

**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**  
Interim Final 7/30/04  
**RCRA Corrective Action**  
**Environmental Indicator (EI) RCRIS code (CA725)**

**Current Human Exposures Under Control**

**Facility Name:** The Colonel's Factory Outlet of Arkansas, North Plant  
**Facility Address:** 720 South Woods Street, West Memphis, Arkansas  
**Facility EPA ID #:** ARD980621288

1. Has all available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?

- If yes - check here and continue with #2 below.  
 If no - re-evaluate existing data, or  
 if data are not available skip to #6 and enter "IN" (more information needed) status code.

**Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

**Definition of "Current Human Exposures Under Control" EI**

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

**Relationship of EI to Final Remedies**

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

**Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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**Facility Information**

The Colonel's Factory Outlet of Arkansas, Inc. (TCFOA), located at 720 and 804 South Woods Street, West Memphis, Arkansas, performed copper, nickel, and chrome plating of recycled automotive bumpers. The property was purchased by Donald Williamson in March 1993 from National Bumper Exchange (NBE), which began electroplating activities at the 804 South Woods Street location on October 12, 1958. Figure 1 of the Conceptual Site Model (CSM) shows the location of the property (Booz Allen, 2004). TCFOA is listed under the Standard Industrial Classification Code 3471: Electroplating, Plating, Polishing, Anodizing, and Coloring (Booz Allen, 2004).

TCFOA owns two separate properties that each generated hazardous waste from separate bumper recycling operations. These two properties are physically separated by another business—formerly Delta Roofing Company. The North Plant (EPA ID ARD980621288) is located at 720 South Woods Street, and the South Plant (EPA ID ARD035663301) is located at 804 South Woods Street. Collectively, these two properties are referred to as the West Memphis sites and occupy approximately three acres. The sites' geographical coordinates are approximately 35°08'10" north latitude and 90°11'04" west longitude (Booz Allen, 2004). This EI determination specifically focuses on the North Plant site.

The TCFOA North and South Plants were metal plating shops with known generated waste, which included RCRA listed metal plating treatment sludge, spent powdered activated carbon filters from the nickel plating operations, metal particulate wastes from the polishing shops, and paint/solvent wastes from the painting operations. TCFOA operations included containerized wastes stored throughout the operating and storage areas (Booz Allen, 2004).

The North Plant consists of a main process building and a bumper strip line area, which was located in a small structure situated along the northern property boundary. The main process building for the North Plant housed two offices, a process area with electroplating lines, a bumper preparation area, a bumper polishing area, a raw materials storage area, a bumper storage area, a chemical storage area, a hazardous waste treatment area, and a packaging area. Figure 2 of the CSM illustrates the layout of the North Plant property (BDLI, 1997a; Belin, 2002; Booz Allen, 2004). The SWMUs identified for the North Plant include the Electroplating Line Area (SWMU-1), the Bumper Preparation and Storage Area (SWMU-2), the Black Beauty Storage Area (SWMU-3), the Bumper Polishing Area (SWMU-4), the North Raw Materials Storage Area (SWMU-5), the South Raw Materials Storage Area (SWMU-6), the Chemical Storage Area (SWMU-7), the Wastewater Treatment Area (SWMU-8), the Chromium Strip Line Area (SWMU-9), and the North and South Plant Drainage Ditch (SWMU-10). A detailed summary of the SWMUs and site conditions is presented in the Draft Conceptual Site Model (CSM) Report (Booz Allen, 2004). It should be noted that the TCFOA facility had one AOC, the Crawfordsville Site (AOC 1), which received waste from both the North and South Plants. AOC 1 is located approximately 20 miles from the TCFOA facility and was issued a separate EPA ID number. Therefore, it is not considered to be a part of the North Plant.

