

塩を除く。)

- ・ 関税定率法別表第三二・〇四項に該当する物品（単一の構造式を有する炭素化合物に限るものとし、炭素の酸化物及び硫化物並びに金属炭酸塩を除く。）
 - エチルアルコール
 - メタン
 - プロパン
 - 尿素

また、「特定有機化学物質」は「有機化学物質であって、燐原子、硫黄原子又は弗素原子を含むもの」を指す。

表 2.3 毒性物質及び化学兵器

毒性物質	人が吸入し、又は接触した場合に、これを死に至らしめ、又はその身体の機能を一時的若しくは持続的に著しく害する性質を有する物質であって、施行令別表第三欄（表 3.1.3 及び表 3.1.4 「毒性物質」）に掲げる物質。
化学兵器	砲弾、ロケット弾等の兵器（施行令第 2 条）であって、毒性物質又はこれと同等の毒性を有する物質を充填したもの（その他の物質を充填したものであって、その内部で化学変化を生ぜしめ、毒性物質又はこれと同等の毒性を有する物質を生成させるものを含む）

（出典：経済産業省ホームページ

http://www.meti.go.jp/policy/chemical_management/cwc/200kokunai/202horitu_gaiyo.htm）

表 2.4 化学兵器禁止法対象物質にかかる手続き等

(1)特定物質の製造、使用、輸入等	
許 可 ・ 手 続 き 関 連	<p>① 特定物質を製造、使用する者は、経済産業大臣の許可を受けなければならない。 [法第 4 条、第 10 条] 特定物質を輸入する者は、外国為替及び外国貿易法（外為法）により承認を受けなければならない。[法第 13 条]</p> <p>② 許可使用者がその使用許可にかかる特定物質を譲り受ける場合以外は、特定物質の譲渡し、譲受けはしてはならない。[法第 15 条]</p> <p>③ 法令に基づく場合等のほか、特定物質を所持してはならない。[法第 16 条]</p> <p>④ 特定物質を運搬する場合は、都道府県公安委員会に届け出て、運搬証明書の交付を受けなければならない。[法第 17 条]</p> <p>⑤ 特定物質を使用することを要しなくなった時等は、特定物質を廃棄しなければならない。[法第 18 条]</p> <p>⑥ 許可製造者及び許可使用者は、製造/使用の実績数量等を経済産業大臣に届け出なければならない。[法第 21 条]</p> <p>⑦ 許可製造者は、日誌を備え、製造数量、保管量等を記録しなければならない。[法第 22 条]</p> <p>⑧ 特定物質が盗取され、又は所在不明となった時は、警察官又は海上保安官に届け出なければならない。[法第 23 条]</p>

	<p>(2)第一種指定物質の製造等及び使用</p> <p>第一種指定物質を次の数量を超えて製造等又は使用する者は、翌暦年の予定数量及び前暦年の実績数量を経済産業大臣に届け出なければならない。[法第 24 条、第 25 条、第 26 条]</p> <p>BZ : 1kg BZ 以外の毒性物質 : 100kg 原料物質 : 1t</p>
	<p>(3)第二種指定物質の製造</p> <p>第二種指定物質を 30t を超えて製造する者は、翌暦年の予定数量及び前暦年の実績数量を経済産業大臣に届け出なければならない。[法第 27 条]</p>
	<p>(4)指定物質の輸出入</p> <p>指定物質を輸出または輸入した者は、前暦年の実績数量を経済産業大臣に届け出なければならない。[法第 28 条]</p>
	<p>(5)有機化学物質、特定有機化学物質の製造</p> <p>有機化学物質、特定有機化学物質を次の数量を超えて製造した者は、前年の実績数量を経済産業大臣に届け出なければならない。[法第 29 条]</p> <p>有機化学物質 : 総量につき 200t 特定有機化学物質 : 一物質につき 30t</p>
国際検査	<p>事業所等に対し、経済産業省職員（申立検査の場合は経済産業省職員及び外務省職員）の立会いの下、国際検査を受け入れる義務が課せられている。[法第 30 条]</p> <ul style="list-style-type: none"> ・ 国際検査の目的は、申告（届出）情報と実際の活動との整合性の確認等である。 ・ 国際機関へ申告を行った事業所のうち、次の数量を超えて活動を行うものが、国際検査対象となる。またこれ以外に、申立検査（ある締約国からの申立てによる国際検査）がある。 <p>特定物質 : 民生活動の施設については、年間 100g</p> <p>第一種指定物質 :</p> <p> BZ : 10kg BZ 以外の毒性物質 : 1t 原料物質 : 10t</p> <p>第二種指定物質 : 200t</p> <p>有機化学物質 : 総量につき 200t</p> <p>特定有機化学物質 : 一物質につき 200t</p>
立入検査	<p>経済産業大臣は、法の施行に必要な限度において、その職員をして、特定物質の許可製造者、承認輸入者、許可使用者又は廃棄義務者に対し、立入検査を行わしめることができる。</p> <p>都道府県公安委員会は、第 17 条第 2 項の規定（運搬における特定物質の盗取等防止）の施行に必要な限度において、警察職員をして、特定物質の許可製造者、承認輸入者、許可使用者又は廃棄義務者に対し、立入検査を行わしめることができる。</p> <p>[法第 33 条]</p>
罰則	<p>次の者は、処罰される。</p> <ul style="list-style-type: none"> ・ 化学兵器を使用して、毒性物質又はこれと同等の毒性を有する物質を発散させた者 [法第 38 条第 1 項、未遂罪 ; 第 38 条第 3 項、予備罪 ; 第 40 条] ・ 毒性物質又はこれと同等の毒性を有する物質をみだりに発散させて人の生命、身体又は財産に危険を生じさせた者 [法第 38 条第 2 項、未遂罪 ; 第 38 条第 3 項] ・ 法第 3 条に違反した者 [法第 39 条第 1 項～第 3 項、未遂罪 ; 第 39 条第 4 項、第 39 条第 1 項（化学兵器製造罪）の予備罪 ; 第 41 条] ・ 第 38 条～第 41 条の国外犯 [法第 42 条] ・ 特定物質について、許可を受けずに製造、使用した者等 [法第 43 条、第 44 条] ・ ・ 特定物質又は指定物質について、必要となる届出をせず、又は虚偽の届出をした者

