



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

**MAY 12 2011**

**ENFORCEMENT ACTION MEMORANDUM**

**SUBJECT:** Request for Approval for Removal Action at the Welch Group Environmental (WGE) Belton Site, Anderson County, South Carolina

**FROM:** Leo Francendese, On-Scene Coordinator  
Emergency Response and Removal Branch

**THRU:** Shane Hitchcock, R4 Chief  
Emergency Response and Removal Branch

**TO:** Franklin E. Hill, Director  
Superfund Division

**SITE ID:** B4E7

**I. PURPOSE**

The purpose of this Action Memorandum is to request and document approval of a proposed time-critical removal action described herein for the Welch Group Environmental Belton Site (the Site) in Anderson, Anderson County, South Carolina. The release of hazardous substances at the Site poses a threat to public health and the environment pursuant to Section 104(a) of CERCLA and the conditions at the Site meet the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Section 300.415(b)(2) criteria for removal actions.

This action will be implemented under an Administrative Order and Agreement on Consent (AOC) with the Welch Group Environmental (WGE) and David B Jones under Sections 104(a), 106(a), and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. This removal action involves the removal, processing, and disposal of lead contaminated debris, wastes, structures and soil constitutes a release.

**II. SITE CONDITIONS AND BACKGROUND**

**Site Specific ID Number:** B4E7  
**Removal Category:** Time-Critical Removal Action  
**CERCLIS ID:**

## **A. Site Description**

This section of the Action Memorandum provides a description of the Site conditions and relevant background information.

### **1. Removal Site Evaluation**

The WGE Belton Site is part of the Welch Group Environmental (WGE) CERCLA response sites. WGE operated a business that recovered lead and other metals from spent munitions gathered from firing ranges around the Southeast.

The Site was referred to the EPA on December 22, 2010 by the South Carolina Bureau of Land and Waste Management (SCDHEC). The SCDHEC referral letter is in Attachment A. A summary of the laboratory data is presented in Attachment C. The soil XRF and the lead soil concentration maps are presented in Attachment B.

On January 31, 2011, the EPA On-Scene Coordinator (OSC), SCDHEC, START, the property owner (David Jones), and WGE (Glenn Welch) conducted a removal site inspection (RSI). The full RSI report is included as Attachment D.

According to Mr. Welch, WGE has been operating at this location for approximately 14 months. WGE used this location for material separation of recovered range materials. After material separation, the lead material was transported to the Fair Play, South Carolina location for smelting. The second on-site warehouse building was used for storage of un-recovered bullets that were still embedded into the rubber resin bullet trap.

Numerous drums and open containers in compromised conditions with high lead level contaminated materials were present on the property. In addition, surfaces within the building and soils on the property had high levels of lead contamination.

On February 1, 2011, the OSC directed the PRP to conduct an emergency response action to secure the site, construct site soil/sediment containment measures and inventory and secure site wide containers. Emergency response was completed on February 18<sup>th</sup>.

### **2. Physical Location**

The Site is located in Anderson, Anderson County, South Carolina. The geographic coordinates are 34° 31' 24.12" North latitude and 82° 59' 28.73" West longitude. The topographic map is presented in Attachment B. The Site is comprised of two one-story buildings, and the property extent is approximately 3 acres.

### **3. Site Characteristics**

The Site is industrial in nature and has been secured by fencing. The Site is bordered by Belton Highway to the north, a cemetery to the east, agricultural land to the south, and woods to the west. An aerial image of the site is included in Attachment B. Topographically, the Site drains

generally to the southwest. Anderson County had a total population of 184,901 in 2009. The county is primarily rural with small municipalities comprising the county.

The property is owned by Mr. David Jones and leased to Glenn Welch, WGE. WGE operations are involved in recovering lead from both indoor and outdoor shooting ranges across the United States.

#### **4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant**

Lead is a hazardous substance as defined under Section 101 (14) of CERCLA and listed in Title 40 of the Code of Federal Regulation (CFR), Section 302.4. Lead is present at high levels in soils as well as vessels/drums, various equipment, and facility floors.

#### **5. NPL Status**

The Site is not on the National Priority List.

#### **6. Maps, Pictures, and Other Graphic Representations**

All removal file information, including data, maps and aerial photos of the Site, will be maintained by the PRP and the EPA On-Scene Coordinator (OSC). These files can be viewed on the EPA OSC webpage, <http://www.epaosc.org>

### **B. OTHER ACTIONS TO DATE**

#### **1. Previous Actions**

As indicated above, emergency removal measures were initiated at the direction of the OSC. The PRPs hired a qualified contractor to perform the emergency response actions. Both a health and safety plan (HASP) as well as removal action work plans (RAWPs) have been submitted and approved by the OSC in consult with SCDHEC. Emergency response work was completed on February 18, 2011. The work included securing the site, stabilizing/containing lead process material vessels (ie drums and containers) and constructing sediment erosion measures.

The removal site inspection (RSI) was completed on March 7, 2011 with a subsequent removal site evaluation (RSE) recommendation for further action. A copy of the WGE Belton RSI report is included in Attachment E.

The OSC will continue to coordinate enforcement activities with SCDHEC. In addition, the OSC is coordinating with EPA R4 RCRA to assure that WGE proposed gun range recovery activities meet with applicable federal RCRA standards.

#### **2. Current Actions**

On February 17, 2011, the OSC requested that the PRP prepare the following plans for WGE Belton:

- Waste Characterization Plan (re. sampling) in order to gather the necessary information for an eventual Disposal/Recycling Options Analysis.
- Decontamination/Demolition Plan for remaining debris and structures exceeding the lead cleanup criteria.
- Soils Removal and Disposal Plan for soils exceeding the cleanup criteria.

The OSC is currently assisting the PRP by reviewing proposed RAWPs.

## **C. STATE AND LOCAL AUTHORITIES' ROLE**

### **1. State and Local Actions to Date**

SCDHEC ordered the cessation of operations on December 2, 2010. SCDHEC referred the Site to EPA Region 4 Emergency Response and Removal Branch (ERRB) for a RSE on December 22, 2010. A copy of the SCDHEC referral letter can be found in Attachment D.

The OSC began the RSI component of the RSE during the week of January 31, 2011 and is coordinating enforcement efforts with SCDHEC using CERCLA response authority. In coordination with Air, Waste and Land Management, Site Evaluation, and Region 1 programs at SCDHEC, the OSC directed the potentially responsible parties (PRPs) to secure the locations, contain and secure open vessels/drums and construct a sediment/soil containment measure such as silt curtain and hay bales where appropriate. This emergency response action was completed by February 18, 2011. A copy of the WGE Belton daily progress report (DPR) is included in Attachment E.

### **2. Potential for Continued State and Local Response**

EPA will continue to play a large role in the response activities at the Site and will continue to oversee activities under the AOC. EPA will coordinate with the State to ensure they are apprised of all progress made under the Administrative Order and Agreement on Consent.

## **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

Conditions resulting from the vessels and drums in disrepair, lead contaminated surfaces and debris as well as contaminated soil/sediment at WGE present a substantial threat to the public health or welfare and the environment if not properly managed and meet the criteria for a time-critical removal action as provided for in the NCP Section 300.415(b)(2). The primary criteria include:

- **Section 300.415(b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:**

The contaminated soil, vessels in disrepair and contaminated structure surfaces and debris presents a potential human exposure threat through direct contact, runoff, and/or air migration.

- **Section 300.415(b)(2)(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate:**

The contaminated soil presents a potential threat of migration.

#### **IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare or the environment.

#### **V. PROPOSED ACTION**

##### **A. Proposed Actions**

The proposed actions listed below have been developed in coordination with the SCDHEC, EPA and the PRP. These actions are designed to promote public welfare by removing and/or remediating lead contaminated debris, wastes, contaminated structures and soil. Removal action work plans will be developed by the PRP to implement the actions described below.

##### **1. Proposed Action Description**

The time critical removal action will execute the proposed actions:

- Implement an approved Health and Safety Plan
- Implement an approved Dust Monitoring and Management Plan
- Implement an approved Decontamination/Demolition Plan
- Implement an approved Soils Remediation Plan
- Implement an approved Waste Disposal Plan

##### **2. Contribution to Remedial Performance**

The proposed removal action will address the threats discussed in Section III, which meet the NCP Section 300.415(b)(2) removal criteria. The removal action contemplated in this Action Memorandum is consistent with potential future remedial actions that are anticipated at the Site.