During site investigation activities, three releases of hazardous waste were confirmed at the North Plant. The first release area is a release of electroplating solutions from the sumps/pits associated with the Electroplating Line Area (SWMU 1). Spills and overflows of electroplating solutions from electroplating activities were stored in sumps/pits for extended amounts of time and eventually degraded the lining of the electroplating line area, which resulted in releases to subsurface soils. The second release point from the North Plant is the Chemical Storage Area (SWMU 7) located in the west-central portion of the North Plant building. Contaminants stored in this unit were released in an easterly direction and impacted an adjacent grass and soil-covered area approximately 30 feet long and 15 feet wide (Booz Allen, 2004).

A third release of contaminants from the North Plant was from the Bumper Polishing Area (SWMU 4), which produced metal particulates generated by grinding and polishing of bumpers. Exhaust fans vented metals particulates out of the west wall of the North Plant and deposited them in the North and South Plant Drainage Ditch (SWMU 10), which was located off site, adjacent to the east property boundary of the North Plant. Site investigation activities at SWMU 10 identified elevated concentrations of chromium, copper, and nickel in ditch sediments. As a result of contamination identified during Phase I and II site investigation activities, remediation activities were performed at the north end of the North and South Plant Drainage Ditch. Work was performed at this SWMU in March and April of 1998. The remediation consisted of excavating impacted materials and offsite disposal at a licensed solid waste disposal facility. To confirm that all impacted soils had been removed from the North Ditch, TCFOA collected verification samples from five locations in the bottom of the excavation pit and from six locations on the sidewalls of the excavation. Results for all confirmatory samples were below residential screening levels (Booz Allen, 2004).

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During preparation of the CSM, releases were also suspected at the Chromium Strip Line Area (SWMU 7) and the Wastewater Treatment Area (SWMU 8). Soil samples were collected adjacent to SWMU 7 in February 2004, and analyses failed to detect the presence of hazardous constituents. SWMU 8 has not been investigated; however, this unit is situated inside the main North Plant building on a concrete floor, surrounded by secondary containment. Therefore, a release of contaminants from this unit to environmental media is unlikely. Additionally, exposure to potential releases from this unit is unlikely for the same reasons cited within this EI determination for the units for which releases have been confirmed (Booz Allen 2004; Ecology and Environment, Inc. 2004).

**References:**

- BDLI, Inc. 1997a. *Final Site Investigation Report – The Colonel’s Factory Outlet of Arkansas, Inc.* June 11.
- Belin, John I. 2002. Personal communication with Derrick Warrick of the Arkansas Department of Environmental Quality regarding The Colonel’s Factory Outlet of Arkansas North and South Plants and the Crawfordsville Property. October 28.
- Booz Allen Hamilton. 2004. *Conceptual Site Model for the Colonel’s Factory Outlet of Arkansas, Inc., North Plant.* May 19.
- Ecology and Environment, Inc. 2004. *Investigation Report, Colonel’s Factory Outlet.* May 7.

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2. Are groundwater, soil, surface water, sediments, or air media known or reasonably suspected to be “contaminated”<sup>1</sup> above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater	<u>x</u>	___	___	<u>Above MCLs or MSSLs / Metals</u>
Air (indoors) <sup>2</sup>	___	<u>x</u>	___	<u>No impact to indoor air</u>
Surface Soil (e.g., <2 ft)	<u>x</u>	___	___	<u>Above MSSLs / Metals</u>
Surface Water	___	<u>x</u>	___	<u>No Impact to surface waters</u>
Sediment	___	<u>x</u>	___	<u>No Impact to sediment</u>
Subsurf. Soil (e.g., >2 ft)	<u>x</u>	___	___	<u>Above MSSLs / Metals</u>
Air (outdoors)	___	<u>x</u>	___	<u>No impact to outdoor air</u>

\_\_\_ If no (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.

X If yes (for any media) - continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

\_\_\_ If unknown (for any media) - skip to #6 and enter “IN” status code.

