

Site: BLUE RIDGE
Break: 5.9
Other: v.2

EXPLANATION OF SIGNIFICANT DIFFERENCE
TO THE REMEDIAL ACTION
BLUE RIDGE PLATING SUPERFUND SITE
ARDEN, BUNCOMBE COUNTY, NORTH CAROLINA



Prepared By:
U.S. Environmental Protection Agency
Region 4
Atlanta, Georgia
June 2008



10588978

EXPLANATION OF SIGNIFICANT DIFFERENCE
BLUE RIDGE PLATING SUPERFUND SITE
ARDEN, BUNCOMBE COUNTY, NORTH CAROLINA

1.0 OBJECTIVE

The function of this Explanation of Significant Difference (ESD) is to relate to all parties of concern that the U.S. Environmental Protection Agency (EPA) is enacting an alteration to a component of the Remedial Action for the Blue Ridge Plating (BRP) Superfund Site. The requirements and goals of the Remedial Action can be found in the September 29, 2004 Record of Decision (ROD). This is the first ESD prepared for the BRP Superfund Site. This modification corrects a transcription error for the cleanup level for 1,1-dichloroethane in Table 18 - Cleanup Levels for Chemicals of Concern in the Groundwater found in the 2004 ROD.

The selected groundwater Remedial Action for the BRP Site is monitored natural attenuation. This ESD is required under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act and Section 300.435(c)(2)(I) of the National Oil and Hazardous Substances Pollution Contingency Plan.

A copy of this ESD will be added to the BRP Superfund Administrative Record/Information Repository located at either the Buncombe/Skyland Library, 260 Overlook Road, Asheville, North Carolina or in EPA's, Region IV Information Center, Atlanta, Georgia. The Administrative Record/Information Repository can be accessed and reviewed by the public during normal working hours.

2.0 SITE LOCATION AND DESCRIPTION

The BRP Site is located at 171 Glenn Bridge Road, Arden, Buncombe County, North Carolina and occupies 3.06 acres. EPA's Site Identification Number is NCD 044 447 589. BRP is an operating metal plating company which started business in 1974 and uses or has used black oxide, cadmium, chromium, copper, cyanide, tin, and zinc in its plating operations. The BRP Company was identified as the only potentially responsible party. A determination on the viability of BRP to pay for any of this Superfund work by the Agency has yet to be made. Consequently, this is an EPA lead Site using Superfund funds to pay for all Site related costs incurred to date.

Figure 1 is a Site location map and **Figure 2** provides a layout of the Site including the location of a designated wetland area (green shaded area).

3.0 SITE HISTORY

From 1974 to 1985, electroplating wastes were collected in drums located in the basement of the BRP building where plating sludges were filtered out and the wastewater was directed to a 70,000 gallon in-ground concrete lagoon located behind the shop. Plating sludges were shipped offsite for disposal and the wastewater was either sprayed on the ground or reused as process water.

Between 1985 and 1990, the wastewater was discharged to the local municipal sewer system. In 1990, the municipality suspended access to the sewer system because BRP was not meeting pretreatment requirements. There are no records indicating how much sludge or wastewater was generated. Currently, BRP employs a closed loop reclamation system which is located in the basement.

BRP has been the subject of numerous investigations, warnings, violations, and court orders from North Carolina Department of Environment and Natural Resources (NCDENR) and EPA. In December 1980, NCDENR inspected the facility under Resource Conservation and Recovery Act (RCRA). Soil samples revealed the presence of 1,1,1-trichloroethane, trichloroethylene, toluene, and cadmium. NCDENR sent BRP a compliance order in March 1987. In June 1989, NCDENR RCRA inspectors determined the facility had not addressed numerous aspects of the March 1987 administrative order.

After 1990, BRP claimed the facility discontinued discharging wastewater to the sewer system. However, the Federal Bureau of Investigation ascertained the facility continued to discharge to the sewer system. A federal court found BRP guilty of discharging heavy metals in excess of legal limits to the sewer system in 1991.

