

**Five-Year Review Form
Old Demolition Area
Former Lone Star Army Ammunition Plant**

Name: Scott Settemeyer			
Date: April 18, 2016			
Relationship to site: TCEQ Project Manager			
Political Official <input type="checkbox"/>	Government Representative <input checked="" type="checkbox"/>	Community Member <input type="checkbox"/>	Community Group <input type="checkbox"/>
Other:			
1. What is your overall impression of the project? (general sentiment)			
Favorable <input type="checkbox"/>	Neutral <input type="checkbox"/>	Unfavorable <input checked="" type="checkbox"/>	Unfamiliar <input type="checkbox"/>
<p>Why?</p> <p>Based on a review of the August 31, 1999 EPA Record of Decision (ROD) and the April 13, 2016 Site Inspection, it appears that the Army is out of compliance with the long-term operation and maintenance (O&M) activities specified in the ROD. Several examples are included below.</p> <p>The ROD explicitly states that the appropriateness of the selected containment remedy is based on the Army having continued control of the Lone Star Army Ammunition Plant (LSAAP) and therefore, limited public access. The current and potential future uses of the site outlined in the ROD were based on the Army continuing to operate at LSAAP and maintaining a perimeter fence and security around the entire installation. However, LSAAP has since been closed and significant portions of LSAAP have been sold and are now accessible by the public. The Old Demolition Area (ODA) does not have a security fence designed to prevent public access. Therefore, it is now possible for the public to access the ODA. While a single cable wire fence may have been considered adequate to prevent Army-trained personnel from accessing the ODA, it is insufficient to warn and prevent general public access to the ODA. As an example, evidence of a deer hunting stand near groundwater monitoring well ODA-25 was noted during the site inspection. Although the deer hunting stand has since been removed, it is evidence that the ODA is not secure from the general public. Nor is there adequate signage surrounding the ODA to adequately warn the general public of the potential hazards associated with accessing the ODA. Additionally, upon inspection of the cap, there were several occurrences of animal burrows and hog rooting. These activities are destructive of the cap and are further evidence that the single cable wire fence is insufficient.</p> <p>The site inspection also identified several minor issues regarding the groundwater monitoring wells. For example, minor vegetation and/or ant mounds were noted around some of the well pads, such as at ODA-2, ODA-25, ODA-7, ODA-4, and ODA-18. Also, some of the metal caps on the well vaults do not close properly, such as on ODA-4, ODA-5, and ODA-6.</p>			

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If so, please give details.

4. Are you aware of any events, incidents, or activities at the site such as vandalism, trespassing, or emergency responses from local authorities? Yes No

If so, please give details.

During the site inspection of the cap, there were several occurrences of animal burrows and hog rooting. These activities are destructive of the cap and are further evidence that the single cable wire fence is insufficient. In addition, the recent presence of a deer hunting stand near groundwater monitoring well ODA-25 suggests that the ODA may have been accessed by the public.

5. Do you feel well informed about the site's activities and progress? Yes No

If no, then why not?

The Army has not been responsive regarding the TCEQ letters dated February 5, 2010 and January 31, 2011. The TCEQ, in conjunction with the US EPA, has communicated the issues contained in these letters to the Army on several occasions, including a site visit in September 2014 as well as a conference call in April 2015. Due to the lack of response from the Army, the TCEQ does not know how the Army intends to proceed with addressing these issues. In addition, since the transfer of the surrounding property to TAC, it does not appear that the Army is adequately engaged with the activities at the ODA. For example, the ODA is currently owned by the Army and the Federal Facility Agreement for the ODA clearly states that the Army will perform the long-term O&M for the remedial action at the ODA. However, the O&M at the ODA is being performed by Matrix Environmental, an environmental consultant for TAC. The Army does not have a contract with an environmental consultant to perform the O&M at the ODA. Therefore, it is not clear what role the Army has regarding performing the O&M at the ODA.

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operation?

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Based on the issues identified during the site inspection, the TCEQ recommends that the Army repair areas of the cap that have been damaged by the burrowing and rooting of animals and fill in low lying areas of the cap that have experienced ponding of water and have a wet subgrade. The TCEQ also recommends that the Army eliminate ant mounds, vegetation with a root structure, and any surficial rocks on the cap.

