

CHAPTER 19

ENVIRONMENTAL LAW IN OPERATIONS

I. INTRODUCTION

A. Environmental law is a complex thicket of federal and state statutes, regulations, and guidance that is a highly specialized discipline. Since the typical environmental legal practitioner at a U.S. installation is a civilian, uniformed Judge Advocates (JAs) do not always have the opportunity to engage in this challenging field. When a unit deploys, however, an understanding of environmental issues may make the difference in success and failure of a mission. Protecting the environment and instilling an environmental ethic across the operational spectrum is a major international, U.S., and Department of Defense (DoD) concern. Failure to do so can jeopardize Soldiers' health and welfare, impede current and future operations, generate criticism, and create other negative consequences.

B. Domestic environmental laws generally do not apply to the practice of environmental law outside of the United States. United States policy nevertheless imposes a structure that is similar to our domestic laws for overseas operations. This chapter addresses legal environmental considerations during overseas military activities. The approach can differ based on the location and phase of the operation. One set of rules applies to established overseas installations, and another set applies to contingency operations. As units deploy, it is important for the JA to understand the distinction between domestic and international environmental laws, how policy directives interact either in tandem with, or in lieu of, those laws, and how to apply them appropriately.

II. ROLES AND RESPONSIBILITIES

A. Several different players are involved in overseas environmental matters. The staff engineer generally takes the lead in planning and executing environmental operations.¹ The engineer usually chairs the Joint Environmental Management Board (JEMB), if established, to integrate the environmental protection efforts of all participating components under a single authority and to ensure unity of effort for environmental protection activities.²

B. Most established theaters of operation will have a designated lead for environmental matters, known as the Lead Environmental Component (LEC).³ The LEC acts as the regulatory authority for DoD operations in the overseas area and is responsible for publishing, interpreting, revalidating, and updating the Final Governing Standards (FGS).⁴ Identifying the LEC, and establishing a communication link with the LEC are key elements to environmental operations.

C. Judge Advocates. While the engineer and LEC play leading roles in operational environmental issues, JAs also have critical responsibilities.

1. Judge Advocates must ensure that leaders are aware of both the rules and the importance of environmental compliance and protection. While JAs can accomplish this through traditional legal counsel methods such as issue spotting, training, and contract formation and review, a JA brings a unique skill set to a contingency operation with respect to environmental considerations with the ability to examine issues across disciplines.

2. Judge Advocates are responsible for advising the command on environmental issues and assisting in the planning process. This includes advising the commander and staff on all environmental legal matters such as identification and interpretation of applicable laws, regulations, treaties, and other requirements; completion of environmental baseline surveys (EBS), and processing claims involving environmental damage.⁵

3. Judge Advocates will assist commanders in ensuring compliance, as far as practicable within the confines of mission accomplishment, with all applicable environmental laws and authorities as outlined in the

¹ U.S. DEP'T OF DEFENSE, JOINT PUB. 4-04, JOINT DOCTRINE FOR CIVIL ENGINEERING SUPPORT, Ch. VI (27 Sep. 2001) [hereinafter JOINT PUB. 4-04].

² *Id.* at ch. VI, para. 2g.

³ U.S. DEP'T OF DEFENSE, INSTR. 4715.05, ENVIRONMENTAL COMPLIANCE AT INSTALLATIONS OUTSIDE THE UNITED STATES (1 NOV 2013) [hereinafter DoDI 4715.05] (a listing of designated LECs is found in the Appendix to Enclosure 3 of the DoDI).

⁴ *Id.* Section IV of this Chapter discusses the rules in established theaters of operation.

⁵ U.S. DEP'T OF ARMY, FIELD MANUAL 1-04, LEGAL SUPPORT TO THE OPERATIONAL ARMY, paras. 5-36, 5-45 to 5-54 (26 Jan. 2012) [hereinafter FM 1-04].

OPLAN and OPORD, specifically, Annex L (Environmental Considerations). Judge Advocates are responsible for legal support in the development of Annex L, and must ensure consideration of appropriate and applicable treaties, laws, policy and guidance. During execution, JAs must know how to analyze environmental issues and be able to provide appropriate and credible solutions to commanders. Judge Advocates also must be prepared to advise and train supported commanders and units regarding environmental aspects of overseas operations along the entire operational spectrum.

4. Judge Advocates also should be involved in writing and interpreting contracts that implement Army environmental policy, particularly where there are legal and treaty issues involved with the international shipment of hazardous waste.⁶ Contractors play a significant role in this regard as they will likely perform many of the environmental missions during an operation, whether under a Logistics Civilian Augmentation Program (LOGCAP) contract or another contract. During both the planning and contracting processes, JAs must carefully determine whether the various environmental standards and authorities apply to the particular operation and work with logistical planners to establish appropriate contract support and specifically outline contractor responsibilities.

D. JAs should also be aware of non-military organizations whose mission may involve environmental considerations. Organizations such as the State Department, United States Agency for International Development (USAID), United Nations, and non-governmental organizations (NGO) such as the International Committee of the Red Cross, Doctors Without Borders and World Wildlife Fund deal extensively with humanitarian and reconstruction activities, and may be integral players in the mission and information sources.

E. Finally, considerations of host nation governments may be relevant. While U.S. Forces generally do not have any obligation to follow host nation laws unless incorporated in a binding agreement, coordination regarding standards and expectations may be productive.

III. APPLICABILITY OF U.S. DOMESTIC ENVIRONMENTAL LAWS

A. Law. What environmental laws apply to U.S. military activities overseas? As a general rule, domestic environmental statutes have no extraterritorial application, absent language within the statute that makes a clear expression of Congress' intent for extraterritorial application.⁷ Courts have examined several of the major environmental media statutory programs regarding the issue of extraterritorial application, with conflicting results.⁸ One U.S. court found extraterritorial application of the Endangered Species Act (ESA) when U.S. federal actions outside of the country had significant environmental impacts within the United States, but the case was overturned for a lack of standing.⁹ Another court held that § 470a-2 of the National Historic Preservation Act (NHPA) had extraterritorial effect regarding the DoD's effect upon the dugong, a mammal on the Japanese equivalent of the historic register.¹⁰ Practitioners must therefore be mindful that the general rule may be overcome by specific facts.

⁶ See *infra* note 56 discussing Basel Convention.

⁷ See generally, *E.E.O.C. v. Arabian American Oil Co.*, 499 U.S. 244 (1991); *NEPA Coalition of Japan v. Defense Department*, 837 F. Supp. 466 (D.D.C. 1993).

⁸ Compare *Arc Ecology v. United States Dep't of the Air Force*, 411 F.3d 1092 (9th Cir. 2005) (holding that the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) had no extraterritorial effect) and *Amlon Metals, Inc. v. FMC Corp.*, 775 F. Supp. 668 (S.D.N.Y. 1991) (holding that the Resource Conservation and Recovery Act (RCRA) has no extraterritorial effect) with *Environmental Defense Fund v. Massey*, 986 F.2d 528 (D.C. Cir. 1993) (holding that the National Environmental Policy Act (NEPA) applied extraterritorially to the National Science Foundation's decision to burn food wastes in Antarctica, with great consideration that there is an absence of a sovereign within Antarctica). *Contra NEPA Coalition of Japan v. Defense Department*, 837 F. Supp. 466 (D.D.C. 1993) (the court refused to make an extraterritorial application of NEPA reasoning that there is a strong presumption against extraterritorial application, and there could be adverse effects upon existing treaties and U.S. foreign policy).

⁹ *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 112 S. Ct. 2130 (1992) (many scholars believe the result would have been the same had the Court reached the extraterritoriality question); see also 16 U.S.C. §§ 1531-1544 (2006).

¹⁰ *Okinawa Dugong v. Rumsfeld*, 2005 WL 522106 (N.D.Cal. March 2, 2005); see also *Okinawa Dugong v. Gates*, 543 F.Supp2d 1082 (2008). Section 470a-2 states, "[p]rior to the approval of any Federal undertaking outside the United States which may directly and adversely affect a property which is on the World Heritage List or on the applicable country's equivalent of the National Register, the head of a Federal agency having direct or indirect jurisdiction over such undertaking shall take into account the effect of the undertaking on such property for purposes of avoiding or mitigating any adverse effects. National Historic Preservation Act, 16 U.S.C. § 470a-2 (2006)(emphasis added).