(出典：経済産業省ホームページ)

http://www.meti.go.jp/policy/chemical_management/cwc/200kokunai/202horitu_gaiyo.htm

3. 米国 CDC による化学物質の分類

表 3 人体へ重篤な影響をもたらす化学物質

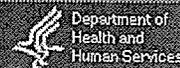
分類	特徴	化学物質等
生物毒素系	植物・動物由来によるもの	<ul style="list-style-type: none"> ・アブリン ・ブレベドキシシ (神経性貝毒) ・コルヒチン ・ジギタリス ・ニコチン ・リシン ・サキシトキシシ ・ストリキニーネ ・テトロドトキシシ ・トリコテセン
びらん剤	眼、呼吸器、皮膚にびらんを生ずるもの	<ul style="list-style-type: none"> ・マスタード類 ・ルイサイト/クロロアルシン類 ・血液剤
血液剤/シアン化物	血液を介して人体に作用するもの	<ul style="list-style-type: none"> ・砒化水素 ・シアン化物 ・一酸化炭素
腐食剤	皮膚、眼、粘膜(鼻腔・口腔・咽頭・肺)に焼け爛れを生ずるもの	<ul style="list-style-type: none"> ・フッ化水素酸
窒息剤	吸入により鼻腔・口腔・肺に炎症を生ずるもの	<ul style="list-style-type: none"> ・ホスゲン類 ・塩素
無能力化剤	身体的もしくは精神的作用により一時的な活動不能状態を生ずるもの	<ul style="list-style-type: none"> ・3-キヌクリジニルベンジラド(BZ) ・フェンタニル、その他オピオイド類
抗凝血剤	血液凝固を阻害する薬物	<ul style="list-style-type: none"> ・スーパーワーファリン
金属	・金属製の毒性を有するもの	<ul style="list-style-type: none"> ・砒素 ・バリウム ・水銀 ・タリウム
神経剤	神経伝達を阻害するもの	<ul style="list-style-type: none"> ・G 剤 (e.g. サリン(GB), タブン(GA), ソマン(GD)) ・V 剤 (e.g. VX, VE, VM, アミトン(VG))
有機溶剤	肝臓や腎臓に障害を及ぼすもの	<ul style="list-style-type: none"> ・ベンゼン

分類	特徴	化学物質等
催涙剤	眼や喉を刺激して激しい催涙効果を生ずるもの	<ul style="list-style-type: none"> ・プロモベンジルシアニド (CA) ・クロロアセトフェノン(CN) ・2-クロロベンジリデンマノロニトリル(CS) ・クロロピクリン(PS) ・ジベンゾ-1,4-オキサゼピン(CR)
有毒性アルコール	心臓、腎臓、神経伝達に障害を及ぼすもの	<ul style="list-style-type: none"> ・エチレングリコール類
嘔吐剤	制御不能の嘔吐を生ずるもの	<ul style="list-style-type: none"> ・アダムサイト(DM)

(出典 : CDC ホームページ <http://www.bt.cdc.gov/agent/agentlistchem-category.asp>)



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Strategic Partnership Program Agroterrorism (SPPA) Initiative

July 2006

First Year Status Report September 2005 - June 2006

(This document also available in [PDF](#))

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I. Executive Summary

To assist in protecting the nation's food supply, the Federal Bureau of Investigation (FBI), Department of Homeland Security (DHS), U.S. Department of Agriculture (USDA), and the Food and Drug Administration (FDA) have developed a joint assessment program, the Strategic Partnership Program Agroterrorism (SPPA) Initiative. The purpose of this initiative is to conduct a series of assessments of the food and agricultural sector in collaboration with private industry and State volunteers.

These assessments support the requirements for a coordinated food and agriculture infrastructure protection program as stated in the National Infrastructure Protection Plan (NIPP), Sector Specific Plans (SSP), and Homeland Security Presidential Directive 9 (HSPD-9), Defense of US Agriculture and Food.

SPPA assessments are conducted on a voluntary basis between one or more industry representatives for a particular product or commodity, their trade association(s), and Federal and State Government agricultural, public health and law enforcement officials. Together, they conduct a vulnerability assessment of that industry's production process using the CARVER + Shock tool. The acronym "CARVER" stands for the factors assessed: Criticality, Accessibility, Recuperability, Vulnerability, Effect, Recognizability, and Shock.

As a result of each assessment, participants identified nodes or process points of highest concern, protective measures and mitigation steps that may reduce the vulnerability of these nodes, and research gaps/needs. Discussions of mitigation steps and best practices were general in nature, focusing on physical security improvements for food processing facilities and biosecurity practices and disease surveillance for livestock.

Research gaps and needs were also identified during each assessment. Enhanced scientific capabilities can provide an early awareness of an event and permit a rapid response that could reduce the impact of an event. Identified gaps and needs include developing a better understanding of threat-agent characteristics and improved detection methodologies. Most assessments also identified improved communications between government and industry during an emergency as a key gap.

To date, the CARVER + Shock tool has produced useful distinctions between nodes of higher and lower concern for each food or agriculture production process assessed. The tool has also shown commonalities across food and agricultural industries that make them more vulnerable to attack, and generic protective measures or mitigation strategies that could be beneficial to the industries assessed.

II. Background

The Strategic Partnership Program Agroterrorism (SPPA) Initiative is a public-private cooperative effort established by the FBI, DHS, USDA, and FDA in partnership with State and industry volunteers. The intent of the initiative is to collect the necessary data to identify sector-specific vulnerabilities, develop mitigation strategies, identify research gaps and needs, and increase awareness and coordination between the food and agriculture government and industry stakeholders. To accomplish this, the SPPA brings together these Federal, State, local, and industry partners to collaboratively conduct a series of assessments of food and agricultural industries.