The TCEQ recommends that the Army eliminate vegetation and ant mounds present on, or adjacent to, groundwater monitoring well pads and repair the monitoring well vault caps so that they will close properly.

The existing fencing at the ODA is inadequate to prevent the public and wildlife from accessing and damaging the cap. As such, the TCEQ recommends that the Army upgrade the fence at the ODA to a structure that will be sufficient to prevent unauthorized entry from the public and prevent access by wildlife that could damage the cap. The TCEQ Superfund standard specifications for fencing is a chain link fence with 3 strands of double 12.5 gauge barbed wire incorporated on extension arms at the top of the fence. Detailed specifications for fencing at TCEQ Superfund sites can be provided upon request. In addition, the signage at the ODA should adequately warn the general public of the potential hazards associated with accessing the ODA and should include the words "explosive hazard". The signs should be placed at the entrance to the ODA and surrounding the ODA in sufficient numbers to be seen from any approach to the ODA.

The TCEQ also recommends that groundwater and surface water samples be collected and analyzed for the list of metals identified in Table 5-1 of the ROD. Also, Table 9-3 of the ROD should be updated using current toxicological information under the Risk Reduction Rules.

Also, the current deed recordation for the ODA is inadequate because it does not clearly state that the ODA is appropriate for no future use. In addition, it does not include sufficient detail regarding use limitations and maintenance requirements for the ODA. The TCEQ recommends that a superseding deed recordation, in the form of a restrictive covenant, be filed in the Bowie County real property records. A comprehensive operation and maintenance plan should be incorporated into the restrictive covenant.

In order to address the above cited recommendations, the TCEQ recommends that the ROD be re-opened and the ODA risk assessment be re-evaluated for appropriate receptors. This recommendation is consistent with Section 4.0 of the ROD. The TCEQ recommends that post-ROD changes at LSAAP and the ODA be documented in a published explanation of significant differences (ESD) in accordance with 40 Code of Federal Regulations (CFR) Section 300.435(c)(2).

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In addition, the issues identified in TCEQ letters dated February 5, 2010 and January 31, 2011 will need to be addressed as part of the 5-year review.

Interview Team:

Date:

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 31, 2011

Ross Ramsauer
BRAC Environmental Coordinator
Lone Star Army Ammunition Plant
Texarkana, Texas 75505-9101

Dear Mr. Ramsauer:

Thank you for the opportunity to review and comment on the United States Army's draft Explanation of Significant Differences (ESD) for the Old Demolition Area (ODA) at the Lone Star Army Ammunition Plant (LSAAP). Please find the Texas Commission on Environmental Quality (TCEQ) Remediation Division comments below. Please note that, throughout these comments, there will be references to the TCEQ's February 5, 2010 letter to Shawn Ghose, Remedial Project Manager, United States Environmental Protection Agency (EPA). This letter was previously mailed to you and was the subject of a conference call between the Army, the EPA, and the TCEQ on February 10, 2010. For ease of reference, a copy of that letter is enclosed with these comments.

Comment 1

Improved engineering controls, including a more substantial fence and more frequent and descriptive signage, are necessary in order to adequately secure the ODA.

The closing of LSAAP and the transfer of land surrounding the ODA to Red River Redevelopment Authority (RRRA) present a fundamental departure from the assumptions that form the basis of the ODA Record of Decision (ROD). The land use planned for the area immediately surrounding the ODA is forest management/future industrial. While a single cable wire fence may have been considered adequate to prevent Army-trained personnel from accessing the ODA, it is insufficient to warn and prevent general public access to the ODA. To the draft ESD's emphasis on the remoteness of the area and immediate plans to use the adjacent property for timber harvest, the TCEQ responds that these characteristics may well change in the future. Indeed, the Finding of Suitability for Early Transfer (FOSET) document submitted by the Army to Governor Perry on July 30, 2010 indicates that the land immediately surrounding the ODA is intended for future industrial development (FOSET page 4). The position of the TCEQ is that the current fence is inadequate to deter trespassers who are also members of the general public. Furthermore, the TCEQ questions the assertion of the draft ESD that the single cable wire fence is sufficient to prevent a vehicle's entry onto the property.