B. Policy. Despite the general rule against extraterritoriality, U.S. executive branch policy often requires adherence to U.S. environmental laws, if feasible. Thus, many of the substantive concepts from our domestic environmental laws are adopted in various policy formats. There are several policy references that apply, depending on the location and nature of the action.

C. Overseas Environmental Planning Process. Environmental operations planning should begin with the overarching U.S. policy. Executive Order (E.O.) No. 12114 creates “NEPA-like” rules for overseas operations by requiring environmental impact analysis of major federal actions affecting the environment outside of the United States, even though the National Environmental Policy Act (NEPA) does not generally have extraterritorial effect.¹¹ Department of Defense Directive (DoDD) 6050.7 implements E.O. 12114 and provides definitions, the review process, and document requirements for environmental analysis.¹² Each Service implements the directive with its own specific regulation.¹³ The policies require a “NEPA-like” process when a major Federal action would significantly affect the environment:

1. in the global commons;¹⁴
2. of a foreign nation that is not participating with the United States and not otherwise involved in the action;¹⁵
3. of a foreign nation involving:
 - a. a product, or involving a physical project that produces a principal product, emission, or effluent, that is prohibited or strictly regulated by Federal law in the United States because its toxic effects to the environment create a serious public health risk, or
 - b. a physical project that is prohibited or strictly regulated in the United States by federal law to protect the environment against radioactive substances;¹⁶ and
4. outside the United States that significantly harms natural or ecological resources of global importance designated by the President or Secretary of State.¹⁷

D. Participating Nation Exclusion.

1. When considering the applicability of DoDD 6050.7, the least straightforward and most frequently problematic of the four triggering events is determining whether the action involves a “participating nation.”¹⁸ The Directive completely excludes and requires no review for federal actions that significantly affect only the environment of a foreign nation that is involved in the action, making it a frequently pursued exclusion. Operational planners may determine whether a nation is participating by the foreign nation’s direct or indirect involvement with the United States, or by involvement through a third nation or international organization.¹⁹ There is no requirement for a SOFA or other agreement between the host nation and U.S. Forces in order to document participating nation status. Participation and cooperation, however evidenced, are the only elements required under E.O. 12114 and its implementing directive. The JA should look to the most logical and obvious places for evidence of such

¹¹ Exec. Order No. 12114, 44 Fed. Reg. 1957 (1979) *reprinted in* 42 U.S.C. § 4321, at 515 (1982) [hereinafter E.O. 12114].

¹² U.S. DEP’T OF DEFENSE, DIR. 6050.7, ENVIRONMENTAL EFFECTS ABROAD OF MAJOR DEPARTMENT OF DEFENSE ACTIONS (31 Mar. 1979) [hereinafter DoDD 6050.7].

¹³ Army, Environmental Analysis of Army Actions, 32 C.F.R. pt 651 (2009)(AR 200-2); Air Force, U.S. DEP’T OF AIR FORCE, INSTR. 32-7001, ENVIRONMENTAL MANAGEMENT (4 Nov. 2011); Navy, U.S. DEP’T OF NAVY, SEC’Y OF THE NAVY INSTR. 5090.1C, ENVIRONMENTAL READINESS PROGRAM MANUAL (18 July 2011); Marine Corps, U.S. MARINE CORPS, ORDER P5090.2A, ENVIRONMENTAL COMPLIANCE AND PROTECTION MANUAL (10 July 1998).

¹⁴ DoDD 6050.7, *supra* note 12, at para. E.1.1 (the Directive sets forth procedures for examining actions within the global commons, adhering more closely to traditional NEPA environmental impact statements (EIS) and environmental assessment (EA) formats).

¹⁵ *Id.* at para. E2.2.1.1; *see also* the participating nation exception discussion in this Chapter, *infra* at Section III.D.

¹⁶ *Id.* at para. E2.2.1.2.

¹⁷ *Id.* para. E2.2.1.3.

¹⁸ *Id.* para. E2.2.2.

¹⁹ *Id.* para. E2.2.1.1.

participation. The United States and its host nation partners may have documented the requisite participation within such agreements.²⁰

2. One method for discerning participating nation status is to consider the nature of the entrance into the host nation. There are generally three ways that military forces enter a foreign nation: forced entry, semi-permissive entry, or permissive entry. A permissive entry typically involves a participating (cooperating) nation. Conversely, U.S. Forces who execute a forced entry would rarely deal with a participating nation. The analysis required for these two types of entries is fairly straightforward. Semi-permissive entry presents a much more complex question. In this case, the JA must look to the actual conduct of the host nation. If the host nation has signed a stationing agreement or Status of Forces Agreement (SOFA), or has in a less formal way agreed to the terms of the U.S. deployment within the host nation's borders, the host nation may be considered to be participating with the United States (at a minimum, in an indirect manner). If the host nation expressly agrees to the entry and to cooperate with the U.S. military forces, the case for concluding that the nation is participating is even stronger.

E. Exemptions. Department of Defense Directive 6050.7 sets forth various exemptions resulting in no further need to perform a formal documented environmental review.

1. Unlike the participating nation exclusion, exemptions often require that the military leader take an affirmative step to gain a variance from the formal documentation requirements.²¹ The action is shorter than most actions that involve the environment because it may be drafted and forwarded with little prior review of environmental impact.²²

2. Once an exemption is approved, then the exempted status should be integrated into the OPLAN. If this event occurs after the OPLAN is approved, the exempted status should be added as a fragmentary order (FRAGO) to provide supplemental guidance to the environmental consideration section of the OPLAN.

3. General Exemptions. The E.O. exempts all federal agencies in the case of actions that do not do significant harm to the environment or a designated resource of global importance.²³ Further, actions taken by the

²⁰ The United States used the participating nation exclusion in contingency operations in Haiti and Bosnia. United States Forces could not use the exclusion in Somalia, however, because that country did not participate with U.S. forces in OPERATION RESTORE HOPE. Accordingly, the United States had a choice of accepting the formal environmental documentation obligations, or seeking an exemption. In OPERATION SEA SIGNAL (August 1994-February 1996), Navy personnel based at Guantanamo Bay Naval Base, Cuba and Marines from II Marine Expeditionary Force assumed the mission of feeding, housing, clothing, and caring for more than 50,000 Haitian and Cuban migrants seeking asylum in the United States), JAs quickly determined that Cuba was not a participating nation. Consequently, they considered the array of exemptions provided in DoDD 6050.7 and forwarded an exemption request based upon national security concerns.

²¹ See DoDD 6050.7, *supra* note 12, at para. E2.3.3.2. With the participating nation exclusion, the combatant commander should document this issue when approving the operations plan (OPLAN) that integrates the exclusion into its environmental considerations appendix; an exemption may require higher headquarters or Department of the Army approval. See, e.g. para E2.3.3.2.1.2. In the case of OPERATION SEA SIGNAL, the Commander, U.S. Atlantic Command forwarded a written request for exempted status for the construction and operation of temporary camps at Naval Station Guantanamo Bay, Cuba. The request was forwarded through appropriate legal channels and the Joint Staff (through the Chairman's Legal Advisor's Office) to the Under Secretary of Defense (Acquisition and Technology) for approval. The Under Secretary approved the request, citing the importance of OPERATION SEA SIGNAL to national security. See Memorandum, Lieutenant General Walter Kross, Director, Joint Staff, to The Under Secretary of Defense for Acquisition and Technology, Subject: Exemption from Environmental Review (17 Oct. 1994) [hereinafter Kross Memo]. The decision memorandum integrated into the final action informed the Under Secretary of Defense (Acquisition and Technology), the approval authority, that the CINCUSACOM had determined that Cuba was not a participating nation, and that a significant impact on the host nation environment was likely. The author of the memorandum, therefore, requested that the approval authority grant an exemption based upon the national security interests involved in the operation. *Id.*

²² See Kross Memo discussion, *supra* note 21. The entire written action was only three pages. The memorandum provided: (a) the "general rule," as required by E.O. 12114 and DoDD 6050.7; (b) the explanation of why the operation did not fall within either of the two exceptions (either an action that does not cause a significant environmental impact or involve a host nation that is a "participating" nation); and (c) the four courses of action. The courses of action provided were as follows:

- (1) Determine that the migrant camp operation has no significant impact;
- (2) Seek application of the national security interest or security exemption;
- (3) Seek application of the disaster and emergency relief operation exemption; or
- (4) Prepare a "NEPA-like" environmental review.