These assessments support the requirements for a coordinated food and agriculture infrastructure protection program as stated in the National Infrastructure Protection Plan (NIPP), Sector Specific Plans (SSP), and Homeland Security Presidential Directive-9 (HSPD-9), I.

The NIPP, SSP, and HSPD-9 all call for Federal, State, and industry partners to work together to protect the nation's infrastructure. Specifically, HSPD-9 establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. HSPD-9 directs the government to work with industry to: identify and prioritize sector-critical infrastructure and key resources; establish protection requirements; develop awareness and early warning capabilities to recognize threats; mitigate vulnerabilities at critical production and processing nodes; enhance screening procedures for domestic and imported products; and enhance response and recovery procedures.

The government requires a greater understanding of the food and agriculture industries in order to identify the critical infrastructure and then address protective measures. The SPPA initiative is a forum for government and industry officials to share information that helps in identifying sector-specific vulnerabilities, developing protective measures, identifying research gaps and needs, and increasing awareness and coordination between the industry and government.

III. Program Overview

A team of 20 to 30 participants from Federal, State and local agricultural, food, public health, and law enforcement government agencies, food and agricultural companies, and their trade associations participate in each SPPA assessment. Approximately 6 weeks prior to an assessment, the assessment leader coordinates with the industry representatives to ensure they prepare background materials that will educate the team about the particular food or commodity's production process. Shortly thereafter, participants receive training materials and background information in advance of a conference call. Approximately 4 weeks prior to the assessment, the leader hosts a conference call to explain the goals of the SPPA, train participants on the CARVER + Shock tool, and address logistical or other related questions in preparation for the assessment.

During the week of the assessment, government participants typically tour one or more facilities or production sites related to the industry being assessed. These tours aid participants in understanding the process flow prior to conducting the tabletop portion of the assessment. Following the tour(s), all participants meet for several days to conduct the CARVER + Shock assessment, which includes informational briefings and discussions of protective measures or mitigation steps and research needs.

Over the course of multiple assessments, the CARVER + Shock tool has produced a useful distinction between nodes of higher and lower concern within each food or agriculture process under consideration. The CARVER + Shock tool has performed well, considering the dynamics of 20 to 30 people with disparate backgrounds ranging from food processing and agriculture production to law enforcement, attempting to achieve consensus. The identification of nodes of higher concern and trends related to these nodes transfers well from assessment to assessment even if the specific scores resulting from individual commodity CARVER + Shock assessments may not be directly comparable with the scores determined at other assessments.

At each assessment, mitigation steps and best practices are proposed and discussed. These mitigation steps have been very general in nature. They have typically focused on physical security improvements, such as countermeasures that can be imposed or bolstered at highly accessible or vulnerable nodes. This may vary by facility and depend on the production process point, but may include cameras, additional supervision, restricting access to certain areas of a facility, color-coded uniforms or bump caps to designate work area, limits of personal items onto production floor, access cards, and process design changes.

Research gaps and needs were also identified during each assessment. These gaps and needs dealt primarily with developing a better understanding of food threat-agent characteristics (including inactivation conditions and environments), development of detection methods for threat-agents of concern, and improved communication between government and industry. Regarding threat-agents, the industry participants were most interested in how the agents survive in particular products or commodities. The topic of improved communication methods included both the dissemination of food and agriculture defense-related information to industry by government and industry modes of communication to the appropriate government agencies during an emergency.

IV. Assessment Status

Each sector specific agency (FDA and USDA) proposed lists of products or commodities within their jurisdiction that could be assessed for the SPPA program (See Table 1.) Trade associations facilitated interactions among their membership and the government participants. The order and extent of products or commodities assessed to date are based upon industry and State volunteers, as well as seasonal considerations. The list of assessments that have been conducted or scheduled to occur within one-year of the program's inception is presented in Table 2.

Table 1. USDA and FDA Site Visits Initially Proposed

USDA Proposed Site Visits	FDA Proposed Site Visits
<p>Pre-Harvest</p> <ul style="list-style-type: none"> • Aquaculture production facility • Beef cattle feedlot • Cattle stockyard/auction barn • Citrus production facility • Corn farm • Dairy farm • Grain elevator and storage facility • Grain export handling facility • Poultry farm • Rice mill • Seed production facility • Soybean farm • Swine production facility • Veterinary biologics firm 	<ul style="list-style-type: none"> • Animal by-products • Animal foods/feeds • Baby food • Breaded food, frozen, raw • Canned food, low acid • Cereal, whole-grain, not heat treated • Deli salads • Dietary supplement, botanical, tablets • Entrees, fully cooked • Flour • Frozen packaged entrees • Fruit juice • Gum arabic (ingredient) • High fructose corn syrup (ingredient) • Honey • Ice cream • Infant formula • Milk, fluid • Peanut butter • Produce • Fresh • Cut, modified atmosphere packaged • Retail setting • Seafood, cooked, refrigerated, ready-to-eat • Soft drink, carbonated • Spices • Vitamin/micro-ingredient premixes/flavors • Vitamins, capsules • Water, bottled • Yogurt
<p>Post-Harvest</p> <ul style="list-style-type: none"> • Deli meats processing • Ground beef processing facility • Hot dog processing • Import re-inspection facilities • Liquid eggs processing • Poultry processing • Retailers (further processing on-site) • School food service central kitchens 	
<p>Related Industries</p> <ul style="list-style-type: none"> • Transportation companies • Warehouses 	

Table 2. Assessments Conducted or Scheduled (Sept. 05-06)

Status	Date	Industry	Sector Specific Agency	State
Completed	11/2005	FDA	Yogurt	TN, MN
Completed	12/2005	FDA/usda	Grain - export elevators	LA
Completed	01/2006	FDA	Bottled Water	NJ
Completed	02/2006	FDA	Baby Food - jarred applesauce	MI
Completed	02/2006	FDA	Baby Food - jarred applesauce	NC
Completed	03/2006	FDA	Swine Production	IA
Completed	03/2006	FDA/USDA	Frozen Food - pizza	WI, FL
Completed	04/2006	FDA	Juice Industry - apple juice	NH