**Rationale and Reference(s):**

**Groundwater:** As part of site investigation activities conducted in February 2004, three soil borings (SB-1, SB-2, and SB-3) were advanced to maximum depth of 15 feet below ground surface (bgs) in the North Plant area using direct-push technology to assess groundwater impacts<sup>3</sup>. Figure 2 of the Investigation

<sup>1</sup> “Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).

<sup>2</sup> Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

<sup>3</sup> It should be noted that groundwater grab samples collected using direct push technology may be turbid, which may bias the results for total metals high. Because the field personnel did not indicate in the field notebook for the February 2004 Sampling Event that the groundwater samples contained high turbidity, the impact of turbidity on the results is expected to be minimal. However for purposes of CA725 EI, groundwater concentrations were assumed to be potentially biased high and represent a worse-case scenario; thus, to be conservative, metals in groundwater exceeding MCLs or MSSLs were carried forward to Question #3 in this CA725 EI determination form.

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Report (Ecology and Environment, 2004) illustrates the location of the soil borings where the groundwater grab samples were collected. Groundwater grab samples were analyzed for inorganic constituents (including mercury) on EPA's Target Analyte List (TAL). Table 1 indicates the maximum concentrations of contaminants detected in groundwater. Concentrations of several metals exceeded their respective screening criteria, (i.e., EPA Region 6 Human Health Medium-Specific Screening Levels [MSSL] for industrial scenarios and Federal Maximum Contaminant Levels [MCL]) (Booz Allen, 2004; Ecology and Environment, Inc. 2004).

It should be noted that groundwater samples results may potentially be bias high because groundwater grab samples collected using direct push technology, which potential for elevated turbidity

**Table 1 - Groundwater Sampling Results for the North Plant**

Contaminant	Maximum Detected Concentration	Region 6 MSSL for Tap Water	MCL
<b>Total Metals (<math>\mu\text{g/l}</math>)</b>			
Aluminum	<b>202,000 J</b>	37,000	n/a
Antimony	<b>52.1 J</b>	15	6
Arsenic	<b>58.8</b>	45	50
Barium	<b>3,690</b>	2,600	2,000
Beryllium	12.7	73	4
Cadmium	<b>25.3</b>	18	5
Chromium	306	55,000	1000
Cobalt	162	730	n/a
Copper	511	1,400	1,300
Iron	<b>321,000</b>	11,000	n/a
Lead	<b>326</b>	15	15
Manganese	<b>10,300</b>	1,700	n/a
Mercury	0.54	11	2
Nickel	683	730	n/a
Selenium	30.0 J	180	50
Silver	10.0 U	180	n/a
Thallium	<b>29</b>	2.9	2
Vanadium	<b>466</b>	2.2	n/a
Zinc	1,230	11,000	n/a

Bolded concentrations exceeded their respective screening criteria

J - qualified as estimated

n/a - Not available

Arkansas Department of Environmental Quality (ADEQ) representatives have also expressed concern about potential volatile organic compound (VOC) contamination in groundwater at the North Plant as a result of leaching of VOCs from soils. However, it should be noted that VOCs were not a significant constituent of concern given that no painting operations were conducted at the North Plant. As a result, no VOC contamination in groundwater is expected at the North Plant.

**Indoor Air:** In some cases, VOCs in soil and groundwater can adversely impact indoor air quality. However, metals are the primary contaminants of concern given that no painting operations were conducted at the North Plant. As a result, VOC contamination is not expected to be present at the North Plant and indoor air quality is not expected to be impacted in this area (Booz Allen, 2004; Belin, 2004).

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**Surface/Subsurface Soil:** Sampling of the surface (0 to 2 feet bgs) and subsurface (greater than 2 feet bgs) soils at the North Plant has shown that soils are contaminated with metals. Site investigations have identified soil contamination in three main areas at the North Plant: the Electroplating Line Area (SWMU 1), the Chemical Storage Area (SWMU 7), and the North and South Plant Drainage Ditch (SWMU 10). It should be noted that soil contamination at SWMU 10 was addressed during remediation activities, and concentrations were reduced to below risk-based screening levels (Booz Allen, 2004; Ecology and Environment, Inc. 2004).