In addition, it is the position of the TCEQ that improved signage is needed at the ODA, in order to adequately warn the general public of the potential hazards associated with accessing the ODA. Signage surrounding the ODA should include the words "explosive hazard." Also, signs

surrounding the ODA should be placed at intervals no greater than 100 feet and should be reasonably sized to provide adequate notice.

Finally, the TCEQ appreciates the draft ESD's discussion of a UXO safety notification and educational program outlining the potential hazards presented by the ODA, but finds such measures to be an inadequate substitute for an appropriate fence and signage. Additionally, the TCEQ seeks clarification of how the Army proposes that educational materials will effectively reach the public. The TCEQ encourages the use of a safety notification and educational program, in conjunction with an adequate fence and signage, but takes the position that such a program can only be effective if it is adequately specific and if measures are in place for its continuity over time. Accordingly, the TCEQ requests that, prior to any transfer of the ODA, the requirements for this program be specifically explained and incorporated into the appropriate property transfer documents.

Comment 2

The ESD needs to more clearly address the Army's responsibility for conducting five-year reviews and for ensuring that the ODA remedy remains protective.

In the February 5, 2010 letter, the TCEQ requested that the Army clarify its intentions regarding the responsibility for maintenance of the cap, fencing, and signage at the ODA. The 1990 Federal Facility Agreement (FFA) for the ODA clearly states that the Army will perform the long-term operation and maintenance for the remedial action at the ODA (FFA page 44). However, the draft ESD does not clearly address this issue. The draft ESD does indicate that, "At property transfer, the Army will transfer responsibility for the maintenance of the Institutional Controls to the property recipient (RRRA)" (Draft ESD page 6). That sentence seems to indicate that the Army plans to transfer land use control functions to RRRA. However, it would appear inconsistent with the FFA for the Army to transfer its responsibility to ensure that the ODA remedy, including land use controls, remains protective. The TCEQ requests that the ESD clearly address the Army's responsibilities for ensuring that the remedy remains protective, in accordance with the FFA. In addition, the TCEQ requests that the ESD clarify that the Army remains responsible for conducting five-year reviews for the ODA.

Comment 3

The ESD needs to more clearly address groundwater monitoring, including ongoing groundwater monitoring requirements.

The draft ESD indicates, on page 4, that if current groundwater trends continue, a request will be made to discontinue groundwater monitoring. It is the position of the TCEQ that, while the frequency of groundwater monitoring may be adjusted, groundwater monitoring at the ODA must continue in perpetuity. Groundwater monitoring is a post-closure care requirement in accordance with 30 Texas Administrative Code Chapter 330, Municipal Solid Waste, which the ROD identifies as an Applicable or Relevant and Appropriate Requirement (ARAR) for the ODA. As long as waste remains in place at the ODA, groundwater monitoring and five-year reviews must continue. Such monitoring is necessary in order to continue to assess, over time, the effectiveness of the cover system at the ODA.

In addition, the TCEQ notes that it appears that not all of the explosives listed in Table 9-3 of the ROD are currently being monitored. The TCEQ requests an explanation. Additionally, ROD Table 9-3 indicated that toxicity information was, at the time of the ROD, unavailable with

respect to certain explosives. However, toxicity information is most certainly available for a number of explosives for which it was unavailable at the time of the ROD. Accordingly, the TCEQ requests that those explosives be re-evaluated and, if toxicity information is now available, that risk-based concentrations for those explosives be derived and monitoring re-initiated.

Comment 4

A comprehensive operation and maintenance plan is needed for the ODA.

In order to ensure the long-term operation and maintenance of the ODA remedy components, the TCEQ requests that the Army draft a comprehensive operation and maintenance plan for the ODA. The TCEQ requests that such a plan be submitted to the EPA and the TCEQ for review and approval prior to being finalized. The TCEQ also requests that, after review and approval by the EPA and the TCEQ, that the plan be incorporated into a restrictive covenant for the ODA. The restrictive covenant is more specifically discussed in Comment 5, below.

Comment 5

An improved institutional control document, in the form of a restrictive covenant, is necessary for the ODA.