Completed	04/2006	USDA	Egg Products - liquid	PA
Completed	05/2006	FDA	Fresh-Cut Produce - bagged salads	CA
Completed	06/2006	FDA	Infant Formula	AZ
Completed	06/2006	USDA	Poultry Processing	AR
Completed	07/2006	FDA	Fluid Dairy - processing	NY
Scheduled	07/2006	USDA	Beef Cattle Feedlot	NE
Scheduled	08/2006	USDA	Ground Beef Processing	KS
Scheduled	08/2006	USDA	Cattle Auction Barn	MO, KS
Scheduled	09/2006	USDA	Dairy Farm	ID

V. General Industry-Wide Vulnerabilities

The very nature of the assessments conducted under the SPPA Initiative has been to determine the presence and extent of vulnerabilities at each node in an industry's production process (i.e., ground beef processing). Individual company participants provide perspective into industry-wide practices. When possible, this allows the results of a specific product assessment to provide insight into similar vulnerabilities that may be encountered in like-products or like-processes.

The general vulnerabilities identified over the course of many SPPA assessments have been highly dependent upon whether they are a food or agricultural product/commodity.

Food Processing

Assessments of processed foods showed a common focus on vulnerabilities that could be a means to cause harm to public health or loss of life. Economic implications of each vulnerable food processing node were significant, but overtaken by the public health implications.

In general, the nodes of highest concern for food products were those in which direct human contact with the largest amount of product (large batch sizes) was both possible and likely. The largest amount of product was typically found in containers that hold either bulk raw ingredients, or large amounts of mixed ingredients. These vulnerabilities were especially true when human access to product or ingredients is a normal operation step such as in the manual addition of secondary ingredients. Additionally, secondary ingredients are a high concern because they are usually dispersed and mixed into large amounts of product during further processing.

In sum, for processed foods, the amount of product that can be directly contacted and exploited by a terrorist usually limits vulnerabilities. Thus, large batch sizes and secondary ingredients that will be mixed with large amounts of product stand out as critical.

Agricultural Production

Agricultural products or commodities, such as live animals or plants, demonstrate different vulnerabilities. Assessments showed that readily available, highly transmissible or contagious plant and animal diseases are the greatest threat from an economic perspective. Only a single plant or animal may need to be infected to close our trading partners' borders to the product or commodity and pose a significant impact on the national economy. A zoonotic disease transmissible between animals and humans, as a threat-agent, raises the possibility for a dual impact to public health and the economy.

VI. Commonalities of Identified Mitigation Strategies

Over the course of the SPPA assessments, participants discussed numerous mitigation strategies, and best practices. The participants did not come to consensus on all identified strategies and practices, but this was a first step and further discussion can occur outside the SPPA. Where feasible, strategies unique to a product, commodity, or facility were generalized to show applicability to others. Mitigation recommendations may not, and are not, expected to apply universally to all sites. The application of mitigation recommendations, even very general recommendations, must be based on a comprehensive determination of risk for a specific site. Most participants identified the following mitigation strategies:

Physical Security Measures Based On Site-Specific Vulnerability Assessments

When possible, deterrents should be imposed or bolstered at highly accessible or vulnerable nodes. This may vary by site and depends on the production process point, but may include cameras, additional supervision, restricted access areas, color-coded uniforms or bump caps to designate work area, and limiting personal items on the production floor.

Continue to Conduct Site-Specific Vulnerability Assessments

Where practical, industry may choose to conduct site-specific assessments to learn of vulnerabilities unique to that site. This activity can build upon the SPPA assessments, which are general product or commodity assessments. All vulnerability assessments should be periodically revisited. As new tools become available, industry should experiment to find the most useful tool for their specific product, commodity, or process.

Food Process Design Changes

Process design changes, such as altering the time/temperature of a food processing step may be useful to eliminate certain threat-agents. This would require adequate information regarding the thermal stability of all possible threat-agents and any changes must provide sufficient benefit to outweigh any adverse affects on final product quality. Process design changes could also include the physical layout of a production facility (i.e., place critical nodes where employee traffic can be controlled or monitored.)

Penetration Audits

Penetration audits may be a useful tool to assess or validate security procedures. They may also be useful to validate the results of risk assessments. Penetration audits may include having an outsider attempt to access the facility or may be conducted by having a current employee attempt to access another location within the facility to see if he or she is challenged or if his or her activity is noticed and communicated to superiors.

Food and Agriculture Defense Incorporated into Procurement Selection Process

Food and agriculture defense-related parameters and Standard Operating Procedures (SOPs) could be placed in the procurement selection processes and vendor assurance programs. The goal is to assure the security of raw ingredients, and a positive side-effect would be to attain a trickle-down effect to implement food defense measures throughout the industry. For instance, producers may require that suppliers have a food defense plan and conduct food defense training.

Raw Materials Inspection

Raw materials inspections procedures could be enhanced to include an emphasis on the detection of tampering or adulteration. This could include SOPs for rejecting opened, damaged, or altered goods, and quarantine and investigation procedures.

Biosecurity Best Practices

Biosecurity and best practices for livestock and plants have encompassed two realms; protecting and isolating livestock and plants from pathogens, and mitigating the economic fallout after exposure. Discussion of best practices when dealing with protection and isolation were a cornerstone of past SPPA assessments that dealt with agricultural products or commodities. Highlighted and recurring themes include but are not limited to:

- isolating new livestock acquisitions,
- screening visitors, to include review of point of origin or recent travel locales,
- decontaminating clothing and material prior to entering and departing facility premises, and
- decontaminating materials used in the rearing process.

Additionally, industry participants should screen their water and feed suppliers, as well as transportation providers.

