦ Hazardous atmospheres

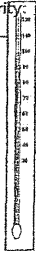


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Heat Hazards

In increasing order of severity:

- ♦ Heat Rash
- ♦ Heat Exhaustion
- ♦ Heat Cramps
- ♦ Heat Stroke



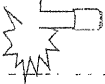
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Noise Hazards

Can cause serious hearing damage.

Hazard posed depends on the:



- Length of exposure
- The force of the sound
- The pitch of the sound.



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Isolation

Many permit space accidents occur when toxins or hazardous energies enter the space.





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Heat Stress (cont).

KEY POINT Heat stroke is a life-threatening condition.

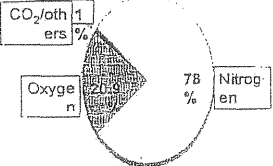
- ♦ Cool the victim with moist cloths, fanning (no ice).
- ♦ Administer fluids if victim can accept.
- ♦ No aspirin, medication, alcohol, or stimulants.



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Atmospheric Hazards

Composition of Normal Air



Gas	Percentage
Nitrogen	78%
Oxygen	20.9%
CO ₂ /others	1%

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Oxygen Deficient Atmospheres (cont.)

- Any oxygen level below _____ percent is deficient.
- Normal air is 20.9%.
- It is common in spaces with: _____
- _____ little or no natural ventilation

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Symptoms of O₂ Deficiency (cont.)


Oxygen Percent	Symptoms
19.5%	Minimum permissible level
15 - 19%	Possibly impaired coordination
12 - 14%	Respiratory/pulse increase, impaired
10 - 12%	Impaired judgment/coordination
8 - 10%	Further increase in respiration/pulse
6 - 8%	Fainting, nausea, vomiting, blue lips
0 - 6%	4 - 5 minutes = Recovery with treatment 6 minutes = 50% mortality 8 minutes = 100% mortality

Come in 40 seconds or less

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O₂ Deficiency Summary (cont.)

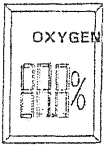
- Can impede self-rescue.
- Increase O₂ levels by ventilating with fresh air.
- NEVER ventilate with pure oxygen.



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Causes of Oxygen Deficiency


- Displacement
- Bacteria (rot)
- Oxidation (rust)
- Combustion
- Absorption



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Symptoms of O₂ Deficiency (cont.)

Never ventilate a space with _____ oxygen levels higher than _____ increase the flammability of gases and other materials.




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Combustible Atmospheres

To burn, an atmosphere must have:

- Sufficient oxygen
- Sufficient fuel
- Ignition source (flame, spark, hot surface)



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Symptoms of O₂ Deficiency

- Symptoms of oxygen deficiency appear when the level drops below _____ percent
- As the oxygen level falls, you suffer: loss of coordination, increased pulse/respiration, impaired judgment, blue lips, fainting, nausea
- Your susceptibility depends on your health and the level of oxygen present.

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O₂ Deficiency Summary


- Any level below 19.5%
- Causes: displacement, bacteria, oxidation, combustion, absorption
- Symptoms: headache, nausea, loss of coordination



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Combustible Atmospheres (cont.)

The amount of fuel depends on the level of oxygen, which is why you should never ventilate a confined space with _____



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Methane (CH₄)


◇ One of the most common flammable gases.

It is also called:

◇ natural gas, marsh gas, swamp gas

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Toxic Atmospheres (cont.)



A toxic atmosphere is present whenever gases, dusts, mists, or vapors exist in concentrations that can cause illness or injury.

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Carbon Dioxide: Symptoms

◇ Headache and dizziness

◇ Prickling or burning sensations

◇ Breathing difficult

◇ Sweating and a general (physical discomfort or uneasiness)

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Methane (CH₄) (cont.)

Methane is:

◇ Colorless and odorless

◇ Lighter than air

◇ Can cause asphyxiation by displacing the oxygen in the air

◇ Combustible, with an LEL of 5% by volume.

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Carbon Dioxide (CO₂)

Carbon dioxide is:

◇ Colorless and odorless

◇ Noncombustible

◇ A component of normal air which contains about 370 ppm.

◇ Heavier than air

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Carbon Monoxide (CO)

◇ CO is a common exhaust product of incomplete combustion


◇ Odorless and colorless

◇ Flammable with a LEL of 5%

◇ An inhibitor of the blood's ability to transport oxygen

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Toxic Atmospheres



Possible Sources:

Bacterial action of organic (decay) materials stored in the space

Products or chemicals brought into the space

Substances: cleaning, welding

Work performed in the confined space

Areas next to the space

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Carbon Dioxide (CO₂) (cont.)

Carbon dioxide is:

◇ Common in solid and compressed liquid forms and used for beverage carbonation

◇ A product of organic decay: grain elevators, sewers, vaults

◇ A byproduct of fermentation: digesters, molasses pits, beer/wine vats

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Carbon Monoxide Symptoms

Symptoms include:

◇ Headache and dizziness


◇ Weakness and chest pains

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Atmospheric Monitors (cont.)

An inaccurate monitor will not protect you. You should always calibrate and zero before use.

You also should ensure that the alarms are working, and that you will be able to see or hear them in the confined space environment.




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Calibration and Zeroing

Calibration means exposing the monitor to a sample of air with known gas levels.

Zeroing means exposing the monitor that has none of the gas being measured.



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
83

Assessing Air Quality (cont.)

Insert your gas detector probe into pick hole or sample hole.

If this is impossible, gently crack the opening just enough to insert the gas sample tube or sensors.

You don't want to spark.






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Types of Monitors

- ◆ Handheld and portable
- ◆ Fixed and mounted
- ◆ Readout and alarms
- ◆ Hoses and extensions


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Calibration and Zeroing (cont.)