Sampling of surface soils at the North Plant was conducted during several Compliance Evaluation Inspections (CEI), during two phases of the site investigation, and during data gap sampling conducted in 2004. Table 2 indicates the maximum detected concentrations of contaminants detected in surface soils at the North Plant. Arsenic was the only contaminant that exceeded its respective risk-based screening level. However, it should be noted that arsenic concentrations across the TCFOA sites were consistent and are believed to be attributable to elevated background concentrations (Booz Allen, 2004; Ecology and Environment, Inc. 2004).

**Table 2 - Surface Soil (0-2 feet bgs) Sampling Results for the North Plant**

Contaminant	Maximum Detected Concentration	Unit/ Sampling Location	MSSL for Industrial Soil
<b>Total Metals (mg/kg)</b>			
Aluminum	6,120	SS-2	100,000
Arsenic	<b>11.8</b>	SS-2	3.8
Barium	167	SS-2	79,000
Cadmium	3.9	SS-3	560
Chromium	450	SWMU 7	500
Cobalt	7.5	SS-2	2,100
Copper	910	SWMU 7	42,000
Iron	36,800	SS-3	100,000
Lead	111	SS-2	800
Manganese	296	SS-2	35,000
Mercury	0.12	SS-2	340
Nickel	9,050	SWMU 7	23,000
Vanadium	22.4	SS-2	1,100
Zinc	659	SS-3	100,000

Bolded concentrations exceeded their respective screening criteria

ADEQ representatives have expressed concern about potential VOC contamination in soils at the TCFOA sites. It should be noted that VOCs were not a significant constituent of concern given that no painting operations were conducted at the North Plant. As a result, no VOC contamination was expected at the North Plant, and sampling was not performed (Booz Allen 2004; Belin, 2004).

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Sampling of subsurface soils at the North Plant was conducted during several inspections, during two phases of site investigation, and during data gap sampling performed in 2004. One detection of chromium in a subsurface soil sample from the electroplating line area exceeded risk-based screening levels. Table 3 indicates the maximum detected concentrations of contaminants detected in subsurface soils at the North Plant (Booz Allen, 2004; Ecology and Environment, Inc. 2004).

**Table 3 - Subsurface Soil (>2 feet bgs) Sampling Results for the North Plant**

Contaminant	Maximum Detected Concentration	Unit/ Sampling Location	MSSL for Industrial Soil
<b>Total Metals (mg/kg)</b>			
Arsenic	4.8	SB-2	3.9
Barium	186	SB-2	79,000
Cadmium	1.4	SB-3	560
Chromium	<b>712</b>	SWMU 1	500
Copper	1159	SWMU 1	42,000
Iron	22,900	SB-1	100,000
Lead	95.6J	SB-3	800
Manganese	1,750	SB-3	35,000
Nickel	3,120	SWMU 1	5,700
Vanadium	37.4	SB-1	1,100
Zinc	162J	SB-3	100,000

Bolded concentrations exceeded their respective screening criteria

J - qualified as estimated

**Surface Water/Sediment:** The only surface water body in the vicinity of the south plant is at SWMU 10, which is located northeast of the property. ADEQ investigated and remediated this area after elevated concentrations of metals were detected in sediments. Confirmatory samples collected from SWMU 10 indicated that all remaining contaminant concentrations were less than risk-based screening levels. Maximum concentrations of chromium, copper, lead, nickel, and zinc in the soil samples were 160 mg/kg, 86 mg/kg, 35 mg/kg, 480 mg/kg, and 160 mg/kg, respectively. In addition, tin, total cyanide, and amenable cyanide were not detected above their respective detection limits (Booz Allen, 2004; Ecology and Environment, Inc. 2004).