Best practices in a post-exposure state have received considerable attention during recent SPPA assessments. Highlighted best practices include a robust foreign animal disease (FAD) screening and detection regimen, immediate isolation of suspected FAD-infected animals, and effective depopulation and disposal practices. In addition to physical practices industry participant recognize the need for a public relations campaign designed to educate consumers and ease foreign market concerns.

Employee Peer Monitoring Programs

Companies could create or further develop employee peer monitoring programs to include an emphasis on food and agricultural defense. Employees are a valuable asset and can be utilized to increase security for little or no additional cost to a company. Examples would include "badge challenges", questioning anyone without a visible and valid company identification badge, and "location challenges", questioning peers that are found in areas not associated with their job function. Another option is to team individuals together (buddy system) so one person does not work alone at specific critical nodes. The addition of another individual that verifies and oversees the production process provides dual control during a critical step.

Awareness Training

Awareness training could be implemented to educate employees and staff about the importance of food and agricultural defense. These activities would need to be tailored to the appropriate audience at each level within an organization. Awareness training could include information regarding the implications of a terrorist attack on the U.S. food supply (including production agriculture). To further this goal, FDA and USDA offer a [free web-based course](#).

Trade Industry Group Best Practices:

More trade industry groups can encourage their members to adopt uniform food defense and agriculture security practices through guidance documents and best practices developed by industry and trade associations. Many protective measures require financial commitments from individual companies to make changes within their system or process design. Industry, in general, would prefer for trade organizations to promote the adoption of best practices.

VII. Commonalities of Identified Research Gaps and Needs

Throughout the SPPA assessments, and subsequent discussions, participants identified numerous research gaps and needs. Research gaps and needs that were highly specific for a single product or commodity have been omitted or generalized so that they are more broadly applicable. Commonly identified research gaps and needs follow.

Threat-Agent and Agent/Matrix Research:

Industry participants have expressed an interest or need for improved threat-agent information. The following agent or agent/matrix research needs were discussed by meeting participants:

- What threat-agents are applicable to food and agriculture industries, and can these lists of agents be tailored to specific products or commodities?
- Are agent inactivation temperatures, effects of environmental conditions, agent persistence, etc. known? Although it is not feasible to research the stability of all potential threat-agents against all scenarios, general threat-agent stability information in a representative variety of conditions and matrices would be useful.
- What oral dose is toxic or infectious for each threat-agent (biological and chemical)?
- What are possible or feasible ranges of terrorist capabilities for threat-agent production or acquisition?

Incident Detection and Response:

Industry participants have requested information on the detection methods currently available for applicable food and agriculture threat-agents (biological and chemical), and which of these have been validated for their specific products. The following specific questions have been asked:

- What detection methods are currently available?
- Are the methods rapid?
- What methods have been validated against particular products, commodities, or processes?
- To whom are the methods/materials available (industry, emergency responders, etc.)?

Improved Communication Channels:

There is an abundance of food defense and agriculture security information available from government websites, trade organizations, State and local health or agriculture departments, etc. The participants at several SPPA assessments have asked if it would be possible to create a single resource by consolidating these materials.

An additional communication issue was the need for simplified and uniform point-of-contact lists and procedures for suspicious incidents. Many industry and State participants requested clear protocols for whom to contact (besides local law enforcement) following a suspected contamination or terrorist event.

VIII. Commonalities of Identified Threat Indicators

Threat indicators, early warnings of a possible suspicious event or planning for an attack, have been discussed at all assessments. Participants have focused upon very general threat indicators dealing with employee vigilance and awareness. These indicators include

- Employees, visitors, vendors, and contractors, observed in areas where they have no legitimate reason to be.
- Someone expressing an unusual interest in the production process.
- Employee health patterns such as unusual absence or attendance patterns and illnesses related to particular job functions or work areas.
- Delays in deliveries, deviations from delivery schedules or evidence of product tampering.

IX. Overall Assessment Observations

Assessment Schedule

This schedule and format has worked well throughout the SPPA initiative. The pre-assessment training materials and conference call have adequately prepared participants for the assessment process and saves valuable time during the on-site assessments. The 3-4 day period provides sufficient time for completing the assessment.

X. Participant Perspective

Although much information has been exchanged during the course of these assessments, the greatest benefit may be in the enhanced communication channels that are formed during each exercise. Numerous initiatives such as this, at the Federal and State levels to partner on security efforts, are the result of a shift to working in partnership to address security issues. Exercises such as the SPPA and others have further bolstered the trust between industry and their government partners while also allowing government agencies to tap into the valuable knowledge base found in private industry.

The comments received from industry participants and trade organizations regarding the SPPA assessments have been very positive. The structure of these assessments has been somewhat informal, allowing open discussions and questions. This informal atmosphere has further improved the interactions and open communications among the industry and government participants. The fact that multiple Federal agencies are represented has also been a great advantage for industry participants. Often a single question posed by industry can be addressed by the multiple perspectives of both the Federal and State food and agriculture leads, and law enforcement agents in attendance. Having all of these voices in the same room at the same time strengthens the industry perception that all facets of the Government are working in unison to improve the safety and security of the food industry.

XI. Conclusion

It is virtually impossible to guard against all threats to the food and agriculture supply. Food and agriculture industries, like all facets of US commerce, must anticipate the possibility of a terrorist attack on their products and evaluate their preparedness and mitigation strategies to either thwart an attack or, at the very least, mitigate the damage, and recover from the economic and psychological impact of an attack. The SPPA initiative is a significant step towards hardening food and agriculture industries. This is accomplished by providing training and hands-on experience with a terrorism-focused assessment tool to industry members; by providing Federal, State, and local government an in-depth look at the vulnerabilities that may be associated with facets of the food and agriculture industries; and by increasing communication between industry, government, and law enforcement stakeholders.