##### **3. Description of Alternative Technologies**

The use of alternative technologies is not anticipated. The PRP will submit to the OSC for evaluation, a technical memorandum documenting the evaluation of best management practices and available technologies concerning treatment if any treatment is to be considered.

##### **4. Engineering Evaluation/Cost Analysis (EE/CA)**

This proposed action is a time-critical removal and does not require an EE/CA.

## **5. Applicable or Relevant and Appropriate Requirements (ARARs)**

This action is being conducted as a time-critical removal action. Pursuant to the NCP, removal actions conducted under CERCLA are required to attain ARARs to the extent practicable, considering the exigencies of the situation. Waivers described in 40 CFR 300.430 may also be used for removal actions. Potential ARARs for this Site include portions of RCRA Subtitle C and DOT requirements for management and shipment of hazardous waste, respectively. All wastes transferred off-site will comply with the CERCLA Off-Site Rule pursuant to CERCLA 121(d)(3) and 40 CFR 300.440.

### **A. Project Schedule**

Removal activities began as an emergency action under the direction of the OSC. A removal action work plan will be developed to provide more details on the anticipated productivity of the removal and disposal, both of which will impact the schedule.

### **B. Estimated Costs**

Estimated costs are not included as this removal action is anticipated to be implemented as an enforcement-lead action.

## **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Failure to conduct this action in a timely manner increases the likelihood of human health exposure.

## **VII. OUTSTANDING POLICY ISSUES**

There are no outstanding policy issues.

## **VIII. ENFORCEMENT**

This action is being undertaken pursuant to an AOC between WGE, David B. Jones and EPA.

## **IX. REFERENCES**

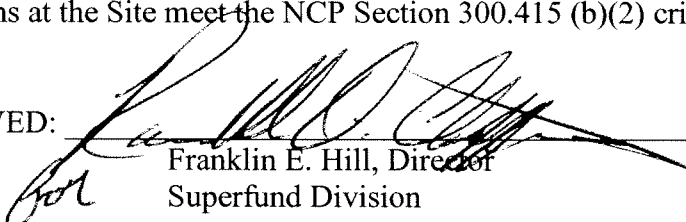
[http://www.epaossc.org/site/site\\_profile.aspx?site\\_id=6664](http://www.epaossc.org/site/site_profile.aspx?site_id=6664)

## X. RECOMMENDATION

This decision document represents the selected removal action for the Welch Group Environmental Belton Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan (NCP). The document is based on the administrative record for the Site.

Conditions at the Site meet the NCP Section 300.415 (b)(2) criteria for a time-critical removal action.

APPROVED: \_\_\_\_\_

  
Franklin E. Hill, Director  
Superfund Division

DATE: \_\_\_\_\_

5/12/11

DISAPPROVED: \_\_\_\_\_

Franklin E. Hill, Director  
Superfund Division

DATE: \_\_\_\_\_

Attachments







December 22, 2010

Via email and US Mail

Mr. Jim McGuire, Chief,  
Removal Operations Section  
US EPA, Region IV  
61 Forsythe Street  
Atlanta, Georgia 30303-3104

RE: Welch Environmental Group Sites  
Welch – Fair Play, SC Site  
Welch – Belton, SC Site

Dear Mr. McGuire:

The purpose of this letter is to formally refer the Welch/Fair Play site and the Welch/Belton sites to EPA's Emergency Response and Removal Branch for consideration of a CERCLA removal action. The Welch/Fair Play Site, is located at 170 Feltman Farm Rd. Fair Play, SC (34.523322°N, -82.991355°W) and the Welch/Belton site is located at 5043 Belton Hwy, Anderson, SC 29621(34.483261°N, -82.563679°W).

The PRP, Welch Environmental Group, operates a business that recovers lead and other metals (copper primarily) from spent munitions at firing ranges gathered from ranges around the southeastern U.S., and then melting the lead into ingots. The melting operations took place at the Welch/Fair Play site. Slag materials are present there as well as at the Belton site. The Belton site was where separation operations were carried out. In addition several hundred drums of salt formulations from a different business venture of Mr. Welch's are present, many of which are uncovered.

These activities were being conducted without any DHEC issued permits.

Blood lead levels in employees at both sites (not including Mr. Welch whom declined) were collected and all 10 were found to have significantly elevated lead levels.

The PRP has been told to shut down all lead recovery operations as of December 2, 2010.

The State Superfund Program is requesting that EPA perform a removal site evaluation at each of these sites to determine if either site qualifies for a federal removal action. The Department would like to participate in any activities and requests that you or your OSC provide us notice of any site visits and removal activities, or any community engagement..

Attached is some supporting information. Attachment I is a timeline of DHEC events as they unfolded with photos of both sites. Attachment 2 has site maps for each. We have additional site photos and field and lab analytic data available as you may need it. DHEC has also conducted some limited soil sampling at surrounding properties to the Fair Play site.

Thank you for your consideration of our request. If you would like to discuss this request or need

additional information, please contact me at (803) 896-4054 or Ken Taylor, Division Director, at (803)896-4011 (taylorgk@dhec.sc.gov).

Sincerely,

R. Gary Stewart, P.E., Manager  
State Remediation Section  
Bureau of Land and Waste Management

Enclosure

cc: Ken Taylor, Director SARR, BLWM, DHEC  
Jonathan McInnis  
Chris McCluskey, Region 1 EQC Director,  
Rick Caldwell, ABC, EQC Bur. Environmental Services  
File

Attachment 1:  
MEMO: Welch Group Environmental

Written By: Tyler Smith – Anderson EQC

10/13/2010

- Received phone call & email from Susie Makison (Reg I - Anderson Epidemiologist) about Welch Group Environmental employee with blood lead level (BLL) of 97 ppm.
- Susie Makison (864) 202-1390
- Welch Group Environmental has website... <http://hotleadinc.com>. Recycle lead bullets from gun ranges.
- Glenn Welch – owner of Welch Group Environmental (864) 314-3803.
- EFIS – Glenn Welch issued permit Aug. 06, 2007 for Air - asbestos demolition permit at 103 Rice St. Belton, SC 29627 (103 Rice St. Belton – does not exist on Anderson County Tax Assessor)

10/14/2010

- Spoke with Karen Sprayberry (SC DHEC) about Welch Group Environmental. She also spoke with Phyllis Copeland (SC DHEC) about Welch – no air permit. Karen said she would try and contact the Welch employee that had BLL of 97 to find out how he was exposed.

10/15/2010

- Stephanie Smith-Strack (SC DHEC) and I drove around Rice Rd. in Belton – could not locate a facility.

10/26/2010

- Called Scott Hanks (City of Belton – Director of Utilities) to see if he knew about Welch Group Environmental. He said that Welch Group Environmental at one time was operating in a warehouse on Rice Rd. in Belton. He said the warehouse isn't actually on Rice Rd. it is on Palmetto Parkway. Mr. Hanks said he did respond to a fire at this facility and to call Allen Simms with the Fire Department. Mr. Hanks also mentioned that Cummings Gary owns the property at 103 Rice Rd. Belton.
- Allison McCullough (SC DHEC) emailed me Allen Simms (City of Belton Fire Department – Chief) phone number (864) 338-7048.
- I spoke with Chief Simms about Welch Group Environmental. He said that the fire department did receive an emergency call to 103 Rice Rd. Belton, SC about a year to a

year and a half ago for explosion/fire and that a man was burned in the incident. He said that facility did contain a large amount of brass shell casings.

10/28/2010

- Received email from Karen Sprayberry with contact information for Welch Group Environmental employee and that OSHA had been contacted.
  - Earnest Colton
  - Jackson, Mississippi
  - 601-573-7140

10/29/2010

- I spoke with Earnest Colton and he said that he was exposed to the lead from using a leaf blower to separate the brass and lead from dirt and rocks inside the facility. He said that Welch Group Environmental does not melt lead and that he didn't think Welch was operating anymore. Mr. Colton said that he did wear a respirator, but it would clog up while he was wearing it. I asked where the facility was located and he said Belton.