As indicated in TCEQ's February 5, 2010 letter, it is the position of the TCEQ that the ODA is not appropriate for any future land use, and that the current deed recordation for the ODA is inadequate. The current notice is considered to be inadequate because it does not clearly state that the ODA is appropriate for no future use. In addition, it does not include sufficient detail regarding use limitations and maintenance requirements for the ODA. The TCEQ requests that a superseding deed recordation, a draft of which is enclosed with these comments, be filed in the Bowie County real property records. The TCEQ requests the opportunity to review and approve the notice before it is filed. The TCEQ also requests that the comprehensive operation and maintenance plan discussed in Comment 4, above, be incorporated into the restrictive covenant after review and approval by the EPA and the TCEQ.

Comment 6

The ESD needs to more clearly explain how future ingestion of groundwater will be prevented.

The TCEQ requests that the Army explain in the ESD how it will prevent future ingestion of groundwater. The ROD indicates that the Army will prevent ingestion of groundwater by "restricting groundwater well permits." In its February 5, 2010 letter, the TCEQ requested that the Army explain how it would fulfill this ROD requirement after the property transfer to RRRA. The draft ESD simply states that "[g]roundwater use is...restricted," (draft ESD, page 5) without explaining how it is restricted. The TCEQ requests that the ESD be revised to more clearly address this issue.

Comment 7

The draft ESD does not provide for sufficient public participation in the ESD process.

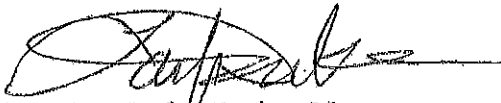
Given the potential for commercial/industrial development in the area immediately surrounding the ODA and the fact that the Army no longer controls the surrounding area and is

Ross Ramsauer
Page 4
January 31, 2011

contemplating transfer of the ODA itself, TCEQ requests that, at a minimum, the Army publish the proposed ESD and allow a minimum of 30 days for public comment. The ESD should be finalized after consideration of all comments. While the TCEQ recognizes that a public comment period is not required for an ESD, it is appropriate in this instance. As the draft ESD makes clear, Army control of LSAAP was fundamental to the ODA remedy established in the ROD. The shift from Army control and availability of the area for commercial/industrial development by non-Army personnel is significant and merits an opportunity for public comment. Further, a brief internet search of "Red River Redevelopment Authority" yielded a website discussion related to the property transfer that appears to indicate that there is public interest in the property transfer of a portion of LSAAP to RRRRA (http://www.facebook.com/note.php?note_id=405141993926). Given the fundamental change from the conditions assumed in the ROD, and the apparent public interest in the property transfer, the opportunity for public participation in this decision process is appropriate.

If you should have any questions or wish to discuss the TCEQ comments, please contact me by phone at 512-239-2443 or by email at fay.duke@tceq.texas.gov.

Sincerely,



Fay Duke, Project Manager
Superfund Section, Remediation Division
Texas Commission on Environmental Quality

FD/cw

Enclosures

cc: Mr. Shawn Ghost, Superfund Division, Texas Section (6SF-AP), USEPA Region VI

Restrictive Covenant

STATE OF TEXAS

§
§
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COUNTY OF BOWIE

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to Texas Commission on Environmental Quality (TCEQ) rules, and affects the real property (Property) described as follows:

[Insert metes and bounds description of the ODA, or a reference to an attached Exhibit A that contains the metes and bounds description. Whether or not the metes and bounds description is contained here or on Exhibit A, Exhibit A should also include a plat map of the ODA, and a certification by a registered professional land surveyor. Exhibit A should also be incorporated into the Restrictive Covenant with the phrase "attached hereto and incorporated herein by reference."]

This Restrictive Covenant is required for the following reasons:

A military landfill is contained on the Property. While the remediation plan implemented at the Property included clearing of surficially-exposed source material and placement of a soil cover, high-hazard military-specific wastes, including possibly explosive material, is contained in place on the Property. Accordingly, the Property is considered appropriate for no future use. No activity shall be conducted or permitted that would damage the integrity of the landfill cover (e.g. digging or disturbing the existing cover or contents of the landfill). No further remediation of the Property is required by the TCEQ as long as the Property is not to be used for any purpose. If any person desires in the future to use the Property for any purpose, the Army, the United States Environmental Protection Agency (USEPA), and the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for such purpose.