Food Defense Programs - Strategic Partnership Program Agroterrorism

Food Defense and Terrorism | National Food Safety Programs

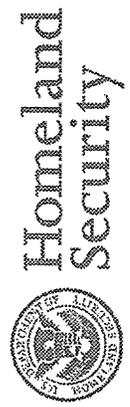
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National Response Plan

December 2004



Preface

In Homeland Security Presidential Directive (HSPD)-5, the President directed the development of a new National Response Plan (NRP) to align Federal coordination structures, capabilities, and resources into a unified, all-discipline, and all-hazards approach to domestic incident management. This approach is unique and far reaching in that it, for the first time, eliminates critical seams and ties together a complete spectrum of incident management activities to include the prevention of, preparedness for, response to, and recovery from terrorism, major natural disasters, and other major emergencies. The end result is vastly improved coordination among Federal, State, local, and tribal organizations to help save lives and protect America's communities by increasing the speed, effectiveness, and efficiency of incident management.

The NRP represents a true "national" framework in terms of both product and process. The NRP development process included extensive vetting and coordination with Federal, State, local, and tribal agencies, nongovernmental organizations, private-sector entities, and the first-responder and emergency management communities across the country. The NRP incorporates best practices from a wide variety of incident management disciplines to include fire, rescue, emergency management, law enforcement, public works, and emergency medical services. The collective input we received from our public- and private-sector partners has been, and will continue to be, absolutely critical to the implementation and continued refinement of the core concepts included in this groundbreaking national plan.

The NRP is built on the template of the National Incident Management System (NIMS), which provides a consistent doctrinal framework for incident management at all jurisdictional levels, regardless of the cause, size, or complexity of the incident. The activation of the NRP and its coordinating structures and protocols—either partially or fully—for specific Incidents of National Significance provides mechanisms for the coordination and implementation of a wide variety of incident management and emergency assistance activities. Included in these activities are Federal support to State, local, and tribal authorities; interaction with nongovernmental, private donor, and private-sector organizations; and the coordinated, direct exercise of Federal authorities, when appropriate.

The NRP is also an essential element of the broader policy coordination and reconciliation mechanisms of the Federal Government. The operational and resource coordinating structures described in the NRP are designed to support existing White House policy mechanisms and decisionmaking entities during the response to a specific threat or incident. Also, while the NRP itself creates no new authorities, it serves to unify and enhance the incident management capabilities and resources of individual agencies and organizations acting under their own authorities in response to a wide array of potential threats and hazards.

Implementation of the NRP and its supporting protocols will require extensive cooperation, collaboration, and information-sharing across jurisdictions, as well as between the government and the private sector at all levels. The Letter of Instruction included with the NRP provides specific guidance on the phased implementation of the plan. I ask for your continued cooperation and assistance as we begin the implementation process for the NRP. I look forward to working with you as we use this new foundational plan to improve our national incident management capability across the board.



Tom Ridge
Secretary
Department of Homeland Security

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Letter of Agreement

The National Response Plan (NRP) is an all-discipline, all-hazards plan that establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to State, local, and tribal incident managers and for exercising direct federal authorities and responsibilities. The NRP assists in the important homeland security mission of preventing terrorist attacks within the United States; reducing the vulnerability to all natural and manmade hazards; and minimizing the damage and assisting in the recovery from any type of incident that occurs.

By signing this letter of agreement, Federal departments and agencies and other organizations commit to:

- * Supporting NRP concepts, processes, and structures and carrying out their assigned functional responsibilities to ensure effective and efficient incident management, including designating representatives to staff interagency coordinating structures, as required;
- * Agreeing to the terms and conditions, as if separately signed, in the "Memorandum of Agreement: Mutual Aid for Incidents of National Significance (non-Stafford Act)," set forth in the Financial Management Support Annex, Attachment 3, December 2004, in the NRP (this provision is applicable only to Federal departments and agencies);
- * Providing cooperation, resources, and support to the Secretary of Homeland Security in the implementation of the NRP, as appropriate and consistent with their own authorities and responsibilities;
- Cooperating with appropriate Federal incident management leadership including the Principal Federal Official, Federal Coordinating Officer, and Federal Resource Coordinator, as appropriate and consistent with their own authorities and responsibilities, in order to enable effective and efficient incident management;
- Modifying existing interagency and agency incident management and emergency response plans to facilitate compliance with the NRP;
- * Forming and maintaining incident management partnerships with State, local, tribal, and regional entities, the private sector, and nongovernmental organizations;
- * Utilizing department- and agency-specific authorities, resources, and programs to facilitate incident management activities in accordance with the NRP; and
- Developing, exercising, and refining headquarters and regional capabilities to ensure sustained operational readiness in support of the NRP.

Signatory departments and agencies follow.

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Signatories



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Donald L. Evans
Secretary
Department of Commerce



Gale A. Norton
Secretary
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Tennessee Valley Authority



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U.S. Postal Service



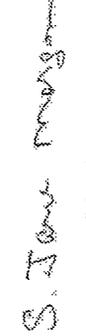
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David Hesser
Chief Executive Officer

Corporation for National and Community Service



S. Jane Morgan
President

National Voluntary Organizations Active in Disaster

Letter of Instruction

Implementation Guidance

General

The National Response Plan (NRP) is effective upon issuance with a phased implementation process during the first year. During the first 120 days of this implementation process, the Initial NRP (INRP), Federal Response Plan (FRP), U.S. Government Domestic Terrorism Concept of Operations Plan (CONPLAN), and Federal Radiological Emergency Response Plan (FRRFP) remain in effect. The implementation phases are as follows:

- * **Phase I - Transitional Period (0 to 60 days):** This 60-day timeframe is intended to provide a transitional period for departments and agencies and other organizations to modify training, designate staffing of NRP organizational elements, and become familiar with NRP structures, processes, and protocols.
- * **Phase II - Plan Modifications (60 to 120 days):** This second 60-day timeframe is intended to provide departments and agencies the opportunity to modify existing federal emergency plans to align with the NRP and conduct necessary training.
- * **Phase III - Initial Implementation and Testing (120 days to 1 year):** Four months after its issuance, the NRP is to be fully implemented, and the INRP, FRP, CONPLAN, and FRRFP are superseded. Other existing plans remain in effect, modified to align with the NRP. During this timeframe, the Department of Homeland Security (DHS) will conduct systematic assessments of NRP coordinating structures, processes, and protocols implemented for actual incidents of National Significance (defined on page 4 of the NRP), national-level homeland security exercises, and National Special Security Events (NSSEs). These assessments will gauge the plan's effectiveness in meeting specific objectives outlined in Homeland Security Presidential Directive-5 (HSPD-5). At the end of this period, DHS will conduct a 1-year review to assess the implementation process and make recommendations to the Secretary on necessary NRP revisions. Following this initial review, the NRP will begin a deliberate 4-year review and reissuance cycle.