**Outdoor Air:** No VOCs have been detected in surface and subsurface soil at the North Plant, which could generate emissions that adversely impact outdoor air quality. In addition, exposure to contaminants entrained in wind blown dust from the North Plant is expected to be minimal because areas of contaminated soils are covered with gravel, vegetation, concrete, or scrap materials, which would prevent dispersion of contaminated soil particles. As a result, outdoor air quality is not expected to be impacted at the North Plant (Booz Allen, 2004; Belin, 2004).

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**References:**

- Belin, John I. 2004. Personal communication with William Smith of the H&H Equipment Company during a site reconnaissance visit to the Colonel's North and South Plants. September 16.
- Booz Allen Hamilton. 2004. *Conceptual Site Model for the Colonel's Factory Outlet of Arkansas, Inc.*, North Plant. May 19.
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3. Are there complete pathways between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

<b>“Contaminated” Media</b>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>4</sup>
Groundwater	no	no	no	no	no	no	no
<del>Air (indoors)</del>							
Soil (surface, e.g., <2 ft)	no	no	no	no	yes	no	no
<del>Surface Water</del>							
<del>Sediment</del>							
Soil (Subsurface, e.g., >2 ft)	no	no	no	no	no	no	no
<del>Air (outdoors)</del>							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
2. enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“\_\_\_”). While these combinations may not be probable in most situations, they may be possible in some settings and should be added as necessary.

- \_\_\_\_\_ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- \_\_\_X\_\_\_ If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.
- \_\_\_\_\_ If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

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<sup>4</sup> Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.) pathway.

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**Rationale and Reference(s):**

For this evaluation, potential exposure to contaminated media was evaluated for both on and off-site receptors. As discussed in Question 2, indoor air, outdoor air, surface water and sediment were not determined to contain concentrations of contaminants above appropriately protective risk-based screening levels. Groundwater, surface soil, and subsurface soil are impacted above relevant screening levels at the North Plant and will be evaluated.

Prior to this evaluation, potential exposures for certain receptors can also be excluded from consideration. Day-care and recreational receptors can be excluded from further consideration because soil contamination has not migrated off site. In addition, no construction activities are currently occurring at the North Plant; thus, there are no exposures to on-site construction workers. No crops or livestock are raised on the north plant property or in the vicinity of the north plant, and thus, these pathways are incomplete. Finally, based on information in the available file material and observations made during a site reconnaissance visit, the North Plant is inactive. On-site workers do not currently perform activities on the property, and therefore, can be excluded from further consideration (Booz Allen, 2004; Belin, 2004). Thus, the trespasser is the only receptor to potentially contact impacted media.

**Groundwater:** Groundwater exposure by trespasser receptors is highly unlikely because the depth to groundwater is greater than 15 feet bgs, and groundwater is not used at the North Plant. In addition, during site investigation activities, TCFOA investigated the area within a one-half mile radius of the site for groundwater wells in an attempt to determine the uppermost groundwater elevation. No groundwater wells were identified within one-half mile of the TCFOA properties. Four municipal water supply wells are located within four miles of the site; however, these wells are located beneath a confining layer and are completed approximately 1,400 feet bgs. Also, according to officials at the Crittenden County Health Department, municipal water supplies are available for the resident within one-half mile of the south plant. As a result, exposure pathways to contaminated groundwater are incomplete for all receptors (i.e., trespassers, day-care, residents) (Booz Allen, 2004; Belin, 2004).

**Surface/subsurface Soil:** The north plant property is surrounded by an eight-foot chain link fence topped with three strands of barbed wire; however, during the site reconnaissance visit, extensive use of the North Plant by trespassers was observed. Thus, potential exposure to surface soils for trespasser receptors is considered a complete exposure pathway. Because trespassers are unlikely to perform intrusive activities such as excavation, which would result in exposure to subsurface soils, exposure to surface soils is the only potentially complete exposure pathway (Booz Allen, 2004; Belin, 2004).