The reason for calibration and zeroing is that gas, and batteries wear out. Temperature, pressure and humidity can affect some readings.

The monitor's manual describes the steps needed to calibrate.





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Assessing Air Quality (cont.)

Most explosions and fires occur at the point and time of entry.



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Types of Monitors (cont.)

Monitors are sophisticated electronic devices, and unless used properly, they will give false readings.

Your life depends on their accuracy.






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Assessing Air Quality

If possible, initial air sampling should be done before opening the space.

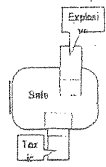

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Assessing Air Quality (cont.)

If not using a multi-gas monitor, you should test for oxygen first.

Once the oxygen level is established, determine combustibles and toxins.





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Harnesses & Tripods (cont.)

If the permit space has a vertical entry over ___-feet deep, then there must be a mechanical means of raising or lowering entrants.



Wristlets or _____ are _____ used in place of harnesses to retrieve entrants.

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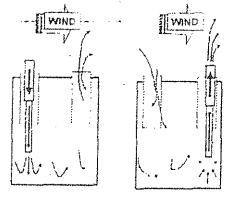
Ventilators/Blowers (cont.)

When using a blower, make sure that:

- ◇ The blower intake is _____ away from _____ traffic.
- ◇ The exhaust from gas-powered blowers is _____ sucked into the intake.
- ◇ The blower intake is _____ feet away from the entry.

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Ventilation: Purging and Blowing (cont.)



Two openings
Lighter than air gases

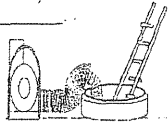
Two openings
Heavier than air gases

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Ventilators/Blowers

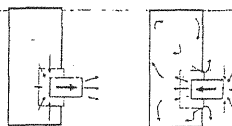
Each blower should have a manufacturer's _____ the _____ capacity in CFM.

Bends in the hose can reduce the _____ capacity.



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Ventilation: Creating Turbulence




Pulling air from space creates little turbulence and gas layers may persist.

Blowing air into space creates turbulence and disperses gas layers.

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Permit Compliance

- ◇ Hazards
- ◇ Preparation
- ◇ Procedures
- ◇ Equipment
- ◇ Emergency Procedures
 - ◇ Entrants/Attendants/Supervisor
 - ◇ Acceptable Entry
 - ◇ Conditions
 - ◇ Hazmat Information
 - ◇ Atmospheric Tests

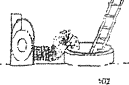


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Ventilators/Blowers (cont.)

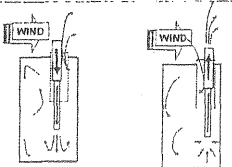
When purging, the dropped end of the hose should:

- ◇ Hang vertically
- ◇ Be more than _____ below ceiling
- ◇ Be not more than _____ above the floor.



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Ventilation: Purging and Blowing



One opening
Lighter than air gases


One opening
Heavier than air gases

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Emergencies

The easiest emergency to deal with is _____ which never occurs!

...but accidents happen and you need to know what to do.



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[REDACTED]

From: [REDACTED] CIV USA USACE
Sent: Thursday, October 25, 2007 2:24 PM
To: [REDACTED] CIV USA IMCOM
Subject: QA/QC

I have reviewed the QA/QC procedures in relation to JOC projects and determined that the procedures identified adequately address the areas of environmental compliance, LEED, and sustainability. Discussions with COE staff in Installation Support and Small Projects team have been conducted to refresh an understanding of these concepts as they pertain to work at Fort Lewis.

[REDACTED]

From: [REDACTED] CIV USA
Sent: Tuesday, October 23, 2007 9:54 AM
To: [REDACTED] CIV USA IMCOM
Cc: [REDACTED] M Mr CIV USA; [REDACTED] CIV USA
Subject: RE: Credit Card review

[REDACTED] seems that JC did not have all the documents on Thursday when Sharon went over. Plus, time was cut short due to the weather curtailment on Thursday. Sharon needs to complete review of JC's Exhibit 6s and then review information in the CARE system to ensure all matches and is accurate. A lot of transactions to review for 2 years. Shooting for next week. I will have Sharon provide you a written report of the results.

-----Original Message-----
From: [REDACTED] USA IMCOM
Sent: Monday, October 22, 2007 3:06 PM
To: [REDACTED] CIV USA
Subject: Credit Card review

Can you provide me results with the CC review for JC at the WWTP?

Thanks

[REDACTED]

Fort Lewis, WA
Commercial [REDACTED]
Secure 253-966-1252
[REDACTED]

How are we doing? Rate our service at:
http://ice.disa.mil/index.cfm?fa=service_provider_list&site_id=348&service_category_id=5

APPENDIX I
FORT LEWIS DUMP PROCEDURE

1. The contractor/organization shall obtain a dump permit from the DPW Customer Service Section, in building 2044, and gather Approval signatures required on the permit.
2. Return completed permit to the Customer Service Desk, who will issue the key to the dump site.
3. The DPW Water & Sewer personnel may accompany the driver to the dump station to observe the dumping operation and sample the discharge if needed. The contract shall only dump what has been authorized in the dump permit.
4. If the waste being discharged is not characteristic of waste characterized in the permit, as observed by the Government agent, he/she may stop the dumping operation until samples are taken and analyzed by an authorized laboratory. Once Government agent determines that the waste will not adversely impact the WWTP, the contractor/organization can resume the dump operation.
5. After dumping operation is complete, the driver shall wash down any spillage and equipment on the concrete pad before exiting site.
6. In the event of unavailability of the dump station, the Government may authorize dumping at an alternate location, such as into the head works of the Wastewater Treatment Facility.