The Secretary of Homeland Security may accelerate the implementation of the NRP if warranted by circumstances.

Requirements

This section provides specific requirements or recommendations for the Secretary of Homeland Security, Federal departments and agencies, State, local, and tribal governments, and private-sector and nongovernmental organizations (NGOs) to enable full NRP implementation.

Secretary of Homeland Security

- Within 120 days of the issuance of this plan, in coordination and consultation with other departments and agencies, the Secretary of Homeland Security will:
- * Develop and publish detailed operational procedures for the Homeland Security Operations Center (HSOC), National Response Coordination Center (NRCC), Interagency Incident Management Group (IIMG), and Joint Field Office (JFO);
 - * Identify appropriate assets and establish agreements and procedures for their rapid deployment and employment in accordance with the NRP Catastrophic Incident Supplement;
 - * Designate representatives to staff the HSOC, NRCC, and IIMG; and
 - * Develop appropriate training programs for HSOC, IIMG, NRCC, Principal Federal Official (PFO), and Federal Coordinating Officer (FCO) cadres.

Within 1 year of its effective date, the Secretary of Homeland Security will conduct an interagency review to assess the effectiveness of the NRP, identify improvements, and provide recommendations regarding plan modifications and reissuance, if required.

Federal Departments and Agencies

- As required by HSPD-5, Federal departments and agencies will:
- * Provide cooperation, resources, and support to the Secretary of Homeland Security in the implementation of the NRP as appropriate and consistent with their own authorities and responsibilities;
 - * Designate representatives to staff the HSOC, NRCC, and IIMG;

- * Carry out responsibilities assigned in the Emergency Support Function (ESF) Annexes to the NRP, developing supplemental plans and procedures as required;

- * Establish connectivity with and report incidents to the National Joint Terrorism Task Force (NJTTF), the HSOC, and the National Counterterrorism Center (NCTC) as outlined in section V (page 46) of this document; and
- * Within 120 days of the issuance of this plan, modify existing interagency incident management and emergency response plans and protocols, to the extent authorized by law, incorporating:
 - * Inhabits to key NRP processes and coordinating structures (i.e., the IIMG, HSOC, NRCC, Regional Response Coordination Center (RRCC), JFO, etc.);
 - * Principles and terminology used in the National Incident Management System (NIMS) and NRP;
 - * NRP incident-reporting requirements;
 - * Procedures for transitioning from localized incidents to incidents of National Significance; and
 - * Accelerated resource activation, mobilization, and deployment requirements outlined in the NRP Catastrophic Incident Annex.

Modifications to existing Federal interagency plans must be completed and reported to DHS within 120 days of the publication of the NRP. When it may not be feasible for plan modifications to be completed within 120 days (such as the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)), agencies must commence modification within this timeframe and provide a timeline for completion to the Secretary of Homeland Security.

State, Local, and Tribal Governments and Nongovernmental Organizations

- State, local, and tribal governments and NGOs are requested to:
- * Utilize established incident reporting protocols to notify local and regional Joint Terrorism Task Forces (JTTFs) and the HSOC, as appropriate, as outlined in section V (page 46) of this document.

The NCP is a regulation subject to notice and comment requirements. For modifications to the NCP, rulemaking activities will be commenced within 120 days of publication of this plan.

- * Coordinate with the HSOC regarding procedures for establishing connectivity for domestic incident management purposes. Local government procedures should be coordinated with the respective State government and/or emergency management agency;
- * Modify existing incident management and emergency operations plans within 120 days (or no later than the next major plan maintenance cycle) to ensure proper alignment with NRP coordinating structures, processes, and protocols;
- * Notify the Secretary of Homeland Security of any substantial conflicts between this plan and State or tribal government laws or regulations. This plan is not intended to compromise existing State or tribal government laws or corresponding incident management or emergency response plans.

Federal Regional Organizations

- Federal regional organizations will:
- * Designate representatives to the RRCC and Regional Interagency Steering Committee (RISC) at the request of the Secretary of Homeland Security;
 - * Develop regional supplements to the NRP as required; and
 - * Update existing standard operating procedures (SOPs) pertaining to the RRCC to align with NRP requirements.

Private Sector

Private-sector owners and operators, particularly those who represent critical elements of infrastructure or key resources whose disruption may have national or major regional impact, are encouraged (or in some cases required under law) to develop appropriate emergency response and business continuity plans and information-sharing and incident-reporting protocols that are tailored to the unique requirements of their respective sector or industry, and that clearly map to regional, State, and local emergency response plans and information-sharing networks.

These plans and information-sharing and reporting protocols should be consistent with the NRP Base Plan and supporting annexes.

Foreword

Organization of the National Response Plan

The National Response Plan (NRP) consists of the components depicted in Figure 1 on the following page. The paragraphs below describe each of the components.