11/2/2010

- Karen Sprayberry called and said that OSHA did an investigation and that Welch Group Environmental was operating in Belton, SC and Fair Play, SC. The Fair Play site is where the lead is melted. Karen gave me the OSHA Contact - Terry Heightbar (803) 896-7728 and (803) 206-0467.
- I called Terry with OSHA – LLR and he described the operation to me.
- Glenn Welch is the owner of Welch Group Environmental and has a processing facility in Belton, located on Belton Hwy. The facility is a white building with 3 bay doors. Brass and lead are processed here and then taken to Fair Play facility to be melted. The Fair Play facility is located on Feltman Farm Rd. The melting is done an open air, 40' x 40' block building with a metal roof. There is a 3'x 3' x 1'deep melting pot located inside the facility. The melting pot is heated by kerosene at 650 degrees Fahrenheit. Impurities are skimmed off and put into a 55 gal container. The melting operation, generally does a minimum of 2500 lbs of lead and could do as much as 25000 lbs in one night. Lead is brought in from other states and is hauled to a site in Tennessee with rental trucks.
- Paul Wilkie (SC DHEC) and I made a site visit to the Welch Group Environmental site located on Belton Hwy. The facility address is 5034 Belton Hwy. There is no business sign/name on the building. It appeared that only sorting is occurring at this address during our visit. No owners were present, only three workers. We spoke with one person who told us that Welch ran the business and his phone number (864) 314-3803.

- During the site visit we estimated there to be around 400-500, 55 gal drums on-site. Many drums are not properly closed. None of the drums are labeled. Many of the open 55 gal drums contained a fine gray metallic dust. The same dust was found in gaylord boxes, these were labeled 2211 9. The majority of the drums are located on the backside of the property.
- I called Chris McCluskey (SC DHEC) and told him what Paul and I found at the site.
- I also called Steve Burdick (SC DHEC) and described the site to him. Steve said he had spoken with Chris McCluskey and they were available to make a site visit tomorrow morning.

11/3/2010

- I called Glenn Welch and asked if he could meet us at his business located on Belton Hwy. He said he wouldn't be available, but for us (SC DHEC) to go ahead and take a look around the site and to take any samples that we needed. Mr. Welch said he would call Felix to let him know we were heading to the site and to open up any drums for us.
- Steve Burdick, Dana Cook (SC DHEC), Chuck Arnold (SC DHEC), Stephanie Smith-Strack and myself made a site visit to the Welch Group Environmental site located on Belton Hwy.
- Upon arrival at the site, I went to the bay door that was open and asked for Felix. Felix came outside and I asked if he would unlock the gate and open a few drums for us. He opened the gate and opened two 55 gal drums for us. Felix stated that the material inside the drum was "salt".
- Steve Burdick used the XRF gun to analyze a representative number of drums on-site that contained what appeared to be different types of material.
- I called Glenn Welch once again asked if our department could take samples. Mr. Welch agreed and said he would be on-site in 20 minutes.
- 68, 55 gal drums (black with white lids) were located behind the main building.
- Glenn Welch arrived at the site around 12:15 pm.
- I asked Glenn Welch what type of material was in the drums. Mr. Welch said that the majority of the drums contained "salt". I asked where the material came from and Mr. Welch said from Fisher/Barton in Fountain Inn and that the company makes lawn mower blades and the salt came from the "quench tanks." Mr. Welch said he had the "salt" analyzed by an independent lab and the 'salt' material wasn't hazardous. Mr. Welch said he would have his assistant Kasey Whitfield send me an email documenting the results.
- I asked Glenn Welch what the fine gray metallic dust was and he said left over material from processing the bullets. He also said that the material that was left over would be returned to the gun ranges in approximately 6-8 months.
- Five split samples were taken from the site. Five samples were given to Glenn Welch on-site.
- I then told Glenn Welch that our department was aware of the melting site in Fair Play and we would like to take a look at the site today. Mr. Welch said he didn't have a key

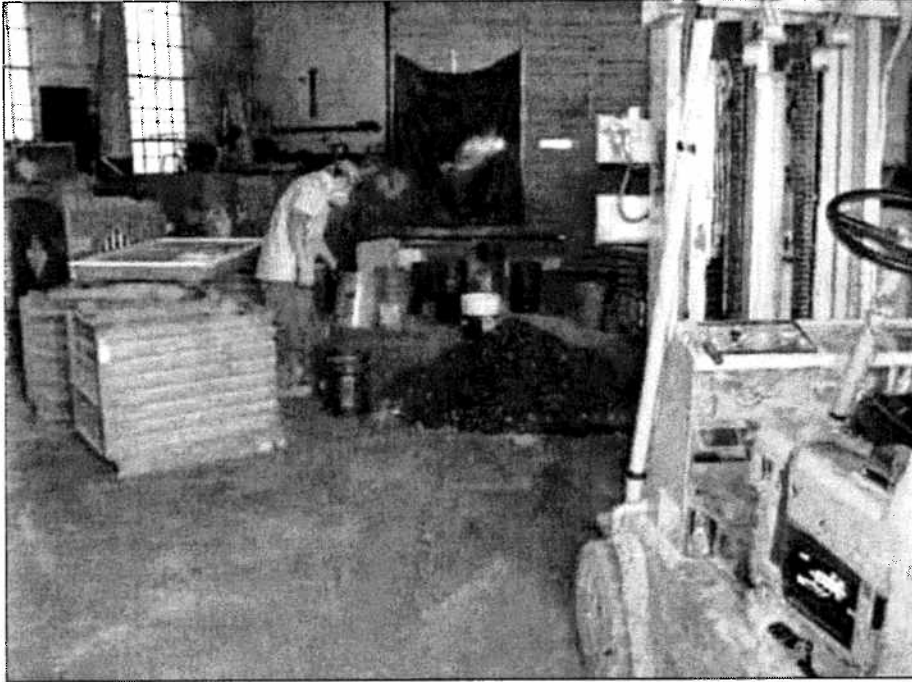
and he didn't own the property and he would have to call the property owner to see if we could get access. Mr. Welch called the property owner and the property owner said he was in Talledega, AL and he couldn't let us on the property until Monday. I then called Chris McCluskey and told him about the property owner in Fair Play refusing to give us access until Monday. Chris McCluskey then spoke with Stephanie Smith-Strack about obtaining the property owner's name and phone number to speak with him about gaining access to the Fair Play property. Mr. Welch told us the property owner's name in Fair Play was James Feltman and he could be reached at home (864) 647-4157. Stephanie called the number and the phone number that was called had a recording that said this phone is not accepting phone calls. Stephanie asked Mr. Welch if that was the correct number and Mr. Welch said, "yes, I just reached him on it." Stephanie called the number again and once again she received a recording. Stephanie then asked Mr. Welch for another number that Mr. Feltman could be reached. Mr. Welch went to his truck to get another number to call (864) 346-1160. Stephanie did reach Mr. Feltman with this number and Stephanie asked multiple times if our department could be granted access to the property today. She explained that SC DHEC wanted to look at both properties as part of the inspection process. Mr. Feltman was reluctant each time and said he was not in town and we could come on Monday. Stephanie told Mr. Feltman that if our department were not granted access today, our department would begin the process of obtaining a search warrant from the local magistrate in order to gain access. At that time Mr. Feltman said he would call someone to allow our department on the property and he would call Mr. Welch back to let him know who would meet us at property (phone call was made at 1:30 pm). We then left the Belton Hwy site to head to the Fair Play site. Stephanie received a phone call (1:46 pm) from Mr. Welch saying he would meet us at the property in Fair Play.

- We arrived at the Fair Play site around 3:22 pm, where we met Glenn Welch and James Feltman. The site is located at Feltman Farm Rd. in Fair Play, SC.
- Glenn Welch described the process at the facility. Mr. Welch said that lead is placed in the "re-melting pot" (3' x 3' x 1' deep – surrounded by brick). The lead is heated to 675 degrees Fahrenheit. Stephanie Smith-Strack asked how do you know when you have reached that temperature. Mr. Welch said I used to have a thermostat, but we don't have one anymore, he said that the way he tells that it's at the right temperature is when there are just fumes and not smoke. Once the lead is melted, the copper and slag is skimmed off the top and placed in a 55 gal drum. The molten lead is poured into ingot molds utilizing 1 gal paint buckets. Once the skimmed material dries it is screened. The copper is sold and the other "material" is put back into 55 gal drums. 50 drums of this "material" were sitting outside the facility, not labeled or closed. There is an accumulation of gray dust that was swept outside the facility entrance onto the ground. The facility is 42' x 42' in size. Mr. Welch said that the lead ingots are sold to O. G. Kelley in Johnston City, TN. [www.ogkelley.com](http://www.ogkelley.com) No samples were taken at this facility, but the XRF gun was used. The material at this site was representative of what was at the Welch Group Environmental site in Belton. Stephanie told Mr. Welch that he would receive an Air Quality violation for operating without a permit. If Mr. Welch had any documentation from BAQ to send it to Stephanie by 11/8/2010. We then exited the facility at 4:30 pm.