²³ DoDD 6050.7, *supra* note 12, at para. E2.3.3.1.1. Commands frequently do a cursory examination of the action and determine whether an action will cause significant harm. Once concluded there is no significant effect, the operations order (OPORDER) process should note this conclusion.

President, and actions taken by DoD in advising the President, are exempted.²⁴ Other important general exemptions apply to actions taken by or pursuant to the direction of the President or cabinet officer in the course of armed conflict,²⁵ where national security implications are involved,²⁶ or in disaster or emergency relief actions.²⁷

4. Additional Exemptions. The DoD is further authorized to establish additional exemptions on a case-by-case basis involving emergencies or other exceptional situations, and for class exemptions involving groups of related actions.²⁸

F. Documentation. For actions that trigger the “NEPA-like” process, the command should direct the production of either a bilateral or multilateral environmental study (ES),²⁹ or a concise environmental review (ER)³⁰ of the specific issues involved. Documentation contents and specificity will depend upon the nature of the proposed action.

IV. AUTHORITIES AT ESTABLISHED OVERSEAS INSTALLATIONS

A. If domestic U.S. law does not apply overseas, the practitioner must determine what rules do apply. The answer differs based on whether the action occurs at a fixed installation or in a deployed context, and is typically not found in the “law,” but by implementing applicable policy directives. This section briefly addresses management of fixed installations overseas.

B. Compliance.

1. DoDI 4715.05, ENVIRONMENTAL COMPLIANCE AT INSTALLATIONS OUTSIDE THE UNITED STATES (1 NOV 2013), is the authority for compliance matters, such as protection of air, water, natural resources and other environmental categories.³¹ The DoDI only applies to established installations under DoD control in foreign countries. It does not apply to off-installation operations and training, operations of military aircraft and vessels, off-installation operational and training deployments, or to contingency locations.

2. The DoDI provides for the designation of a DoD Lead Environmental Component (LEC) for specific countries and overseas geographic locations, and designates which countries require Final Governing Standards (FGS).³²

3. The DoDI establishes environmental compliance standards for protecting human health at overseas installations published as the Overseas Environmental Baseline Guidance Document (OEBGD).³³ The OEBGD is a generic document that establishes a set of objective criteria and management practices to protect human health and the environment.³⁴ As a relationship is established in a particular country, the LEC develops country specific-standards known as Final Governing Standards (FGS), which is a comprehensive set of country-specific substantive

²⁴ *Id.* at para. E2.3.3.1.2. Further actions to be taken by DoD to implement the President’s actions are not exempted, and require adherence to the Directive.

²⁵ *Id.* at para. E2.3.3.1.3. The Directive defines armed conflict as “hostilities for which the Congress has declared war or enacted a specific authorization for the use of armed forces; hostilities or situations for which a report is prescribed by section 4(a)(1) of the War Powers Resolution, 50 U.S.C. 1543(a)(1)(Supp. 1978); and other actions by the Armed Forces that involve defensive use or introduction of weapons in situations where hostilities occur or are expected.” The third prong of this definition is extremely broad, and can be useful in situations in which there is little reaction time.

²⁶ *Id.* at para. E2.3.3.1.4 (this exemption requires a determination of national security interest by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics)).

²⁷ *Id.* at para. E2.3.3.1.8.

²⁸ *Id.* at para. E2.3.3.2.1.

²⁹ *Id.* at para. E2.4. An ES is analogous to an Environmental Impact Statement (EIS) under NEPA; it contains a more in-depth analysis of the likely environmental consequences of the action, including a review of the affected environment, significant actions taken to avoid environmental harm or otherwise better the environment, and significant environmental considerations and actions by other participating entities. The ES can involve public participation and is intended to be a cooperative, rather than unilateral, action, which usually involves coordination and consultation with the foreign government.

³⁰ *Id.* at para. E2.5. An ER is more analogous to NEPA’s Environmental Assessment (EA) process; it is typically a unilateral undertaking and surveys the important environmental issues associated with the action, but it has a less involved evaluation of the issue and does not generally involve the public.

³¹ The goal of compliance is to minimize potential adverse impacts on human health and the environment while maximizing readiness and operational effectiveness. Joint Pub. 4-04, *supra* note 1, at Ch. VI-2.

³² See this Chapter, *supra* Section II.B.

³³ DoD Pub 4715.05-G, OVERSEAS ENVIRONMENTAL BASELINE GUIDANCE DOCUMENT (OEBGD) (1 May 2007).

³⁴ DoDI 4715.05, *supra* note 3, at para. E2.1.5.

provisions. The LEC determines the FGS by using the OEBGD standard unless it is inconsistent with host-nation law and the host-nation law is more protective. If the issue is not addressed in the OEBGD, the LEC must consider host-nation law.

C. Remediation.

1. Cleaning up environmental contamination attributable to our activities on DoD installations outside the territorial jurisdiction of the United States is controlled by DoDI 4715.08.³⁵ The DoDI specifically prohibits remediation to address:

a. Off installation contamination from any source unless remediation is specifically required by applicable international agreement;

b. Environmental contamination at installations approved by OSD for realignment, EXCEPT for remedial measures needed to prevent immediate exposure of US forces and personnel to environmental contamination that poses a substantial impact to human health and safety (SIHS); and

c. Contamination at installations after they are returned to the host nation UNLESS required by applicable international agreement

2. "Installations" means "enduring locations", so the DoDI does not apply to contingency locations. The DoDI does not apply to spill responses governed by DoDI 4715.05.

3. In all cases, DoD will follow applicable international agreements that require remediation. Under the DoDI, remediation is required to address a SIHS due to environmental contamination on a DoD installation that was caused by DoD activities. Remediation of contamination from non-DoD activities on DoD installations may be permissible under limited circumstances.

4. The substantial impact (SI) determination is made by the responsible in-theater Component commander, after consultation with appropriate DoD medical authority and the DoD LEC (if any). SI determination authority may be delegated to a subordinate general officer, but consultation is still required. SIHS is the only justification for remediation other than remediation required by applicable international agreement, absent extraordinary circumstances.

V. NON-ESTABLISHED OVERSEAS INSTALLATIONS.

A. In some countries and in most contingency operations, installations have not been established, and the DoDIs do not apply.³⁶ Although environmental issues often have a significant impact on operations,³⁷ there is little guidance available to guide the practitioner in advising the commander in a deployed contingency operation.

B. The Joint Operational Planning Execution System (JOPES) incorporates environmental considerations into operational planning, and devotes Annex L of the OPORDER to these issues.³⁸ While complete protection of the environment will not always be possible due to its competition with other risks and mission objectives, planners should carefully and continuously address the full range of environmental considerations in joint operations.³⁹

³⁵ U.S. DEP'T OF DEFENSE INSTR. 4715.08, REMEDIATION OF ENVIRONMENTAL CONTAMINATION OUTSIDE THE UNITED STATES (1 NOV 2013) [hereinafter DoDI 4715.08].

³⁶ DoDI 4715.5, *supra* note 3, at para. 2.1; DoDI 4715.8, *supra* note 35, at para. 2.1.3.

³⁷ Environmental issues are undeniably critical for supporting and sustaining U.S. Forces. Often overlooked is how these considerations are instrumental in helping win the "hearts and minds" of the local populace. Commanders are increasingly realizing that by ensuring a decent place to live with safe, reliable infrastructure, resources upon which to secure a livelihood, and other features of a stable society, local civilians are more likely to support the military mission. *See* U.S. DEP'T OF ARMY, FIELD MANUAL 3-34.5, ENVIRONMENTAL CONSIDERATIONS, ch.1 (Feb. 2010) (Supersedes FM 3-100.4/ MCRP 4-11B, 15 June 2000). [hereinafter FM 3-34.5]; *See also* U.S. DEP'T OF ARMY, FIELD MANUAL 3-24, COUNTERINSURGENCY, Appx. A, para. A-26 (15 December 2006).