As part of the remediation plan, a physical control in the form of a soil cover was placed over the entire Property to prevent exposure to high-hazard military-specific wastes contained on the Property. In addition, erosion control berms were constructed on the Property. The attached Exhibit B describes the required maintenance and monitoring required for these physical controls. This program must be implemented unless and until the Army, the USEPA, and the TCEQ approve any modification.

Certain chemicals of concern have been detected in the groundwater underlying the Property. Accordingly, use of and exposure to this groundwater for any purpose is prohibited unless otherwise approved in writing by the Army, the USEPA, and the TCEQ. This Restrictive Covenant must not be removed or modified without prior approval from the Army, the USEPA, and the TCEQ.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is the United States Army, with an address of Highway 82 West, Texarkana, Texas 75505.

In consideration of response actions oversight by the USEPA and the TCEQ, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner

has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The Property shall not be used for any purpose. No activity shall be conducted or permitted on the Property that would damage the integrity of the landfill cover (e.g. digging or disturbing the existing cover or contents of the landfill).
2. The removal or modification of the physical control on the Property is prohibited without prior approval from the Army, the USEPA, and the TCEQ and the physical controls must be maintained and monitored as described in Exhibit B, or as modified by written agreement of the Army, the USEPA, and the TCEQ.
3. Use of and exposure to the groundwater underlying the Property for any purpose is prohibited unless approved in writing by the Army, the USEPA, and the TCEQ.
4. These restrictions shall be a covenant running with the land. Removal or modification of this Restrictive Covenant is prohibited without prior approval of the Army, the USEPA, and the TCEQ.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle, Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.:

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same real property records as those in which this Restrictive Covenant is filed.

Executed this _____ day of _____, _____.

[Army]

By: _____

Name: _____

Title: _____

Accepted as Third Party Beneficiary this _____ day of _____, _____.

Texas Commission on Environmental Quality

By: _____

Name: _____

Title: _____

STATE OF TEXAS

(_____) COUNTY

BEFORE ME, on this the _____ day of _____, personally appeared [name] [title], of the [owner], known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the _____ day of _____, _____.

Notary Public in and for the State of Texas,
County of _____

My Commission Expires: _____

STATE OF TEXAS

(_____) COUNTY

BEFORE ME, on this the _____ day of _____, personally appeared [name] [title], of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the _____ day of _____, _____.

Notary Public in and for the State of Texas,
County of _____

My Commission Expires: _____

EXHIBIT A
PLAT OF SURVEY

EXHIBIT B

OPERATION AND MAINTENANCE PLAN

The O&M Plan, as requested in Comment 4 of the TCEQ's 1/31/11 letter, should be contained here. The Plan should include language indicating that the O&M activities included herein shall be conducted unless modification of these requirements is approved in writing by the Army, the USEPA and the TCEQ.

Elyán W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 5, 2010

Shawn Ghose
Remedial Project Manager (RPM)
U.S. EPA Region 6 (6SF-RA)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: TCEQ Non-Concurrence to EPA's Preliminary Direct Final Notice of Deletion and Draft Notice of Intent to Delete for the Old Demolition Area (ODA) at the Lone Star Army Ammunition Plant (LSAAP); SUP 125, Texarkana, TX

Dear Mr. Ghose:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above referenced submittals. Based on our review of these submittals in conjunction with the August 31, 1999, Record of Decision (ROD), and all historical reports related to LSAAP, the TCEQ does not concur with de-listing of the ODA at LSAAP and recommends that post-ROD changes at LSAAP and the ODA be documented in a published explanation of significant differences (ESD) in accordance with 40 Code of Federal Regulations (CFR) Section 300.435(c)(2). The following text outlines the TCEQ's position. Please note that the primary driver for our position stems from the fact that, in accordance with the 2005 Base Realignment and Closure (BRAC) recommendations, LSAAP is slated to close, as well as the fact that efforts are currently underway to transfer portions of LSAAP, including the ODA, from the Army to the Red River Redevelopment Authority (RRRA) via the early transfer process per Section 120(h)(3) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