11/4/2010

- Documents concerning the air permit were faxed today. Documents that were supplied to Stephanie were communication between Welch group and SC DHEC Small Business. There was no determination of exemption. A construction permit application has not been submitted. Also included was communication between Welch group and an engineering firm. The description of the system that the submitted to the engineering firm for the requirements to complete the air permit does not match what is actually on site.

WELCH GROUP ENVIRONMENTAL – BELTON FACILITY





68 drums located behind main building



Estimated 350-400 drums located on backside of facility



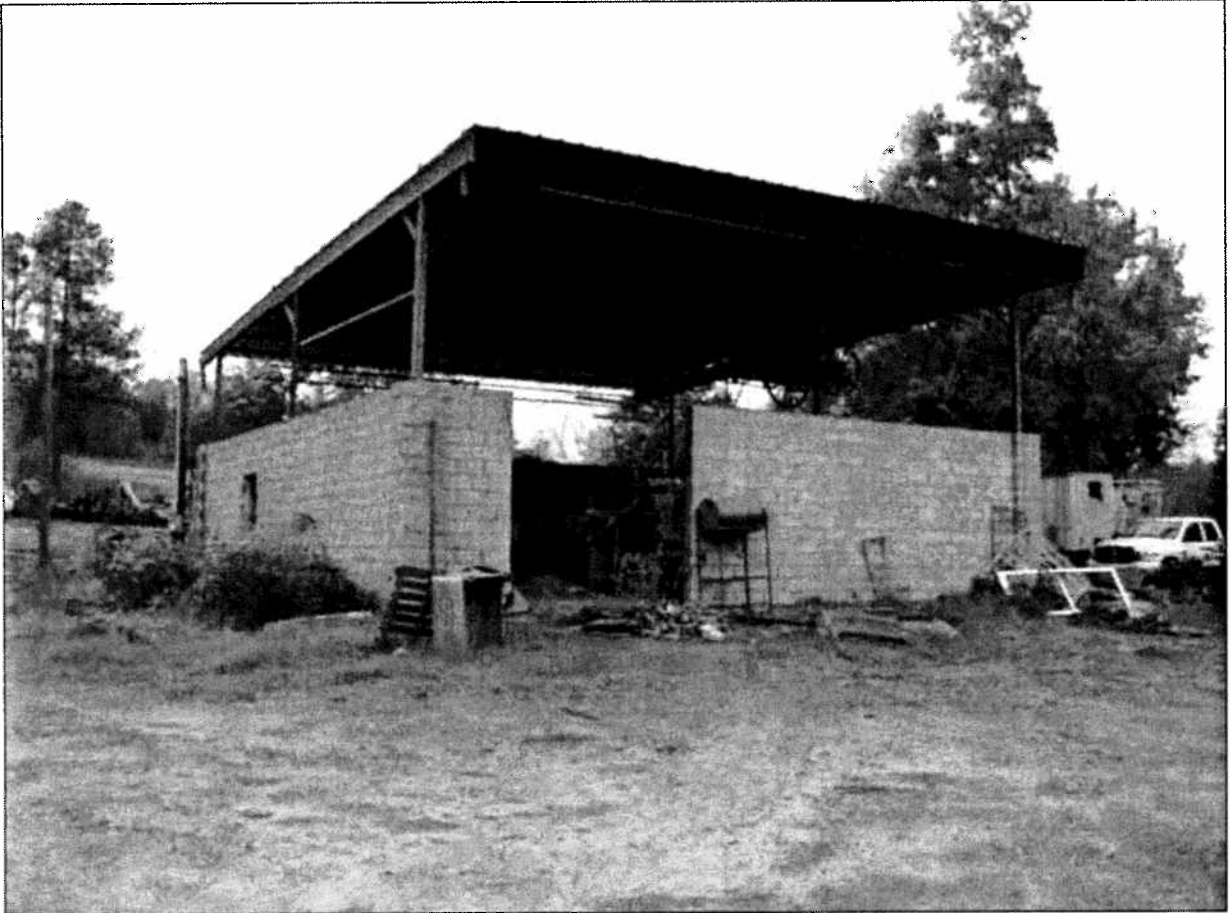
Gray powder/dust – left over material from processing/melting lead