³⁸ JOINT CHIEFS OF STAFF, STAFF MANUAL 3122.03C, JOINT OPERATION PLANNING AND EXECUTION SYSTEM VOL. II: (PLANNING FORMATS AND GUIDANCE), Enclosure C (17 Aug. 2007) (when not using JOPES, Army OPLANs/OPORDs will contain an Appendix 2 (Environmental Considerations) to Annex F (Engineer)).

³⁹ U.S. DEP'T OF DEFENSE, JOINT PUB. 3-34, JOINT ENGINEER OPERATIONS, Appx. D, Environmental Considerations (30 June 2011) [hereinafter Joint Pub. 3-34].

C. While the engineer has responsibility for development of Annex L, there is a shared responsibility with other staff elements, and the JA is a critical participant in this process.⁴⁰ To begin this effort, the JA should gather all the relevant resources and authorities that might apply in that theater of operation.⁴¹ The JA should contact the combatant command's legal advisor to determine DoD's position relative to whether any host nation law applies, obtain copies of relevant treaties or international agreements, and have a firm understanding of the Law of Armed Conflict (LOAC).⁴² If the command wishes to contact foreign governments to discuss environmental agreements or issues, the command should obtain higher headquarter permission before engaging in "formal" communications, and must coordinate with the State Department.⁴³

D. The goal of the OPORD planning process is to plan an operation that achieves mission objectives while minimizing the environmental effects and observing environmental requirements.⁴⁴ Environmental considerations are relevant in all phases of an operation, and the considerations often shift during the lifecycle of a conflict, from the pre-conflict stage, through the conflict and post-conflict stages, ending with site closure.⁴⁵ United States policy is to always conduct a good faith environmental audit to reduce potential adverse consequences to the host nation's environment.⁴⁶ Accordingly, from the planning to execution phase, the environment is an important aspect of U.S. operations.

1. Pre-Conflict Stage. During pre-deployment planning, environmental considerations are generally addressed as functions of risk, much like the application of safety considerations. The operational planning model incorporates environmental issues into each stage of the military decision-making process. The OPORD will want to reflect considerations regarding geology, hydrology, climate, environmentally sensitive ecosystems, waste management, environmental hazards, and other characteristics of the battlefield which can in turn shape the development of courses of action. Once risks are identified, they can be balanced against mission accomplishment goals, and help the commander determine how to proceed.⁴⁷

2. Conflict Stage. As the mission progresses towards operations, the level of environmental protection will vary depending on the focus of the operation. Combat operations involve less environmental protection than humanitarian operations because commanders generally weigh strategic objectives and force protection more heavily than environmental concerns.⁴⁸ All operations should implement strategies to prevent unnecessarily complicating the post-conflict phase by creating extreme environmental problems. Probably the most important consideration of environmental factors during the conflict stage involves LOAC⁴⁹ principles. While all phases of operations have LOAC concerns, this phase is perhaps the most relevant because of the targeting implications. In

⁴⁰ *Id.*

⁴¹ There are many resources to assist the JA draft and review Annex L. See, e.g. Air Force Handbook, 10-222, Volume 4, *Environmental Guide for Contingency Operation*, and the Defense Environmental Network and Information Exchange (DENIX) at www.denix.osd.mil (the "international" subject area within the DoD section of DENIX contains many of the references cited in this chapter and requires registration for full access).

⁴² See this Chapter, *infra* Sec. VI.

⁴³ DoDD 6050.7, *supra* note 12, at para. 4.4.

⁴⁴ Joint Pub. 4-04, *supra* note 1, at Ch. III, para. 4.

⁴⁵ In many operations, checklists were used to construct an environmental compliance model that took into account relevant considerations. See e.g., TRAINING CIRCULAR 3-34.489, THE SOLDIER AND THE ENVIRONMENT, Appx. A (26 Oct. 2001) (Appendix A contains a practical checklist for environmental considerations during operations; however, this is not related to a specific military operation). During OPERATION JOINT ENDEAVOR, JAs worked in conjunction with the civil engineering support elements and medical personnel to establish concise standards for the protection of host nation water sources and the management of waste. HEADQUARTERS, UNITED STATES EUROPEAN COMMAND, OFFICE OF THE LEGAL ADVISOR, INTERIM REPORT OF LEGAL LESSONS LEARNED: WORKING GROUP REPORT 3 (18 Apr. 1996).

⁴⁶ Joint Pub. 3-34, *supra* note 39, at D-1. This policy may result in U.S. Forces adhering "to U.S. domestic law standards for environmental actions where such procedures do not interfere with mission accomplishment." See CENTER FOR LAW & MILITARY OPERATIONS, THE JUDGE ADVOCATE GENERAL'S SCHOOL, U.S. ARMY, AFTER ACTION REPORT, UNITED STATES ARMY LEGAL LESSONS LEARNED, OPERATION RESTORE HOPE, 5 DECEMBER 1992 - 5 MAY 1993 (30 Mar. 1995). During OPERATION RESTORE HOPE in Somalia, the multi-national force (under U.S. leadership) determined that the actions of U.S. forces in that operation were exempted from E.O. 12114 formal review or study requirements, but the force adhered to U.S. domestic law to the greatest extent possible (defined as the extent to which such adherence did not frustrate operational success). *Id.*

⁴⁷ See FM 3-34.5, *supra* note 37, at Ch. 2 (Appendix B provides an example of a compliant Annex L).

⁴⁸ For example, a commander measures the military value of destroying an enemy's petroleum, oil, and lubricants (POL) distribution facility against the potential for polluting water supplies.

⁴⁹ U.S. DEP'T OF DEFENSE, JOINT PUB. 3-60, JOINT TARGETING, Appx. A (13 Apr. 2007) (including the LOAC principles of military necessity, unnecessary suffering, proportionality, and distinction).

general, it is lawful to cause collateral damage to the environment during an attack on a legitimate military target, but a commander has an affirmative obligation to avoid unnecessary damage to the environment to the extent that it is practical to do so consistent with mission accomplishment.⁵⁰ Given this legal duty, mission planners should consider ways to prevent or mitigate adverse environmental effects.

3. Post-Conflict Stage. Once hostilities abate, the commander's attention turns to base camp, force protection and sustainment type issues. While the U.S. domestic environmental laws and policy directives likely do not apply in this situation, they often provide valuable models for commands to follow. This stage is full of environmental issues and considerations for the JA. Mission aims and humanitarian goals may be aided by environmental improvements designed to convince the populace to support the host nation government, participate in securing their community, and contribute to reconstruction efforts.

a. Base Camp Site Selection. An early critical decision is selecting the base camp location. Troops require a safe and hazard-free location. The Environmental Baseline Survey (EBS)⁵¹ is an important tool in this selection process. The primary purpose of an EBS is to identify environmental, health, and safety conditions that pose a potential health threat to military personnel and civilians who occupy properties used by the United States. The secondary purpose is to document environmental conditions at the initial occupancy of property to prevent the United States from receiving unfounded claims for past environmental damages.⁵² Judge Advocates must also integrate a directive for documentation of initial environmental conditions into the OPLAN.⁵³

b. Environmental protection strategies apply in four broad areas of base operations (BASOPS), and should be incorporated into planning:⁵⁴

(1) Hazardous substance control.

(i) This area applies to such issues as the management of hazardous materials and oil products, disposal of hazardous waste (including pesticides, medical and infectious waste, etc.), spill prevention, containment, and response, and air emissions (e.g., burning).⁵⁵

(ii) The Basel Convention of 1989, which the United States has signed but not ratified, imposes strict rules on signatory countries with respect to the movement of hazardous waste across international boundaries.⁵⁶ The lead agency for DoD with respect to the Basel Convention is the Defense Logistics Agency (DLA). Should an operation involve potential Basel Convention issues, contact DLA.

(2) Natural habitat and wildlife protection. This can include issues regarding forests, croplands, waterways, fisheries and endangered or threatened species.