In 1993, NCDENR served another injunction for not submitting a closure plan. NCDENR received another complaint in 1997 that BRP was disposing of plating wastes by dumping them outside the back door and through cracks in the floor. Consequently, NCDENR requested EPA to collect environmental samples at the facility. The April 1998 sampling effort found elevated levels of cadmium, chromium, copper, cyanide, nickel, tin, and zinc in samples collected from inside and outside the BRP building. As a result of this sampling effort, the facility was placed in Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) in October 1998.

NCDENR conducted the Preliminary Assessment/Site Inspection (PA/SI) in July 1999 which documented the release of cadmium, chromium, copper, and nickel in soils. An Expanded Site Investigation (ESI) was conducted in September 2000. This investigation confirmed the presence of elevated levels of arsenic, cadmium, chromium, copper, cyanide, lead, manganese, mercury, nickel, selenium, silver, and zinc in the soils at the Site. **Figure 2** provides a layout of the Site, the location of the designated wetland area (shaded green), and PA/SI and ESI sampling points.

In an October 2002 correspondence, NCDENR RCRA Program deferred the Site to the Superfund Program. The Hazardous Ranking Score package for the Site was developed. The Site was proposed for inclusion on the National Priorities List (NPL) on April 27, 2005 and was finalized on the NPL on September 14, 2005.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE AND BASIS FOR THE DIFFERENCE

The following information explains the basis and rationale for the issuance of this ESD. Table 18 in the September 2004 ROD lists the cleanup levels for chemicals of concern in the

groundwater at the Site. All but two of these groundwater clean-up levels are based on North Carolina's 2004 2L groundwater standards which can be found in North Carolina Groundwater Classifications and Standards (15A NCAC 2L). The clean-up goals for iron and manganese are based on background concentrations at the Site.

The cleanup goal for 1,1-dichloroethane in Table 18 was stated to be 0.00038 milligrams per liter (mg/l) or parts per million (ppm). The correct cleanup goal for this contaminant of concern should have read 0.7 mg/l. This was the 2L groundwater standard for 1,1-dichloroethane when EPA issued the ROD in 2004. A revised Table 18 - Cleanup Levels for Chemicals of Concern in the Groundwater with the correct cleanup level for 1,1-dichloroethane is included in this ESD.

This correction does not change, alter, or modify the groundwater remediation strategy or the anticipated cleanup time-frame for the groundwater remedial action.

5.0 AFFIRMATION OF STATUTORY DETERMINATIONS

The Agency and NCDENR believe that this change to the selected remedy does not alter the protectiveness for human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to this remedial action, and is cost-effective.

NCDENR concurs with this change.

6.0 PUBLIC PARTICIPATION ACTIVITIES

As this ESD only corrects the cleanup level specified for 1,1-dichloroethane in Table 18 - Cleanup Levels for Chemicals of Concern in the Groundwater in the September 2004 ROD and does not change, alter, or modify the selected groundwater remedy, the only public outreach effort associated with this ESD will be the dissemination of a fact sheet to inform the public of this correction.

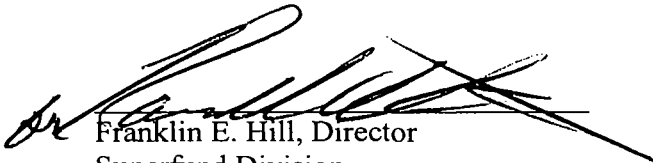
This ESD will be added to the BRP Site Administrative Record/Information Repository. The Site's Administrative Record/Information Repository are kept at:

Buncombe/Skyland Library
260 Overlook Road
Asheville, North Carolina 28803
http://www.buncombecounty.org/governing/depts/Library/locations_Skyland.htm
828-250-6488

and

U.S. Environmental Protection Agency
Region IV - Records Center
61 Forsyth Street
Atlanta, Georgia 30303
<http://r4intranet.epa.gov/r4library/index.htm>
404-562-8190

These records are available for public review during normal working hours.