WELCH GROUP ENVIRONMENTAL – FAIR PLAY FACILITY





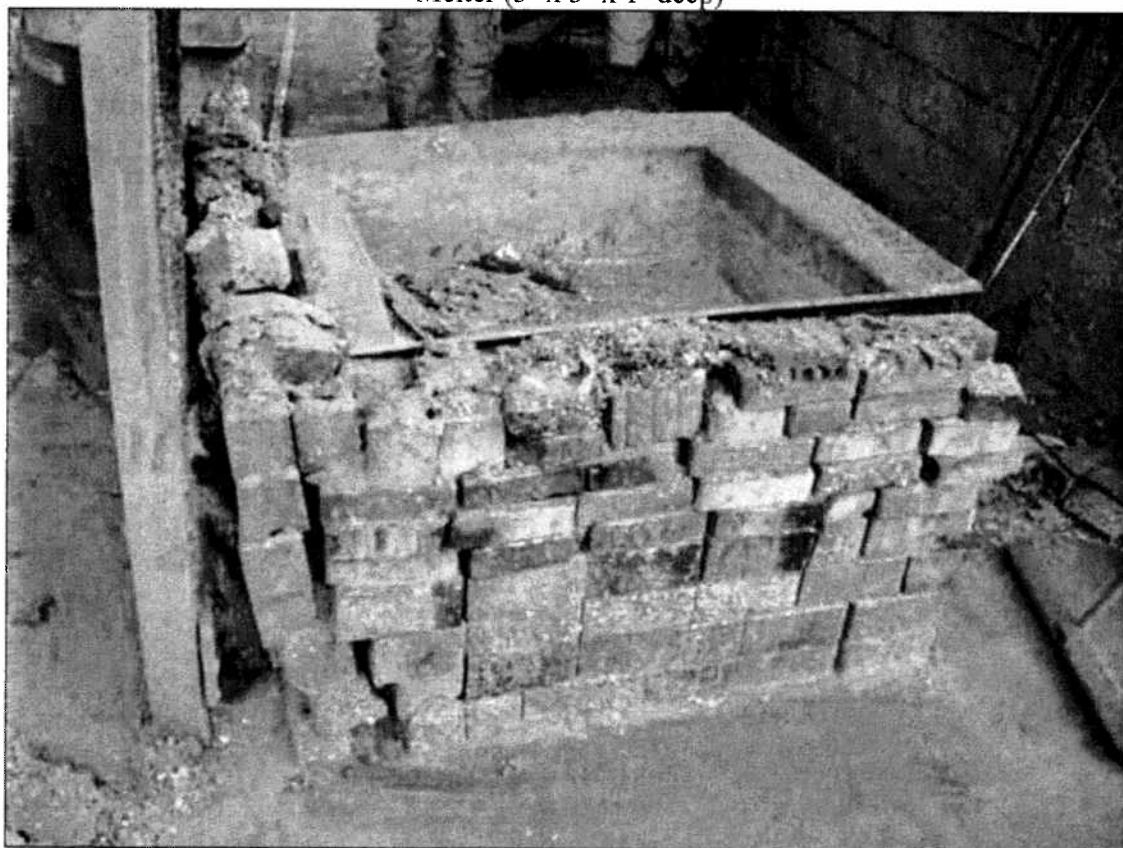


Leftover processed material

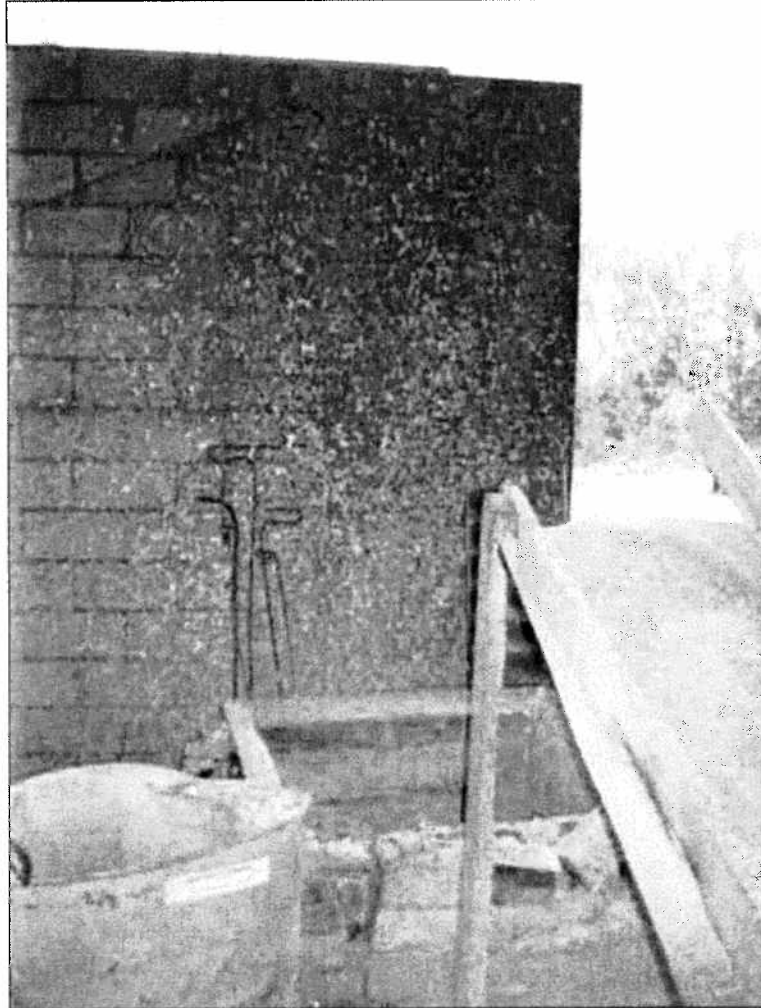




Melter (3' x 3' x 1' deep)



Melter and splattered lead on wall



Processed material swept outside



Processed material/slag inside facility



More processed material swept outside



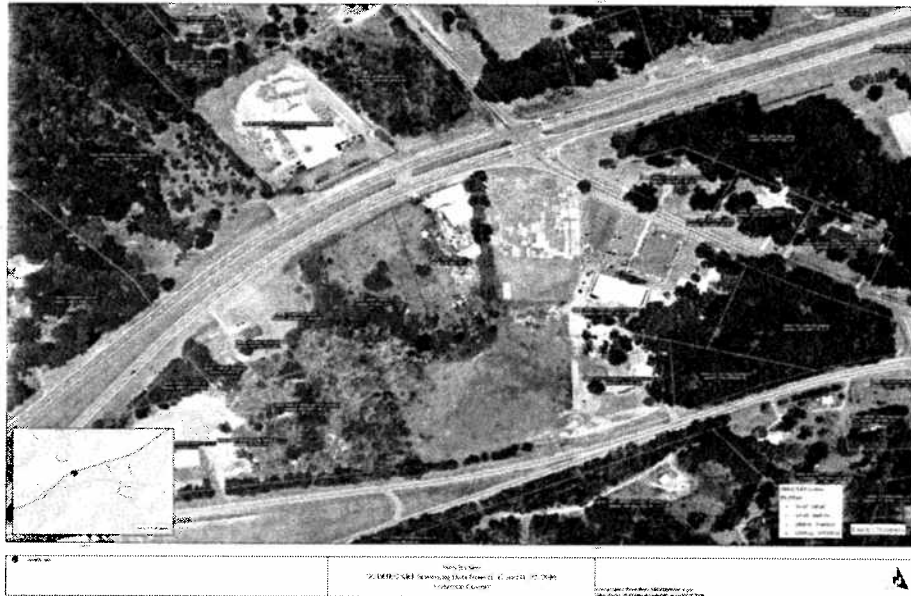
Total of 42 drums in this area – processed material



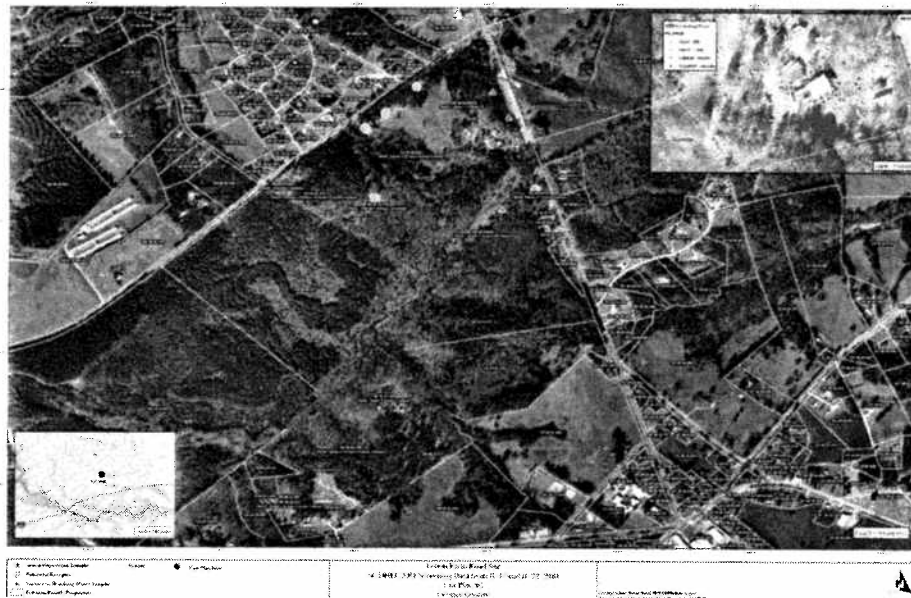
## Attachment 2

Site Maps:

Belton



Fair Play:



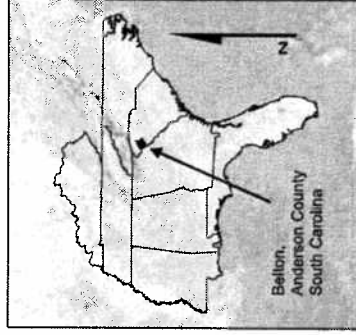
**ATTACHMENT B**  
**Figures**



# Legend

▲ Site Location

Feet  
0 1,500 3,000



WELCH GROUP ENVIRONMENTAL  
ANDERSON, ANDERSON COUNTY  
SOUTH CAROLINA  
TDD NO. TNA-05-001-0127  
FIGURE 1  
TOPOGRAPHICAL MAP