(3) Resource conservation. This includes issues such as water certification and wastewater management; pollution prevention and recycling efforts to reduce waste generation and logistic efforts; energy efficiency considerations, and noise abatement.

⁵⁰ *Id* at Appx. A, para. 8; *see also*, this Chapter, *infra* Section VI.

⁵¹ *See* FM 3-34.5, *supra* note 37, at Appx. E (listing items that should be included in an EBS and describing contents and preparation of an EBS to be placed in the OPOD); *see also* U.S. ARMY IN EUROPE REG. 200-2, ENVIRONMENTAL GUIDANCE FOR MILITARY EXERCISES (4 July 2007).

⁵² *See* Chapter 18 (Claims, Foreign & Deployment) of this Handbook.

⁵³ This was done in OPERATION JOINT ENDEAVOR and, pursuant to this directive, unit commanders took photographs and made notes regarding the status of land that came under their unit's control. As a result of this planning and execution, U.S. Forces were protected against dozens of fraudulent claims filed by local nationals. Memorandum, Captain David G. Balmer, Foreign Claims Judge Advocate, 1st Armored Division (Task Force Eagle), to Major Richard M. Whitaker, Professor, International and Operational Law, The Judge Advocate General's School, Subject: Suggested Improvements for Environmental Law of Operational Law Handbook (4 Dec. 1996) (stating that the number of claims alleging environmental damage was "fairly high, and very difficult to adjudicate in the absence of photographs taken prior to the occupation of the area by U.S. forces," and that such pictures repeatedly "saved the day when fraudulent claims were presented by local nationals").

⁵⁴ FM 3-34.5, *supra* note 37, ch. 2.

⁵⁵ *See* DoDI 4715.19, Use of Open-Air Burn Pits in Contingency Operations (15 Feb. 2011).

⁵⁶ Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal, Mar. 22, 1989, 28 I.L.M. 657. This issue presented problems for operations in the Balkans, particularly with respect to Germany and Macedonia, as well as Afghanistan. Nationaldefensemagazine.org, Hazardous Waste Disposal Complicates U.S. Deployments (July 2001), http://www.nationaldefensemagazine.org/ARCHIVE/2001/JULY/Pages/Hazardous_Waste4229.aspx.

(4) Cultural resource protection. United States Forces should respect and preserve cultural and religious resources such as buildings, religious structures, monuments, and archaeological sites whenever possible.⁵⁷

4. Base/Site Closure. Annex L of relevant OPLANs should contain guidance on environmental remediation required prior to closure or turnover of U.S.-used facilities in a deployed environment.⁵⁸ A closure survey will provide a measurement of change of the environmental conditions against an EBS, if one was completed. This process will assist in the potential adjudication of claims.⁵⁹

VI. TRADITIONAL LAW OF ARMED CONFLICT (LOAC) APPLICATION

A. During all phases of conflict and planning efforts, the JA must consider a number of LOAC treaties that impact operations and their effect upon the environment. For a more in-depth discussion of the LOAC, see Chapters 2 and 4 of this Handbook.

1. Hague Convention No. IV (Hague IV).⁶⁰ Hague IV and the regulations attached to it represent the first time that environmental principles were codified into treaty law. Hague IV restated the customary principle that methods of warfare are not unlimited (serving as the baseline statement for environmental war principles).⁶¹ Hague IV environmental protections enjoy the widest spectrum of application of any of the LOAC conventions; they apply to all property, wherever located, and by whomever owned.

a. Article 23e forbids the use or release of force calculated to cause unnecessary suffering or destruction.⁶² Judge Advocates should analyze the application of these principles to environmental issues in the same manner they would address the possible destruction or suffering associated with any other weapon use or targeting decision.

b. Article 23g prohibits destruction or damage of property in the absence of military necessity.⁶³ When performing the analysis required for the foregoing test, the JA should pay particular attention to the geographical extent (i.e., how widespread the damage will be), longevity, and severity of the damage upon the target area's environment.

2. The 1925 Geneva Gas Protocol.⁶⁴ The Geneva Gas Protocol bans the use of "asphyxiating, poisonous, or other gases, and all analogous liquids, materials, and devices . . ." during war.⁶⁵ This treaty is important because many chemicals (especially herbicides) are extremely persistent, cause devastating damage to the environment, and even demonstrate the ability to multiply their destructive force by working their way up the food chain. During the ratification of the Geneva Gas Protocol, the United States reserved its right to use both herbicides and riot control agents (RCA) in certain circumstances.⁶⁶

⁵⁷ Convention for the Protection of Cultural Property in the Event of Armed Conflict, May 14, 1954, 36 Stat. 2279, 249 U.N.T.S. 240 [hereinafter Cultural Property Convention]; *see also* 154 Cong. Rec. S9439, 9555 (daily ed. Sep. 25, 2008) (containing understandings and declarations of the United States).

⁵⁸ CENTER FOR LAW AND MILITARY OPERATIONS, THE JUDGE ADVOCATE GENERAL'S SCHOOL, U.S. ARMY, LEGAL LESSONS LEARNED FROM AFGHANISTAN AND IRAQ: Volume II, FULL SPECTRUM OPERATIONS 2 (MAY 2003 - 30 JUNE 2004), 177-79, available at <http://www.fas.org/irp/doddir/army/clamo-v2.pdf>.

⁵⁹ USCENTCOM REG. 200-2, CENTCOM CONTINGENCY ENVIRONMENTAL GUIDANCE, para. 3-2f (Appendix F contains a sample checklist for base closure).

⁶⁰ Hague Convention No. IV, Respecting the Laws and Customs of War on Land, Oct. 18, 1907, 36 Stat. 2277, 205 Consol. T.S. 277, including the regulations thereto [hereinafter Hague IV].

⁶¹ *Id.* at art. 22.

⁶² *Id.* at art. 23e.

⁶³ *Id.* at art. 23g. Most nations and scholars agree that Iraq's release of oil into the Persian Gulf while retreating from Kuwait during OPERATION DESERT STORM violated this principle. Iraq failed to satisfy the traditional balancing test between military necessity, proportionality, and unnecessary suffering/destruction. *See* Lieutenant Colonel Michael N. Schmitt, *Green War: An Assessment Of The Environmental Law Of International Armed Conflict*, 22 YALE J. INT'L L. 1 (1991).

⁶⁴ The 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 571, T.I.A.S. No. 8061 [hereinafter Gas Protocol].

⁶⁵ *Id.*

⁶⁶ *Id.* (the U.S. position is that neither agent meets the definition of a chemical under the treaty's provisions).

3. The 1993 Chemical Weapons Convention (CWC).⁶⁷ The CWC complements the Geneva Gas Protocol. Executive Order 11850⁶⁸ specifies U.S. policy relative to the use of chemicals, herbicides, and RCA, and sets out several clear rules regarding the CWC.⁶⁹ As a general rule, the United States follows the CWC's restrictions on the use of both herbicides and RCA against combatants, for example, the prohibition on use in offensive operations "in war," and requires national command authority (NCA) authorization for most other uses by armed forces.⁷⁰ In regard to herbicides, the E.O. sets out two uses that are expressly permitted, even without NCA authorization: domestic use and control of vegetation within and around the "immediate defensive perimeters" of U.S. installations.⁷¹

4. 1980 Certain Conventional Weapons Treaty (CCW).⁷² Only Amended Protocol II has environmental significance because it places restrictions on the use of mines, booby traps, and other devices. The significance of this treaty lies in the fundamental right to a safe human environment as the CCW bans the indiscriminate use of these devices.⁷³

5. The Fourth Geneva Convention (GC IV).⁷⁴ The GC IV is a powerful environmental convention, but it does not have the wide application enjoyed by Hague IV. Article 53 protects the environment of an occupied territory by prohibiting the destruction or damage of property (including the environment) only in the absence of "absolute military necessity."⁷⁵ Article 147 provides the enforcement mechanism; under its provisions, "extensive" damage or destruction of property, not justified by military necessity, is a "grave breach" of the conventions.⁷⁶ All other violations that do not rise to this level are lesser breaches (sometimes referred to as "simple breaches"). The distinction between these two types of breaches is important. A grave breach requires parties to the conventions to search out and either prosecute or extradite persons suspected of committing a grave breach.⁷⁷ A simple breach only requires parties to take measures necessary for the suppression of the type of conduct that caused the breach.⁷⁸ United States policy requires the prompt reporting and investigation of all alleged war crimes (including environmental violations), as well as taking appropriate corrective action as a remedy when necessary.⁷⁹ These obligations potentially subject Soldiers to adverse actions if they are not well-trained relative to their responsibilities under environmental operational provisions.

6. Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD).⁸⁰ Unlike all the other LOAC treaties, which ban the effect of various weapon systems upon the environment, ENMOD bans the manipulation or use of the environment itself as a weapon. Any use or manipulation of the environment that is widespread, long-lasting or severe violates ENMOD (a single element

⁶⁷ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Preamble, Jan. 13, 1993, 32 I.L.M. 800 [hereinafter CWC] (where the CWC is more rigorous than the Gas Protocol, the provision of the CWC should be followed).

⁶⁸ Exec. Order No. 11850, 40 Fed. Reg. 16187 (1975) [hereinafter E.O. 11850].

⁶⁹ *Id.*

⁷⁰ *Id.* (for example the CWC's restrictions do not apply relative to uses that are not methods of warfare).

⁷¹ *Id.* (the depth of an "immediate defensive perimeter" will be controlled by the type of terrain, foreseeable tactics of enemy forces, and weapons routinely used in the area).

⁷² Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Excessively Injurious or Have Indiscriminate Effects, Oct. 10, 1980, 19 I.L.M. 1525 [hereinafter CCW].

⁷³ *Id.* Indiscriminate use is defined as use that: is not directed against a military objective; employs a method or means of delivery that cannot be directed at a specific military objective; or may be expected to cause incidental loss of civilian life or injury to civilian objects, which would be excessive in relation to the concrete and direct military advantage to be gained. *Id.*

⁷⁴ The Geneva Convention relative to the Protection of Civilian Persons in Time of War, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135 [hereinafter GCIV].

⁷⁵ *Id.* at art. 53.

⁷⁶ *Id.* at art. 147.

⁷⁷ *Id.* at art. 146, cl. 2.

⁷⁸ *Id.* at art. 146, cl. 3.

⁷⁹ U.S. DEP'T OF DEFENSE, DIR. 2311.01E, DoD LAW OF WAR PROGRAM, para. 4.4 (9 May 2006)(Change 1, 15 Nov. 2010; certified current as of 22 Feb. 2011).

⁸⁰ The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, May 18, 1977, 31 U.S.T. 333, 1108 U.N.T.S. 151 [hereinafter ENMOD].

requirement).⁸¹ Another distinction between ENMOD and other treaties is that ENMOD only prohibits environmental modifications that cause damage to another party to ENMOD.⁸²

a. The application of ENMOD is limited, as it only bans efforts to manipulate the environment with extremely advanced technology. It is likely that simple diversion of a river, destruction of a dam, or even the release of millions of barrels of oil do not constitute “manipulation” as contemplated under the provisions of ENMOD. Instead, the technology must alter the “natural processes, dynamics, composition or structure of the earth”⁸³ Examples of this type of manipulation are: alteration of atmospheric conditions to alter weather patterns, earthquake modification, and ocean current modification (tidal waves, etc.).

b. The drafters incorporated the distinction between high versus low technological modification into ENMOD to prevent its unrealistic extension. For example, if ENMOD reached low technological activities, then actions such as cutting down trees to build a defensive position or an airfield, diverting water to create a barrier, or bulldozing earth might all be violations. Judge Advocates should understand that none of these activities or similar low technological activities is controlled by ENMOD.

c. The treaty does not regulate the use of chemicals to destroy water supplies or poison the atmosphere.⁸⁴ As before, ENMOD probably does not reach this application of a relatively low technology.⁸⁵ Although the relevance of ENMOD appears to be minimal given the current state of military technology, JAs should become familiar with the basic tenets of ENMOD. This degree of expertise is important because some nations argue for a more pervasive application of this treaty. Judge Advocates serving as part of a multinational force must be ready to provide advice relative to ENMOD, even if this advice amounts only to an explanation as to why ENMOD has no application, despite the position of other coalition states.⁸⁶

7. The 1977 Protocols Additional to the Geneva Conventions (AP I & AP II).⁸⁷ The United States has not ratified AP I or AP II; accordingly, the United States is ostensibly bound only by the provisions that reflect customary international law. To some extent, AP I, Articles 35, 54, 55, and 56 (the environmental protection provisions within AP I) merely restate Hague IV and GC IV environmental protections, and are therefore enforceable. However, the main focus of AP I protections go far beyond the previous baseline protections. AP I is much more specific relative to the declaration of these environmental protections. In fact, AP I is the first LOAC treaty that specifically provides protections for the environment by name.

a. The primary difference between AP I and the protections found with the Hague IV or GC IV is that once the degree of damage to the environment reaches a certain level, AP I does not employ the traditional balancing of military necessity against the quantum of expected destruction. Instead, it establishes this level as an absolute ceiling of permissible destruction. Any act that exceeds that ceiling, despite the importance of the military mission or objective, is a violation of the LOAC. This absolute standard is laid out in Articles 35 and 55 as any “method of warfare which is intended, or may be expected, to cause widespread, long-term and severe damage to the environment.”⁸⁸ The individual meanings of the terms “widespread,” “long-term” and “severe” damage have been debated at length. The ceiling is only reached when all three elements are satisfied (unlike the single-element requirement of ENMOD). The United States does not accept an absolute ceiling except as contemplated by ENMOD, instead preferring to employ traditional proportionality analysis.

⁸¹ *Id.* For a discussion of the meaning of these three elements (similar elements are found in Articles 35 and 55 of the 1977 Protocol I Additional to the Geneva Conventions of 1949 (AP I)), see this Chapter, *infra* Section VI.7.a & b.

⁸² *Id.* at Art. I.

⁸³ *Id.* at Art. II.

⁸⁴ *Id.* However, these types of activities would violate Hague IV and the Gas Protocol.

⁸⁵ Environmental Modification Treaty: Hearings Before the Committee on Foreign Relations, U.S. Senate, 95th Cong., 2nd Sess. 83 (1978) (Environmental Assessment).

⁸⁶ See e.g., AUSTRALIAN DEFENCE FORCE PUB. 37, THE LAW OF ARMED CONFLICT at 4-5 (1996) (Discussing general prohibition against “means and methods of warfare causing unnecessary suffering or injury, which cause widespread, long-term and severe damage to the natural environment.”)

⁸⁷ See Protocol I Additional to the Geneva Conventions, Dec. 12, 1977, 16 I.L.M. 1391, 1125 U.N.T.S. 3 [hereinafter AP I]. As mentioned in the text above, the United States has signed but not ratified AP I, and in addition has not submitted it to the Senate for advice and consent, and continues to oppose several provisions thereof. The United States embraces to varying degrees, however, a number of AP I’s articles. See Chapters 2 and 4 of this Handbook, and the LOAC DocSupp for information on the U.S. position on AP I.