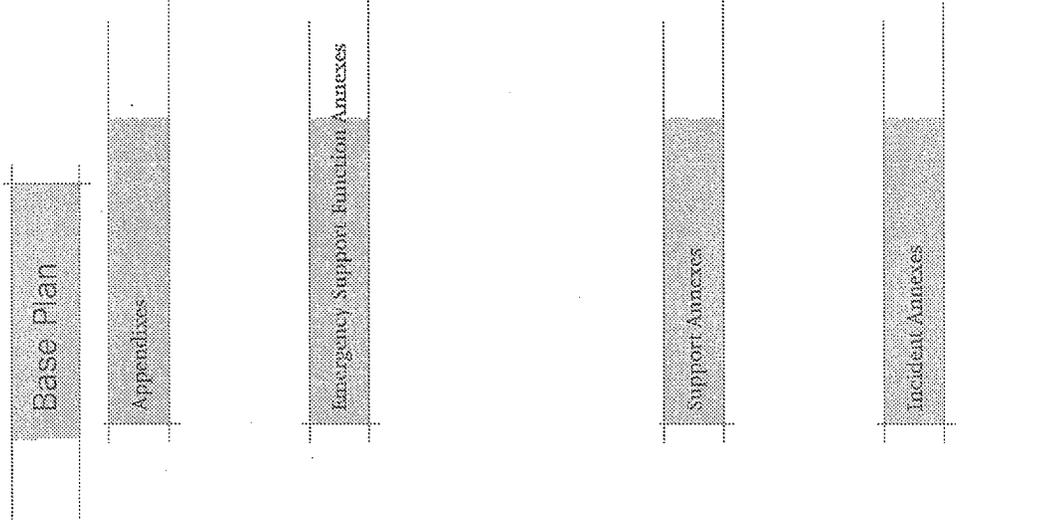
- The Base Plan describes the structure and processes comprising a national approach to domestic incident management designed to integrate the efforts and resources of Federal, State, local, tribal, private-sector, and nongovernmental organizations. The Base Plan includes planning assumptions, roles and responsibilities, concept of operations, incident management actions, and plan maintenance instructions.
- Appendices provide other relevant, more detailed supporting information, including terms, definitions, acronyms, authorities, and a compendium of national interagency plans.

- The Emergency Support Function (ESF) Annexes detail the missions, policies, structures, and responsibilities of Federal agencies for coordinating resource and programmatic support to States, tribes, and other Federal agencies or other jurisdictions and entities during incidents of National Significance. The introduction to the ESF Annexes summarizes the functions of ESF coordinators and primary and support agencies. The chart on page 12 provides a summary of the scope of each ESF.
- The Support Annexes provide guidance and describe the functional processes and administrative requirements necessary to ensure efficient and effective implementation of NRP incident management objectives. The Support Annexes are described below.

Support Annexes

- **Financial Management** provides guidance for NRP implementation to ensure that incident-related funds are provided expeditiously and that financial management activities are conducted in accordance with established law, policies, regulations, and standards.
- **International Coordination** provides guidance for carrying out responsibilities regarding international coordination in support of the Federal response to domestic incidents of National Significance.
- **Logistics Management** describes the framework within which the overall NRP logistics management function operates. It also outlines logistics management responsibilities and mechanisms for integrating Federal, State, local, and tribal resource providers.
- **Private-Sector Coordinator** outlines processes to ensure effective incident management coordination and integration with the private sector, including representatives of the Nation's Critical Infrastructure/Key Resources (CI/KR) sectors and other industries.
- **Public Affairs** describes interagency incident communications procedures designed to enable the coordination and dissemination of timely public information during incidents of National Significance.
- **Science and Technology** provides guidance and mechanisms to ensure that all levels of government can leverage the Nation's science and technology resources efficiently and effectively in the management of incidents of National Significance.
- **Tribal Relations** describes the policies, responsibilities, and concept of operations for effective coordination and interaction with tribal governments and communities during incidents of National Significance.
- **Volunteer and Donations Management** provides guidance on volunteer and donations management functions related to incidents of National Significance.
- **Worker Safety and Health** details processes to ensure coordinated, comprehensive efforts to identify responder safety and health risks and implement procedures to minimize or eliminate illness or injuries during incident management and emergency response activities.

FIGURE 1. Organization of the National Response Plan



- The Incident Annexes address contingency or hazard situations requiring specialized application of the NRP. The Incident Annexes describe the missions, policies, responsibilities, and coordination processes that govern the interaction of public and private entities engaged in

incident management and emergency response operations across a spectrum of potential hazards. These annexes are typically augmented by a variety of supporting plans and operational supplements. The Incident Annexes are described below.

Incident Annexes

- The Biological Incident Annex describes incident management activities related to a biological terrorism event, pandemic, emerging infectious disease, or novel pathogen outbreak.
- The Catastrophic Incident Annex establishes the strategy for implementing and coordinating an accelerated national response to a catastrophic incident.
- The Cyber Incident Annex establishes procedures for a multidisciplinary, broad-based approach to prepare for, remediate, and recover from catastrophic cyber events impacting critical national processes and the national economy.
- The Food and Agriculture Incident Annex describes incident management activities related to a terrorist attack, major disaster, or other emergency involving the Nation's agriculture and food systems. (To be published in a subsequent version of this plan.)
- The Nuclear/Radiological Incident Annex describes incident management activities related to nuclear/radiological incidents.
- The Oil and Hazardous Materials Incident Annex describes incident management activities related to certain nationally significant oil and hazardous materials pollution incidents.
- The Terrorism Incident Law Enforcement and Investigation Annex describes law enforcement and criminal investigation coordinating structures and processes in response to a terrorist event.

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ESF #7 – Resource Support
ESF #8 – Public Health and Medical Services
ESF #9 – Urban Search and Rescue
ESF #10 – Oil and Hazardous Materials Response
ESF #11 – Agriculture and Natural Resources
ESF #12 – Energy
ESF #13 – Public Safety and Security
ESF #14 – Long-Term Community Recovery and Mitigation
ESF #15 – External Affairs

Support Annexes

Financial Management
International Coordination
Logistics Management
Private-Sector Coordination
Public Affairs
Science and Technology
Tribal Relations
Volunteer and Donations Management
Worker Safety and Health
Incident Annexes
Biological Incident
Catastrophic Incident
Cyber Incident
Food and Agriculture Incident (to be published in a subsequent version of this plan)
Nuclear/Radiological Incident
Oil and Hazardous Materials Incident
Terrorism Incident Law Enforcement and Investigation