Franklin E. Hill, Director
Superfund Division


Date



Legend

- 2000 Samples
- 1999 Samples
- BRP Facility
- Grass Meadow
- Forested Wetland
- Old Plating Vats
- Former Concrete Lagoon
- Roads



0 5 10 20 30 40 Feet



Blue Ridge Plating Company
Arden, Buncombe County, NC

Figure 2
Site Layout Map and
Historical Sampling Locations

TABLE 18 – Cleanup Levels for Chemicals of Concern in the Groundwater						
CHEMICALS	Non-Cancer @ Hazard Quotient = 1	SITE BACKGROUND CONCENTRATION	NORTH CAROLINA GROUNDWATER 2L STANDARDS	CLEAN-UP LEVELS	RISK AT CLEANUP	BASIS FOR SELECTION (refer to Footnotes)
GROUNDWATER/FUTURE CONSTRUCTION WORKER SCENARIO						
VOLATILE ORGANIC COMPOUNDS						
Chloroform	NA	NA	0.00019	0.00019	1 x 10 ⁻⁶	5
1,1-Dichloroethane	NA	NA	0.7	0.7	1 x 10 ⁻⁶	5
1,1-Dichloroethene	NA	NA	0.007	0.007	1 x 10 ⁻⁶	5
Tetrachloroethene	NA	NA	0.0007	0.0007	1 x 10 ⁻⁶	5
1,1,1-Trichloroethane	NA	NA	0.2	0.2	1 x 10 ⁻⁶	5
Trichloroethene	NA	NA	0.0028	0.0028	1 x 10 ⁻⁶	5
SEMI-VOLATILE ORGANIC COMPOUNDS						
2-Methylnaphthalene	NA	NA	0.014	0.014	1 x 10 ⁻⁶	5
Naphthalene	NA	NA	0.021	0.021	1 x 10 ⁻⁶	5
Pentachlorophenol	NA	NA	0.0003	0.0003	1 x 10 ⁻⁶	5
METALS						
Arsenic	0.03	NA	0.01	0.01	1 x 10 ⁻⁶	5
Cadmium	0.05	NA	0.005	0.005	1 x 10 ⁻⁶	5
Cyanide	NA	NA	0.154	0.154	1 x 10 ⁻⁶	5
Iron	31	3.8	0.3	3.8	NA	4
Manganese	14	0.3	0.05	0.3	NA	4
Nickel	NA	0.0052	0.1	0.1	1 x 10 ⁻⁶	5
Footnotes:						
All concentrations included in this table are in milligrams per liter (mg/l) or parts per million (ppm)						
NA - Not applicable						
4 - Site specific background concentration						
5 - North Carolina Groundwater Classifications and Standards (15A NCAC 2L)						

ATTACHMENT A

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT
& NATURAL RESOURCES

Letter of Concurrence



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

20 May 2008

Mr. Jon Bornholm
Superfund Branch, Waste Management Division
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303

SUBJECT: Concurrence with Explanation of Significant Difference
Blue Ridge Plating
Arden, Buncombe County

Dear Mr. Bornholm:

The State of North Carolina has reviewed the Explanation of Significant Difference (ESD) received by the Division on 19 May 2008 for the Blue Ridge Superfund Site and concurs with the selected remedy, subject to the following conditions:

1. State concurrence on the ESD for this site is based solely on the information contained in the ESD received by the State on 19 May 2008. Should the State receive new or additional information which significantly affects the conclusions or amended remedy contained in the ESD, it may modify or withdraw this concurrence with written notice to EPA Region IV.
2. State concurrence on this ESD in no way binds the State to concur in future decisions or commits the State to participate, financially or otherwise, in the clean up of the site. The State reserves the right to review, overview comment, and make independent assessment of all future work relating to this site.
3. If, after remediation is complete, the total residual risk level exceeds 10^{-6} , the State may require deed recordation/restriction to document the presence of residual contamination and possibly limit future use of the property as specified in NCGS 130A-310.8

The State of North Carolina appreciates the opportunity to comment on the ESD and looks forward to working with EPA on the remedy for the subject site. If you have any questions or comments, please call Mr. Nile Testerman at 919 508-8482.

Sincerely,

Dave Lown, Head
Remediation Branch
Superfund Section

cc: Jack Butler, Chief NC Superfund Section
Nile Testerman, NC Superfund