⁸⁸ *Id.* at Art. 33, 55.

b. Most experts and the Commentary to AP I state that “long-term” should be measured in decades (twenty to thirty years). Although the other two terms remain largely subject to interpretation, a number of credible interpretations have been forwarded.⁸⁹ Within AP I, the term “widespread” probably means several hundred square kilometers, as it does in ENMOD. “Severe” can be explained by Article 55’s reference to any act that “prejudices the health or survival of the population.”⁹⁰ Because the general protections found in Articles 35 and 55 require the presence of all three of these elements, the threshold is set very high.⁹¹ For instance, there is little doubt that the majority of carnage caused during World Wars I and II (with the possible exception of the two nuclear devices exploded over Japan) would not have met this threshold requirement.⁹²

c. Specific AP I protections include Article 55’s absolute ban on reprisals against the environment; Article 54’s absolute prohibition on the destruction of agricultural areas and other areas that are indispensable to the survival of the civilian population, and Article 56’s absolute ban on targeting works on installations containing dangerous forces (dams, dikes, nuclear plants, etc.), if such targeting would result in substantial harm to civilian persons or property.⁹³ The United States opposes the absolute bans contemplated by each of these articles, but recognizes that many coalition allies are party to AP I and must observe their interpretations of this standard, and continues to prosecute conflicts in a way sensitive to the humanitarian and environmental concerns behind these articles—in many cases, well beyond any others’ efforts.

d. Although the foregoing protections are typically described as “absolute,” the protections do not apply in a number of circumstances. For instance, agricultural areas or other food production centers used solely to supply the enemy fighting force are not protected.⁹⁴ A knowing violation of Article 56 is a grave breach. Additionally, with respect to the three-element threshold set out in Articles 35 and 55, the standard is so high that a violation of these provisions may also be a grave breach, because the amount of damage required would seem to satisfy the “extensive” damage test set out by GC IV, Article 147.⁹⁵

8. Convention for the Protection of Cultural Property in the Event of Armed Conflict.⁹⁶ Cultural property falls within the broad spectrum of environmental law, and the United States ratified this 1954 Convention in September 2008. The Convention protects both movable and immovable objects, to include: monuments, art, archaeological sites, manuscripts, books, and scientific collections from theft, pillage, misappropriation, vandalism, requisitioning, and the export of such objects as an occupying power.⁹⁷ The Convention also requires contracting States to import protected objects, and return them upon cessation of the armed conflict, to affect the intent of the Convention.⁹⁸ Occupying powers also assume the obligations of protection just as the party State had prior to the armed conflict.⁹⁹ Judge Advocates should be aware that parties to the Convention must develop inventories of

⁸⁹ C. Pilloud, et al., International Committee of the Red Cross, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 Aug. 1949, at 410 to 420 (1987) [hereinafter Pilloud].

⁹⁰ *Id.* (Article 55 language has roughly the same meaning as the meaning of “severe” within the ENMOD Convention).

⁹¹ G. Roberts, *The New Rules for Waging War: The Case Against Ratification of Additional Protocol I*, 26 VA. J. INT’L L. 109, 146-47 (1985). Some experts have argued, however, that this seemingly high threshold might not be as high as many assert. The “may be expected” language of Articles 35 and 55 appears to open the door to an allegation of war crimes any time damage to the environment is substantial and receives ample media coverage. The proponents of this complaint allege that this wording is far too vague and places unworkable and impractical requirements upon the commander. *Id.*

⁹² See Pilloud, *supra* note 89, at 417.

⁹³ AP I, *supra* note 87, art. 54-56. *Id.*

⁹⁴ *Id.* at 652-3. However, if the food center is shared by both enemy military and enemy civilian population (a likely situation), then Article 54 permits no attack that “may be expected to leave the civilian population with such inadequate food or water as to cause starvation or force its movement.” *Id.*

⁹⁵ Report of the Secretary-General on the Protection of the Environment in Times of Armed Conflict, U.N. GAOR, 6th Comm., 48th Sess., Agenda Item 144, at 17, U.N. Doc. A/48/269 (29 July 1993) (the experts who compiled the Secretary General’s report felt that the AP I should be changed to make this point clear, that a violation of either Article 35 or Article 55, at a minimum, is a grave breach—however, this opinion did not meet with general support).

⁹⁶ Cultural Property Convention, *supra* note 57.

⁹⁷ *Id.* at Art. 1.

⁹⁸ *Id.*

⁹⁹ *Id.* at Art. 5.

protected items and have emergency plans in place in the event of an armed conflict, and also be able to recognize the symbol of the International Register indicating such protected status.¹⁰⁰

VIII. CONCLUSION.

As the forgoing discussion indicates, it is necessary to integrate environmental planning and stewardship into all phases of overseas operations. The Army JAG Corps' doctrinal source for legal operations recognizes that environmental law comprises a part of our core legal disciplines such that environmental considerations must play a role in the planning and execution of operations.¹⁰¹ In addition, environmental law issues cut across many other core legal disciplines, particularly in a deployed setting. Judge Advocates, must be aware of changes in doctrine, law, and policy in this area. Due to the specialized nature of this discipline, JA's should not hesitate to establish "reach-back" capabilities with subject matter experts (e.g. the Army's Environmental Law Division). In the end, legal advice should be based upon a complete understanding of the applicable law and policy, the client's mission, and common sense.

¹⁰⁰ *Id.* at Art. 16 ("The distinctive emblem of the Convention shall take the form of a shield, pointed below, per saltire blue and white (a shield consisting of a royal-blue square, one of the angles of which forms the point of the shield, and of a royal-blue triangle above the square, the space on either side being taken up by a white triangle.)").

¹⁰¹ FM 1-04, *supra* note 5, at paras. 5-35 to 5-36 (Jan. 2012).

APPENDIX

LAWS AND REGULATIONS

I. SUMMARIES OF SOME OF THE MAJOR DOMESTIC (U.S.) ENVIRONMENTAL LAWS

ACT TO PREVENT POLLUTION FROM SHIPS - 33 U.S.C. §§ 1901-1912. This act provides the enabling legislation that implements the protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973. The protocol is specifically designed to decrease the potential for accidental oil spills and eliminate operational oil discharges from ships at sea and in coastal waters. It contains many requirements concerning the design, construction, operation, inspection, and certification of new and existing ships. Specifically, it requires the installation of oil-water separating equipment and oil content monitors in nearly all ships, and prohibits the discharge of oil at sea.

ANTARCTIC PROTECTION ACT - 16 U.S.C. §§ 2461-2466. This legislation prohibits prospecting, exploration and development of Antarctic mineral resources by persons under U.S. jurisdiction.

CLEAN AIR ACT - 42 U.S.C. §§ 7401 *et seq.* This legislation is broken down into six subchapters, each of which outlines a particular strategy to control air pollution. Subchapter I: Control of Criteria and Hazardous Pollutants from Stationary Sources; and Enforcement of the Act; Subchapter II: Mobile Source Control; Subchapter III: Administrative Provisions; Subchapter IV: Acid Rain Control; Subchapter V: Operating Permits; and Subchapter VI: Protection of Stratospheric Ozone.

DEEPWATER PORT ACT - 33 U.S.C. §§ 1501 *et seq.* (INTERNATIONAL APPLICATION THROUGH 33 U.S.C. § 1510). This legislation regulates construction, ownership and operation of deepwater ports beyond the territorial limits of the United States, thereby protecting indigenous marine life and the coastal environment.

ENDANGERED SPECIES ACT OF 1973 - 16 U.S.C. §§ 1531 *et seq.* The purpose of this act is to protect threatened and endangered fish, wildlife, and plant species, as well as the “critical habitat” of such species.

FEDERAL WATER POLLUTION CONTROL ACT (CLEAN WATER ACT) - 33 U.S.C. §§ 1251-1376. This act controls domestic water pollution in the United States (primarily through the use of the National Pollution Discharge Elimination System (NPDES)) and also regulates wetlands.

FOREIGN ASSISTANCE ACT - 22 U.S.C. §§ 2151p-2152d. This subsection requires environmental accounting procedures for projects that fall under the act and significantly affect the global commons or environment of any foreign country.

FOREIGN CLAIMS ACT - 10 U.S.C. §§ 2734-2736. This legislation prescribes the standards, procedures and amounts payable for claims arising out of noncombat activities of the U.S. Armed Forces outside the United States.

MARINE MAMMAL PROTECTION ACT - 16 U.S.C. §§ 1361-1421h. This legislation establishes a moratorium on the taking and importation of marine mammals and marine mammal products, during which time no permit may be issued for the taking of any marine mammals nor may marine mammal products be imported into the U.S. without a permit.

MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT - 16 U.S.C. §§ 1431-1445, 33 U.S.C. §§ 1401-1445. This major Federal legislation sets out the procedures for designation of marine sanctuaries and the enforcement procedures for their protection. It also addresses application to non-U.S. citizens.

MIGRATORY BIRD TREATY ACT - 16 U.S.C. §§ 703-712. This legislation makes it illegal to “take” migratory birds, their eggs, nests, or feathers. Take includes hunting, killing, pursuing, wounding, possessing, and transporting.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) - 42 U.S.C. §§ 4321-4345. Pursuant to this act, environmental impacts must be considered before conducting any major Federal action significantly affecting the quality of the human environment.