United States Environmental Protection Agency

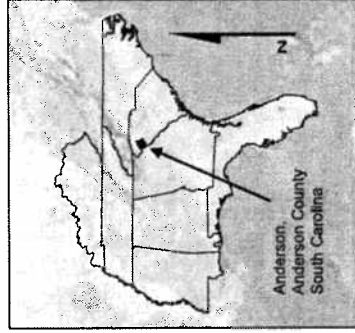
0111



## Legend

- Welch - Anderson Parcel
- Site Location

Feet  
0 75 150

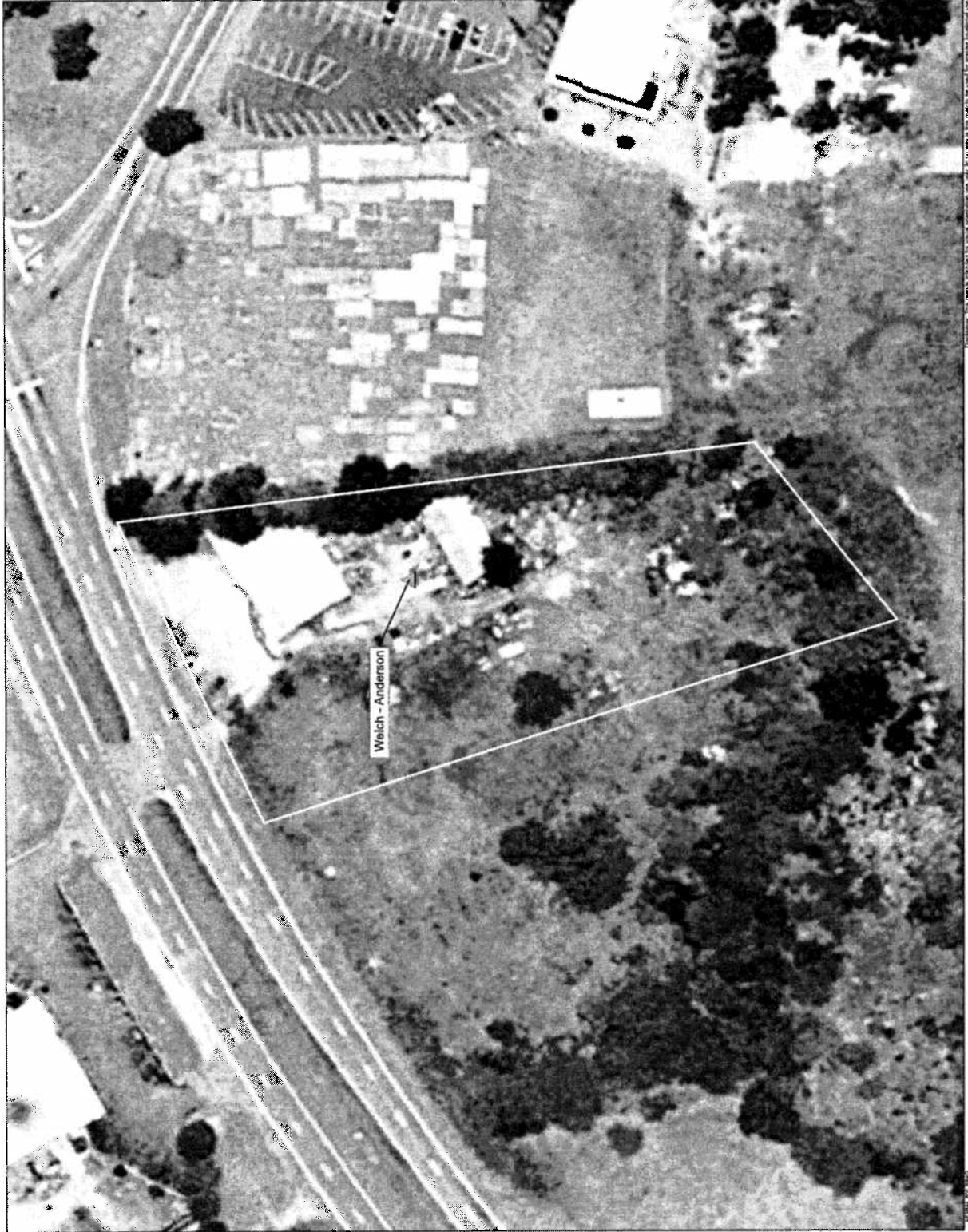


WELCH ENVIRONMENTAL GROUP  
ANDERSON,  
ANDERSON COUNTY  
SOUTH CAROLINA  
TDD NO. TNA-05-001-0127

## FIGURE 2 AERIAL MAP



United States Environmental Protection Agency



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# Legend

Welch - Anderson Parcel

Sample Grid

Below 400 ppm (EPA)

Above 400 ppm (EPA)

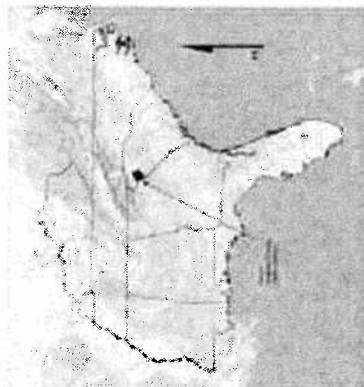
Welch - Anderson Parcel

Sample Grid

Below 400 ppm (EPA)

Above 400 ppm (EPA)

Feet  
0 30 60



WELCH GROUP ENVIRONMENTAL  
ANDERSON COUNTY  
SOUTH CAROLINA  
TDD NO. TNA-05-001-0127

## FIGURE 3 SURFACE SOIL XRF RESULTS MAP



United States Environmental Protection Agency



# Legend

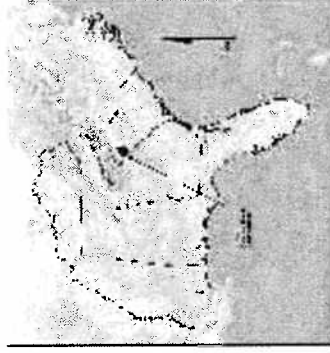
Welch - Anderson Parcel

Sample Grid

Laboratory Results compared to the EPA  
Regional Screening Level of 400 mg/kg

Site  
Title: Welch - Anderson Parcel  
Project: 01-000000-000000

Feet  
0 50 100



WELCH GROUP ENVIRONMENTAL  
ANDERSON  
ANDERSON COUNTY,  
SOUTH CAROLINA  
TDD NO. TNA-05-003-0122

FIGURE 4  
LEAD SOIL  
CONCENTRATION MAP



Lead Soils - Environmental Protection Agency

000000

**ATTACHMENT C**  
**Table**

**TABLE 2**  
**WELCH GROUP ENVIRONMENTAL**  
**REMOVAL SITE INSPECTION**  
**ANDERSON, ANDERSON COUNTY, SOUTH CAROLINA**  
**SUMMARY OF LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS**  
**FEBRUARY 2, 2011**

Sample Identification		Region 4 RSL (Residential Soil)	Region 4 RSL (Industrial Soil)	A01-B5 (0-6)		A02-D5 (0-6)		D5-100		A03-D4 (0-6)		A04-E4 (0-6)	
Sample Depth (fbgs)				0.5		0.5		0.5		0.5		0.5	
Collection Date				2/2/2011		2/2/2011		2/2/2011		2/2/2011		2/2/2011	
Matrix				Surface Soil		Surface Soil		Surface Soil		Surface Soil		Surface Soil	
Sample Type				Field Sample		Field Sample		Duplicate Sample		Field Sample		Field Sample	
Metals, Total (mg/kg)													
Aluminum	77000		990000	2840		4260		--		--		--	
Antimony	31		410	8.69		379		--		--		--	
Arsenic	0.39		1.60	1.68	B	53.1		--		--		--	
Barium	15000		190000	67.1		93.9		--		--		--	
Beryllium	160		2000	0.15	B	0.23	B	--		--		--	
Cadmium	70		800	1.33		1.62		--		--		--	
Calcium	NL		NL	1240		2410		--		--		--	
Chromium	120000		1500000	9.16		23.5		--		--		--	
Cobalt	23		300	1.9		4.24		--		--		--	
Copper	3100		41000	43.4		941		--		--		--	
Iron	55000		720000	11200		40900		--		--		--	
Lead	400		1200	1810		22800		60600		11600		3480	
Magnesium	NL		NL	1120		1260		--		--		--	
Manganese	1800		23000	151		248		--		--		--	
Nickel	1500		20000	7.77		96.2		--		--		--	
Potassium	NL		NL	1370		1570		--		--		--	
Selenium	390		5100	0.22	U	0.48	U	--		--		--	
Silver	390		5100	0.04	U	1.23		--		--		--	
Sodium	NL		NL	34.3	B	57.8	B	--		--		--	
Thallium	NL		NL	0.11	U	0.25	U	--		--		--	
Vanadium	390		5200	6.92		15.6		--		--		--	
Zinc	23000		310000	202		263		--		--		--	
Mercury	5.6		34	0.014		0.064		--		--		--	

**Notes:**

RSL - Regional Screening Level

bold - Concentration exceeds the RSL for residential/industrial soil.

U - Analyte was not detected above the associated value.