**References:**

- Belin, John I. 2004. Personal communication with William Smith of the H&H Equipment Company during a site reconnaissance visit to the Colonel's North and South Plants. September 16.
- Booz Allen Hamilton. 2004. *Conceptual Site Model for the Colonel's Factory Outlet of Arkansas, Inc.*, North Plant. May 19.

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4. Can the exposures from any of the complete pathways identified in #3 be reasonably expected to be “significant”<sup>5</sup> (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

- If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”
- If unknown (for any complete pathway) - skip to #6 and enter “IN” status code

**Rationale and Reference(s):**

**Surface Soil:** Exposure to contaminated surface soils by trespassers is the only potentially complete exposure pathway identified for the North Plant.

For several reasons, exposure to contaminated soils by trespassers at the North Plant is not expected to be significant. First, trespasser access to the two soil contaminated areas at the North Plant, including SWMU 1 and SWMU 7, can be considered to be significantly limited. Contaminated soils associated with SWMU 1 are covered by the concrete floor of the electroplating line, which prevents direct contact exposure by trespassers. In addition, during the site reconnaissance visit, it was determined that SWMU 7 is currently used as a debris storage area. The contaminated soils associated with this SWMU are covered with a substantial amount of debris, scrap metal, piping, and other general refuse, which would significantly limit exposure by trespassers to surface soils. For these reasons, trespassers direct contact with surface soils is not expected to be significant (Booz Allen, 2004; Belin, 2004).

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<sup>5</sup> If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

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5. Can the “significant” exposures (identified in #4) be shown to be within acceptable limits?

\_\_\_\_\_ If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

\_\_\_\_\_ If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

\_\_\_\_\_ If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code

**Rationale and Reference(s):**

**Not Applicable**

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6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

**YE** - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at **The Colonels' Factory Outlet of Arkansas, North Plant** facility, EPA ID # **ARD980621288**, located at **West Memphis, Arkansas** under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

**NO** - "Current Human Exposures" are NOT "Under Control."

**IN** - More information is needed to make a determination.

**Completed by** \_\_\_\_\_ Date 7/30/2004  
John Belin  
Risk Assessor

**ADEQ Representative** \_\_\_\_\_ Date \_\_\_\_\_

**Locations where references may be found:**

Arkansas Department of Environmental Quality - Hazardous Waste Division and Records Section  
8001 National Drive  
Little Rock, AR 72209

**Contact telephone number and e-mail:**

Daniel Clanton  
501-682-0834  
[CLANTON@adeq.state.ar.us](mailto:CLANTON@adeq.state.ar.us)

**FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.**

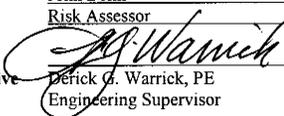
**Current Human Exposures Under Control**  
**Environmental Indicator (EI) RCRIS code (CA725)**

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6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

- YE** - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at The Colonels' Factory Outlet of Arkansas, North Plant facility, EPA ID # ARD980621288, located at West Memphis, Arkansas under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
- NO** - "Current Human Exposures" are NOT "Under Control."
- IN** - More information is needed to make a determination.

Completed by \_\_\_\_\_ Date 7/30/2004  
John Belin  
Risk Assessor

ADEQ \_\_\_\_\_ Date 9/8/2004  
Representative  Derrick G. Warrick, PE  
Engineering Supervisor

**Locations where references may be found:**

Arkansas Department of Environmental Quality - Hazardous Waste Division and Records Section  
8001 National Drive  
Little Rock, AR 72209

**Contact telephone number and e-mail:**

Daniel Clanton  
501-682-0834  
[CLANTON@adeq.state.ar.us](mailto:CLANTON@adeq.state.ar.us)

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