NATIONAL HISTORIC PRESERVATION ACT - 16 U.S.C. §§ 470 *et seq.* This act provides for the nomination, identification (through listing on the National Register) and protection of historical and cultural properties of

significance. Specific procedures are established for compliance, including rules for consulting the World Heritage List or equivalent national register prior to approval of any OCONUS undertaking.

OCEAN DUMPING ACT - 33 U.S.C. §§ 1401-1445, 16 U.S.C. 1431–1447f, and 33 U.S.C. 2801–2805. This legislation regulates the dumping into ocean waters of any material that would adversely affect human health, welfare or amenities, or the marine environment or its economic potential.

OIL POLLUTION ACT - 33 U.S.C. §§ 2701 *et seq.* This act implements the provisions of the International Convention for the Prevention of the Pollution of the Sea by Oil, 1954, and amends the Federal Water Pollution Control Act. Specifically, it implements the 1969 and 1971 amendment to the International Convention.

PRE-COLUMBIAN MONUMENTS, TITLE II - REGULATION OF IMPORTATION OF PRE-COLUMBIAN MONUMENTAL OR ARCHITECTURAL SCULPTURE OR MURALS – 19 U.S.C. §§ 2091-2095. This public law prohibits the importation into the United States of pre-Columbian monumental or architectural sculptures or murals that are the product of the pre-Columbian Indian culture of Mexico, Central America, South America, or the Caribbean Islands without a certificate from the country of origin certifying that the exportation was not in violation of law.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) - 42 U.S.C. §§ 6901 *et seq.* This act (§ 6938) prohibits the export of hazardous waste without the consent of the receiving country and notification to the appropriate U.S. authorities.

II. EXECUTIVE BRANCH MATERIALS

Executive Order 12088, Federal Compliance with Pollution Control Standards, 43 Fed. Reg. 47707 (1978). The E.O. directs federal agencies to ensure that construction and operation of federal facilities overseas comply with host nation pollution control standards of general applicability.

Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, 44 Fed. Reg. 1957 (1979). The document requires Federal agencies to complete an environmental analysis upon undertaking major federal actions that significantly affect the environment outside the national boundaries of the United States.

III. DEPARTMENT OF DEFENSE DIRECTIVES/ INSTRUCTIONS/ PUBLICATIONS

DoDD 6050.7, Environmental Effects Abroad of Major Department of Defense Actions (Mar. 31, 1979, certified 5 Mar. 2004). This directive implements E.O. 12114.

DoDD 4715.12 Environmental and Explosives Safety Management on Operational Ranges Outside the United States (12 Jul. 2004) (certified current as of April 24, 2007 update). This Directive establishes policies for sustainable use and management of operational ranges located outside the United States.

DoDI 4715.4, Pollution Prevention (18 Jun. 1996) (Administrative Reissuance Incorporating Change 1, July 6, 1998). This Instruction requires all DoD components to comply with all applicable environmental laws, regulations, and standards at locations in the United States, and with applicable Executive Orders, international statutes, and Federal statutes with extraterritorial effect in the case of installations located outside the United States. Section 6.2.3 sets forth mandatory programs applicable at all DoD installations worldwide.

DoDI 4715.05, Environmental Compliance at Installations Outside the United States (1 NOV 2013). This Instruction designates a Lead Environmental Component (LEC) for specific countries/overseas geographic locations and designates which countries require Final Governing Standards. DOD establishes the parameters of the Overseas Environmental Baseline Guidance Document (OEBGD) which are used by LECs to develop FGS and the Final Governing Standards. DoD LECs are listed in Appendix to Enclosure 3.

DoD Pub 4715.05-G, Overseas Environmental Baseline Guidance Document (OEBGD) (1 May 2007). This DoD publication is issued under the authority and requirements of DoDI 4715.05. It provides criteria, standards, and management practices for environmental compliance at DoD installations overseas.

DoDI 4715.08, Remediation of Environmental Contamination Outside the United States (1 NOV 2013). This Instruction contains the procedures for remediation of environmental contamination caused by DoD activities overseas at enduring locations. It does not apply to combat or hostilities, peacekeeping missions, security assistance, relief missions, or other contingency locations.

DoDI 4715.19, Use of Open-Air Burn Pits in Contingency Operations (15 Feb. 2011). This Instruction established policy and provides procedures regarding the use of open-air burn pits during contingency operations, except in circumstances in which no alternative disposal method is feasible

DoD Joint Publication 3-34, Joint Engineer Operations (30 June 2011). This publication provides for the planning, command and control, execution, and assessment of joint engineering operations. Appendix D helpfully identifies all JOPEs Annexes and Appendices with significant environmental considerations.

DoD Joint Publication 4-04, Joint Doctrine for Civil Engineering Support (27 Sept. 2001). This publication provides the guidance and procedures necessary to plan, coordinate, and conduct timely and tailored joint civil engineering support across the range of military operations. Chapter VI discusses environmental considerations, including roles and responsibilities, requirements, planning, and contingencies.

IV. ARMY REGULATIONS, PUBLICATIONS, AND FIELD MANUALS

AR 27-20, Claims (8 Feb. 2008). Chapter 10 of AR 27-20 implements the Foreign Claims Act, thereby making claims for loss of or damage to property payable in foreign states. NOTE: Foreign states are divided among the services for claims settlement authority; thus, the Army may not be the claims settlement authority in the area of operations. The claims regulation to be followed is the service-specific claims regulation for the responsible service.

AR 200-1, Environmental Protection and Enhancement (13 Dec. 2007). This document regulates compliance with environmental standards set out in host nation law or SOFAs and supplies regulatory standards for OCONUS commanders at locations where there is an absence of host nation law or SOFA requirements.

FM 1-04, Legal Support to the Operational Army (Jan. 2012). The Army's manual for operational legal doctrine.

FM 3-34.5, Environmental Considerations (Feb. 2010) (Supersedes FM 3-100.4/ MCRP 4-11B, 15 June 2000). This Field Manual establishes and explains the principles of environmental support in full spectrum operations. Appendix B lists typical environmental considerations for the Environmental Annex to Joint OPLANs and OPORDs. Appendix C lists typical environmental considerations for the Environmental Appendix to the Engineering Annex for Army OPLANs and OPORDs.

United States Army Corps of Engineers, European District, Installation Management Agency, Europe Region Office, "You Spill, You Dig II:" An Environmental Handbook for Sustained Deployment Operations (2000). This handbook contains practical planning and environmental contamination response guidance for deployed operations.

V. NAVY REGULATIONS

OPNAVINST 5090.1C, Environmental Readiness Program Manual (30 Oct. 2007). The Instruction contains guidance to deployed commanders concerning the management of hazardous materials, the disposal of hazardous waste and ocean dumping. It also contains the Navy's implementing guidance for Executive Order 12114 and DoDD 6050.7, and sets out the factors that require environmental review for OCONUS actions.

VI. MARINE CORPS ORDERS AND REFERENCE PUBLICATIONS

MCO P5090.2A, Environmental Compliance and Protection Manual (10 July 1998) (Change 1, 22 Jan. 2008). This codification of Marine Corps environmental policies and rules instructs the deployed commander to adhere to SOFA guidance and host nation laws that establish and implement host nation pollution standards.

MCRP 4-111B. Environmental Considerations (Feb. 2010) (Supersedes FM 3-100.4/ MCRP 4-11B, 15 June 2000). See FM 3-34.5, *supra*.

VII. AIR FORCE INSTRUCTIONS

AFI 32-7006, Environmental Program in Foreign Countries (29 Apr. 1994). This Instruction contains a complete overview of the overseas environmental program for the Air Force, including cleanup, compliance, and reporting.

AFI 32-7061, The Environmental Impact Analysis Process (EIAP) (12 Mar. 2003). Now published as 32 C.F.R. 989, this regulation is the Air Force's implementing guidance for E.O. 12114 and DoDD 6050.7. It sets out service activities that require environmental documentation and the type of documentation required. For overseas EIAP, see subpart 989.37.