J - Value is estimated

B - Analyte was found in the method blank sample.

mg/kg - Milligrams per kilogram

fbgs - Feet below ground surface

NL - Not listed

NA - Not analyzed

**TABLE 2**  
**WELCH GROUP ENVIRONMENTAL**  
**REMOVAL SITE INSPECTION**  
**ANDERSON, ANDERSON COUNTY, SOUTH CAROLINA**  
**SUMMARY OF LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS**  
**FEBRUARY 2, 2011**

Sample Identification		Region 4 RSL (Residential Soil)	Region 4 RSL (Industrial Soil)	Metals, Total (mg/kg)									
Sample Depth (ft/bs)													
Collection Date													
Matrix													
Sample Type													
Aluminum	77000		990000		11600		13000		11100		--		6130
Antimony	31		410		20.7		22.6		1730		--		7.53 B
Arsenic	0.39		1.60		22.7		30.4		268		--		4.23 B
Barium	15000		190000		494		245		96.4		--		67
Beryllium	160		2000		0.56		1		0.3 B		--		0.2 B
Cadmium	70		800		16.1		9.09		1.42		--		1.38
Calcium	NL		NL		3800		2020		1280		--		683
Chromium	120000		1500000		42.5		41.1		17.1		--		42.8
Cobalt	23		300		7.28		8.33		5.38		--		2.95
Copper	3100		41000		574		725		4270		--		210
Iron	55000		720000		34400		32800		16600		--		28000
Lead	400		1200		3940		4310		45600		--	1360	680
Magnesium	NL		NL		4360		3510		2950		--		834
Manganese	1800		23000		290		330		175		--		223
Nickel	1500		20000		27.6		32.4		13.1		--		22.6
Potassium	NL		NL		3470		4280		2720		--		1090
Selenium	390		5100		2.37 B		1.12 B		0.77 B		--		1.11 U
Silver	390		5100		0.49 B		0.86 B		6.01		--		0.28 B
Sodium	NL		NL		151		168		131		--		93.3 B
Thallium	NL		NL		0.25 U		0.27 U		0.24 U		--		0.58 U
Vanadium	390		5200		31.1		34.8		29.6		--		17
Zinc	23000		310000		921		1060		343		--		1300
Mercury	5.6		34		0.14		0.2		0.02		--		0.025

**Notes:**

RSL - Regional Screening Level  
bold - Concentration exceeds the RSL for residential/industrial soil.  
U - Analyte was not detected above the associated value.  
J - Value is estimated  
B - Analyte was found in the method blank sample.

**ATTACHMENT D**  
**Belton RSI Report**





March 4, 2011

Mr. Leo Francendese  
On-Scene Coordinator  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW 11<sup>th</sup> Floor  
Atlanta, Georgia 30303

**Subject: Removal Site Inspection, Revision 0  
Welch Group Environmental (WGE) Belton Site  
5043 Belton Highway, Anderson County, Anderson, South Carolina  
EPA Contract No. EP-W-05-053  
Technical Direction Document (TDD) No. TNA-05-001-0127**

Dear Mr. Francendese:

Oneida Total Integrated Enterprises (OTIE) Superfund Technical Assessment and Response Team (START) are submitting one copy of the Removal Site Inspection (RSI) for the Welch Group Environmental (WGE) Belton facility located in Anderson, Anderson County, South Carolina.

Please contact me at (678) 355-5550 ext. 5708 if you any questions or comments regarding this report.

Sincerely,

Jerry Partap  
START Project Manager

Enclosure

cc: Katrina Jones, EPA Project Officer  
Darryl Walker, EPA Project Officer  
Russell Henderson, START Program Manager (w/o enclosure)  
START File

**REMOVAL SITE INSPECTION  
WELCH GROUP ENVIRONMENTAL (WGE)  
BELTON SITE  
ANDERSON, ANDERSON COUNTY, SOUTH CAROLINA**

**Revision 0**

**Prepared for:**

U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303

**Prepared by:**

Oneida Total Integrated Enterprises  
Superfund Technical Assessment and Response Team  
1220 Kennestone Circle, Suite 106  
Marietta, Georgia 30060

Contract No.	:	EP-W-05-053
TDD Number	:	TNA-05-001-0127
Date Submitted	:	February 28, 2011
EPA OSC	:	Leo Francendese
Telephone No.	:	404-606-2223
Prepared by	:	Jerry Partap
Telephone No.	:	678-355-5550 ext. 5708

## 1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked the Oneida Total Integrated Enterprises (OTIE) Superfund Technical Assessment and Response Team (START) to perform field activities in support of the On Scene Coordinator (OSC) for the U.S. Environmental Protection Agency (EPA) at the Welch Group Environmental (WGE) Belton Site, located in Anderson, Anderson County, South Carolina. The field activities include maintaining the EPA OSC site webpage, compiling site history and maps and managing field data. The site activities are conducted under Contract Number (No.) EP-W-05-053 and Technical Direction Document (TDD) No. TNA-05-001-0127. The general purpose of the RSI is to collect information to assist in determining whether Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances have been released into the environment. Specifically, findings will identify the need for federal intervention under the CERCLA of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986. In addition, the EPA OSC expanded the scope of the above actions by directing the PRP to conduct an emergency response (Pol/SitRep#1). START expanded its role in support of this additional action.

Specifically, START was tasked with the following:

- Preparing a Health and Safety Plan (HASP);
- Preparing a Quality Assurance Project Plan (QAPP)/Site Sampling Plan (SSP) (Soil Sampling Plan);
- Screening surface and subsurface soil for lead concentrations using a Niton® X-Ray Fluorescence (XRF) elemental detector;
- Submitting a limited number of soil samples to a non-Contract Laboratory Program (non-CLP) laboratory for total lead analysis (Belton Site Lab Report);
- Documenting site activities with written logbook notes (Field Notes) and digital photographs (Photolog), maintain the OSC webpage (OSC Webpage); and,
- Preparing a comprehensive report summarizing the site conditions, field investigation activities, and analytical results of the RSI.

This RSE Report summarizes the existing conditions at the site; describes the field investigation activities conducted by START in February 2011; and, delineates the limits, nature, and extent of soil contamination at the site. All activities and procedures described in this report were performed in accordance with the EPA Region 4 *Field Branches Quality System and Technical Procedures* (FBQSTP) (EPA Region 4 Technical Procedures).

## **2.0 SITE BACKGROUND**

This section discusses the site characteristics, previous investigations, and environmental setting of the area.

### **2.1 SITE DESCRIPTION**

The site is located in Anderson, Anderson County, South Carolina. The geographic coordinates are 34° 31' 24.12" North latitude and 82° 59' 28.73" West longitude ([Figure 1](#)). The site is comprised of two one-story buildings, and the property extent is approximately 3 acres.

The site is bordered by Belton Highway to the north, a cemetery to the east, agricultural land to the south, and woods to the west ([Figure 2](#)). Topographically, the site drains generally to the southwest.

The property is owned by Mr. David Jones and leased to Glenn Welch (WGE). WGE operations are involved in recovering lead from both indoor and outdoor shooting ranges across the United States ([Access Approval](#)).

### **2.2 PREVIOUS INVESTIGATIONS**

The South Carolina Department of Health and Environmental Control (SC DHEC) conducted an initial site inspection on November 3, 2010. Details of the SC DHEC report can be found on the OSC web page at the following link ([SC DHEC Memo](#)).

The site was referred to the EPA on December 22, 2010 by the South Carolina Bureau of Land and Waste Management. Details of the SC DHEC referral letter can be found on the OSC web page at the following link ([SC DHEC Referral](#)) .

On January 31, 2011, the EPA On-Scene Coordinator (OSC), SC DHEC, START, the property owner (David Jones), and WGE (Glenn Welch) conducted a removal site inspection. According to Mr. Welch, WGE has been operating at this location for approximately 14 months. WGE used this location for material separation of recovered range materials. After material separation, the lead material was transported to the Fair Play, South Carolina location for smelting. The second warehouse building was

used for storage of unrecovered bullets that were still embedded into the rubber resin bullet trap. The photographic log ([Photolog](#)) and field logbook notes ([Field Notes](#)) can be found at the above link.

### **3.0 FIELD INVESTIGATION ACTIVITIES**

On February 2 2011, START performed a RSE that included soil screening, soil sampling, and analysis activities at the site to identify the nature and extent of lead contamination in on-site soils from site operations. START utilized an XRF instrument to screen on-site soils for lead contamination to a maximum depth of 6 inches below ground surface (bgs). The EPA OSC indicated that soil samples were only to be collected from 0 to 6 inches bgs. Surface soil grab samples (0 to 6 inches bgs) were collected and screened using the XRF.

START collected a total of 40 discrete surface soil samples from eight grids using stainless steel spoons for screening using the XRF. In addition, composite samples of the screened soils were submitted to Gulf Coast Analytical Laboratories (GCAL) for analysis of total lead in accordance with SW846 Method 6010C and Target Analyte List (TAL) Metals in accordance with SW846 Method 6010C/7471B. START collected a total of eight composite samples and one duplicate composite sample for total lead and five composite samples and one duplicate composite sample for TAL Metals. The data gathered during the RSE will be used to determine the release or substantial threat of release of a CERCLA hazardous substance.

Geographic positioning information was collected for all sampling locations and was geographically referenced using ArcView and uploaded to a hand-held Trimble® Global Positioning System (GPS). [Table 1](#) provided in Appendix B presents the GPS coordinates for each sample location.