1. The selected remedy in the 1999 ROD was containment, through capping of the 17.4 acre ODA, with restricted access via an Army owned and controlled LSAAP, of which the ODA is an included parcel. This concept is explicitly denoted in several sections throughout the ROD. Two pertinent citations were identified, one on page D-4, under "Description of the Selected Remedy", which states *"Other practical considerations in the selection of the containment remedy for the ODA are based on current control/use of land and future land reuse plans. The appropriateness of the selected containment remedy is based on: the Army having continued control of LSAAP, and therefore, limited public access, land use at LSAAP remaining commercial/industrial, the land remaining in control of the Army until LSAAP is closed completely as decreed by the Army Headquarters at Rock Island, IL. EPA, TNRCC, and the Army agree that should any of the listed land uses change, the ROD would be re-opened and the ODA risk assessment would be re-evaluated for appropriate receptors."*

The second citation can be located in Section 4.0 on page DS-8 to DS-9, which stipulates that *"The selected remedy is based on continued Army control of LSAAP, and therefore, limited public access. The Army Headquarters at Rock Island, IL has decreed that the land will remain in control of the Army until LSAAP is closed completely. If LSAAP is closed or if land use is*

proposed to change from commercial/industrial, the ROD would be re-opened and the ODA risk assessment would be re-evaluated for appropriate receptors."

It is the position of the TCEQ that the closure of LSAAP presents new information that could affect the implementation of the remedy selected in the ROD or could prompt the reassessment of that remedy (See A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, Section F, Chapter 7, EPA 540-R-98-031). Accordingly, the TCEQ requests that this new information be addressed through a formal ESD process. The TCEQ also requests an opportunity to review and comment on drafts of the ESD prior to publication.

2. 40 Code of Federal Regulations 300.425(e) of the National Contingency Plan (NCP) lists two delisting criteria applicable to federal facilities: one, the remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate, and second, the responsible parties or other persons have implemented all appropriate response actions required. The TCEQ does not consider the ODA to have achieved either of these conditions. This conclusion draws, in part, from the exposure assessment conducted by the Army which eliminated physical contact with munitions and explosives of concern (MEC) as a complete exposure pathway based on the facility being staffed with trained Army personnel. This is succinctly stated in the ROD, Section 7.1.5, page DS-19, which states the following: *"Examining potentially incomplete pathways - Two pathways, physical contact with and ingestion of chemicals directly on the ordnance debris, were considered to be incomplete by the Army. Therefore, they were not examined in the risk assessment. The Army considered these pathways incomplete because both the future worker and recreational visitor identified for the Study Area are employees of LSAAP. Employees of LSAAP are educated in the potential health and safety risks associated with contact with explosive ordnance debris and would not touch or ingest ordnance debris. The EPA and TNRCC consider this pathway to be complete. However, because the selected remedial action removes exposed ordnance debris and institutes erosion control, this remedy is considered by EPA and TNRCC to be a best management practice against direct contact with ordnance debris."* The TNRCC, predecessor agency to the TCEQ, may have considered this remedy to be a best management practice against direct contact with ordnance debris under the terms of the ROD (i.e., with the explicit provision that the ROD would be reopened upon closure of LSAAP or upon the Army having continued control over LSAAP). However, given the fact that the Army will no longer be in a position to educate, in the manner contemplated by the ROD, those who would access the ODA, these exposure pathways should be re-evaluated in the ESD.
3. In addition to comment number 2, the exposure assessment only considered chemical not explosive risk to human health. As only superficially exposed MEC was removed prior to capping, there could potentially only be two feet of cap material separating unauthorized persons from direct physical contact with MEC with unknown explosive capacities at a landfill classified as containing "high-hazard military-specific wastes" (LSAAP ROD, Page DS-22). This point is further supported by the September 29, 1989, Dames & Moore, Feasibility Study Report, Section 2.2.2, pages 2-6 to 2-9, which acknowledges that "metal objects of different sizes and weights do exist in the near-surface soils." As a result, the TCEQ requests that, through the ESD process, the exposure assessment be expanded to include explosive risk to human health.