#### **3.1 SURFACE SOIL SCREENING AND SAMPLING**

On February 2, 2011, START collected surface soil samples for screening purposes. The site was subdivided into 50 foot (ft) x 50 ft sampling grids as shown in [Figure 3](#), Appendix A. Based on the site topography and drainage pattern, the EPA OSC directed START to grid areas along the drainage patterns. Five-point discrete surface soil samples (0 to 6 inches) were collected from each grid location and screened using the XRF. Each sample was collected using stainless steel spoons, placed in zip top bags, and screened using the XRF. The lead results detected on the XRF were compared to the Region 4

Regional Screening Level (RSL) for residential soil of 400 parts per million (ppm). Screening results for each sample location are found on [Figure 3](#) and are summarized in [Table 1](#).

The five discrete samples from each of the eight grids sampled were homogenized in stainless steel bowls, containerized, placed on ice, documented, and shipped under standard chain-of-custody procedures to GCAL in Baton Rouge, Louisiana. The soil samples were compared to the Region 4 RSL for residential soil (400 ppm). A summary of the laboratory analytical results for each sample collected are found on [Table 2](#). [Figure 4](#) depicts the areas of lead impacts to the surface soils.

### **3.2 OSC REQUIRED EMERGENCY RESPONSE (ER) ACTIONS**

On February 1, 2011, the EPA discussed with WGE the ER actions required to secure the site ([WGE Workplan](#)). The EPA OSC directed WGE to immediately complete the following site tasks ([WGE Progress Report](#)):

- 1) Install silt fencing to limit the further impact of potentially impacted surface water off-site;
- 2) Determine and secure drums containing hardened salt;
- 3) Secure and/or all open containers with lead related material in the warehouse pending disposal/recycling;
- 4) Segregate empty drums, scrap metal and trash in piles pending disposal/recycling.

### **3.3 XRF SCREENING OF THE WAREHOUSE AREA**

On February 2, 2011, the EPA OSC tasked START to screen the floor of the warehouse and the associated equipment. The lead results detected on the XRF were compared to the Region 4 RSL for residential soil (400 ppm). The XRF results indicated the warehouse floor and equipment had elevated lead readings. A summary of the XRF readings is presented on [Table 3](#). [Figure 5](#) show the sampling location and XRF readings.

### **3.4 SITE SECURITY AND MISCELLANEOUS ITEMS**

During the RSE, shell casings and bullet remains were discovered in the natural drainage patterns at the site. As a result, the EPA OSC instructed WGE to install silt fencing to limit the further impact of

potentially impacted surface water off-site. A photographic log Photolog shows where silt fencing was installed around the site.

During the RSE drums, steel containers, scrap metal, and trash were observed on site. The inventory of items at the back of the property was as follows (WGE Progress Report):

- 1) Approximately 941 55-gallon steel drums of a hardened salt (NuSal);
- 2) Approximately 66 drums of lead derived material;
- 3) 21 metal square containers (lead material);
- 4) One cardboard box (lead material);
- 5) 23 blue drums with material;
- 6) 24 empty drums.

On November 3, 2010, SCDHEC submitted samples of the NuSal for analysis. The samples were varying shades of white, gray, or brown in color. A summary of the laboratory data indicated the white/gray portion of the sample was composed of potassium chloride and sodium chloride. The brown portion of the sample was a mixture of five salts which included potassium chloride, sodium chloride, potassium nitrate, sodium nitrate, and sodium nitrite. The complete laboratory analysis and the SCDHEC report is located on the EPA OSC webpage at (SC DHEC Site Sampling Report). This material does not qualify as a CERCLA hazardous substance or pollutant/contaminant and is not part of this enforcement action. Nevertheless, SCDHEC expressed an interest in the PRP properly managing this material and the issue was deferred to SCDHEC oversight.

#### **4.0 QUALITY ASSURANCE/QUALITY CONTROL**

QA/QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of sampling equipment, glassware, and reagents. This section describes the QA/QC measures taken and provides an evaluation of the usability of data presented in this report.

A total of two duplicates (D5-100 and F3-101) for total lead were submitted to GCAL for analysis. The native sample (A05-F3) and its duplicate (F3-101) were within permissible limits of each other as allowed by the National Functional Guidelines (NFG) for lead. However, the native sample (A02-D5) and its duplicate (D5-100) had a high percent difference between the two samples (90%) for lead. This difference can be attributed to the heterogeneity of the soil.

## 5.0 SITE INVESTIGATION RESULTS

The following sections summarize the XRF and laboratory results for soil samples collected during the RSI field sampling activities. As discussed, 40 discrete surface soil samples were collected from 8 grids. XRF screening results indicate concentrations of lead above the Region 4 RSL were detected in Grids D3, D4, D5, E3, E4, F3, and G3. The screening results for each sample location are summarized in [Table 1](#) and are shown on [Figure 3](#).

Soil samples from the 8 grids were homogenized and submitted for laboratory analysis. The analytical data indicates soil concentrations of lead were above the residential RSL of 400 mg/kg in the samples collected from all 8 grids. Soil concentrations ranged from 680 mg/kg in Grid G3 to 45,600 mg/kg in Grid E3. A summary of the laboratory analytical results for each sample collected are found on [Table 2](#). [Figure 4](#) depicts the areas of lead impacts to the surface soils. The laboratory analytical report can be viewed at the following link ([Laboratory Report](#)).



## 6.0 SUMMARY AND CONCLUSIONS

WGE leases the property from Mr. David Jones and has been operating a business that recovers lead and other metals from spent munitions at firing ranges gathered from around the Southeast. The WGE Anderson site conducted material separation as well as distribution of recycled material.

WGE was directed by the EPA OSC to submit workplans that were approved for securing the facility. WGE installed silt fencing to limit the amount of potentially impacted surface water leaving the site. Based on the XRF data collected by START during the RSE, the warehouse was limited to activity. Drums and metal containers of exposed lead material that existed on-site were moved and secured in the warehouse for further disposal. The remaining drums in various conditions of deterioration were secured on-site until further determination by the EPA OSC.

On February 17th, the EPA OSC requested that WGE prepare the following plans for the WGE Anderson facility:

- ***Waste Characterization Plan*** (re. sampling) in order to gather the necessary information for an eventual ***Disposal/Recycling Options Analysis***.
- ***Decontamination/Demolition Plan*** for remaining debris and structures exceeding the lead cleanup criteria.
- ***Soils Removal and Disposal Plan*** for soils exceeding the cleanup criteria.

Further activities associated with this site will be determined by the EPA OSC. The EPA OSC anticipates that the management of the site will transition into a time critical removal action under an EPA Administrative Order on Consent.

**ATTACHMENT E**  
**WGE Daily Progress Report**

## PROGRESS NOTES

Date: February 18, 2011



### COMPLETED ACTION:

#### 1. Finished repackaging lead material from cardboard containers

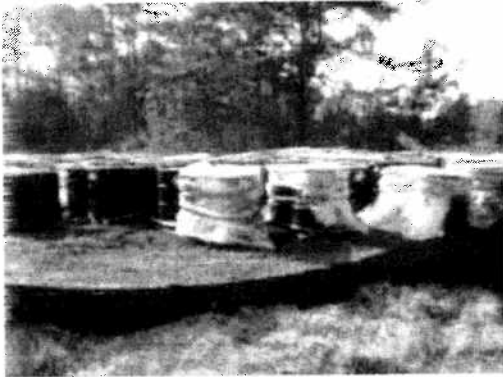


#### 2. Finished covering drums total ( lower portion)



WGE BELTON SITE

**(upper portion)**



**3. One drum of lead material left outside (inaccessible at this time)**



**4. There are now a total of 61 drums inside**



AET/Advanced Environmental Technologies  
1-800-990-8406

WGE BELTON SITE



### **5. Relocate/ gather like materials**



**Cardboard**



**Miscellaneous Trash**



**Empty Drums**





### **Labeled drums**

#### **6. Decon Equipment**

- 1. Bobcat**
- 2. Set of Forks**

#### **Total Drum Count:    Inside**

**66 – 62 lead 4 HAZCAT**

**1-Card board Box (lead)**

**21 Metal square Containers (lead)**

#### **Outside**

**Upper portion (345)**

**Lower portion (596)**

**Blue Drums with material (23)**

**Empty Drums (24)**

**Site Supervisor**

**Michael Mraovich**