4. ROD, Section 3.0, page DS-8 states that the public had no objections to the proposed remedy. However, given the ROD provisions summarized above, it is likely that the public's understanding of the proposed remedy involved the ownership and control of the LSAAP residing with the Army. Therefore, it would be appropriate to provide an opportunity for public notice and comment, as well as a public meeting, to address the closure of LSAAP, the potential transfer of LSAAP from the Army to the RRRA, and the implications of these changes for the ODA remedy. While the ESD process under §300.435(c) of the National Contingency Plan does not require an additional public comment period and a public meeting for an ESD, EPA guidance indicates that, in some cases, opportunity for both may be voluntarily provided in accordance with 40 CFR Section 300.825(b) (A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, Section F, Chapter 7, EPA 540-R-98-031, Page 7-5). The TCEQ requests both an additional comment period and a public meeting to ensure adequate stakeholder involvement.
5. The existing cable wire fence is considered an inadequate barrier to restrict access under civilian ownership, i.e., the RRRA. As explained above, the remedy established in the ROD (including a single cable-wire fence) is premised on the Army's ability to limit ODA access to Army-trained personnel. It is the TCEQ's contention that the LSAAP BRAC listing and efforts to transfer the property to civilian ownership compromises this fundamental basis of the remedy. Accordingly, a more substantial fence is needed to prevent access to the ODA and ensure protection of human health from explosive hazards.
6. It is not clear who will be responsible for maintaining the cap, fencing and signage at the ODA. However, the Federal Facilities Agreement (FFA) for LSAAP specifies that these maintenance activities are the responsibility of the Army, even in the event of a change in ownership at LSAAP (LSAAP FFA pages 44 and 54). In addition, 30 Texas Administrative Code (TAC) Section 330.463, related to municipal solid waste, requires the maintenance of these physical controls. This provision is an Applicable or Relevant and Appropriate Requirement of the ROD. Please identify in the ESD how cap, fencing, and signage maintenance requirements will be met following property transition.
7. The groundwater data in monitor well, ODA-5 for 4-amino-2, 6-dinitrotoluene, was greater than the compliance goal set forth in the ROD for the March 2008 and July 2009 sampling events. This exceedance should have required an evaluation of the data to determine its stability as ODA-5 is an unbounded down-gradient well. In addition, the 5-year review states, on page 14, #5, "*Recommend, when the ROD is reopened, to reexamine the compliance criteria. Currently the ROD does not clearly address termination of groundwater monitoring when the compliance criteria have been achieved...*" This appears to present another area where further documentation is necessary to identify how and why cessation of groundwater monitoring can occur. It is the TCEQ's position that the long term monitoring data do not represent an increasing trend and are considered stable. A trend analysis should be conducted and documented in the ESD in an overall effort to justify closure of groundwater monitoring activities.
8. In relation to cessation of groundwater monitoring, the ROD states, on page DS-36, that future ingestion of groundwater within the study area will be prevented by the Army restricting

Shawn Ghose
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groundwater well permits. ("The Army will restrict the potential installation of production water wells in this area through the use of a well permitting program implemented by LSAAP environmental personnel. Through such an on-site permitting program, the Army will be able to control and thereby restrict the drilling of wells in designated areas such as the ODA." Based on the current expectation of the Army divesting the ODA it is unclear how this measure will be implemented. Please describe in the ESD how this ROD provision will be met.

9. It is the position of the TCEQ that the ODA is not appropriate for any future land use. Please confirm this understanding and explain, through the ESD process, how this will be achieved, especially in light of TCEQ's understanding that RRRRA has indicated that the area surrounding and including the ODA may be used for commercial/industrial use in the future.
10. Finally, the existing institutional control is ambiguous with regard to future land use in the ODA and should be revised and a new document filed in the county real property records. Please provide deed language to the TCEQ for approval prior to filing.

Please note that the TCEQ is not, at this time, requesting a change in remedy for the ODA. It would appear, from the explicit language of the ROD, that some level of re-assessment of the remedy is necessary given the developments of the LSAAP BRAC listing and current efforts to transfer the LSAAP property to RRRRA. The TCEQ is open to discussion of possible alternatives in an effort to identify a path forward that would be mutually agreeable to EPA, Army and TCEQ, and that would adequately address TCEQ's concerns regarding de-listing.

Please note that these comments represent a starting point to ultimately reach the common goal of de-listing at the ODA.

Please call me at (512) 239-4977 if you need additional information or wish to discuss any site related matters. Thank you for your cooperation.

Sincerely,



Ronald Dildine, Project Manager
Team 3, Superfund Section
Remediation Division
Texas Commission on Environmental Quality

RD/ow

cc: Courtney Sprague, TCEQ Office of Legal Services, Litigation Division
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