

# L-BAR SITE AGREED ORDER DRAFT CLEANUP ACTION PLAN



The Washington Department of Ecology is proposing to issue an Agreed Order to Northwest Alloys, Inc. (NWA) under the terms of the Model Toxics Control Act (MTCA), Chapter 70.105D, to conduct cleanup actions at the L-Bar Site near Chewelah, Stevens County, WA. This Agreed Order is a legal document formalizing the agreement between Ecology and NWA ensuring the proposed cleanup actions will be implemented in a timely manner and in accordance with MTCA and other applicable laws and regulations.

The cleanup standards, actions and other requirements to be met for the L-Bar Site are described in the Draft Cleanup Action Plan (DCAP). The DCAP was prepared by Ecology based on information collected and evaluated during the Remedial Investigation/Feasibility Study (RI/FS). Substantive requirements of the National Pollutant Discharge Elimination System (NPDES) to discharge surface water from an on-site ditch to the Colville River are included.

A State Environmental Policy Act (SEPA) Checklist for the proposed cleanup action has been completed. Ecology has determined that the proposed actions do not have a significant adverse impact on the

environment. Therefore, a Determination of Nonsignificance (DNS) has been issued.

Ecology invites the public to review and comment on the following:

- Proposed Agreed Order No. DE 00TCPER-984
- Draft Cleanup Action Plan, April 2000
- Draft NPDES Permit Substantive Requirements, April 2000
- SEPA DNS

**Public comments will be accepted May 4 through June 5, 2000.** The box at the right provides information for review of reports and how to submit written comments.

## SITE BACKGROUND

The L-Bar Site (Site) is located about two miles south of Chewelah on the west side of U.S. Highway 395 and lies on the south bank of the Colville River (Figure 1). The industrial area covers about 80 acres, including an adjoining 17-acre agricultural field (the North Field) that is located between the industrial area and the Colville River. An above-grade magnesite residue pile, about 30 feet deep and covering about seventeen (17) acres, is found west of the Site.

## FACT SHEET MAY 2000

### REPOSITORIES:

**WA Department of Ecology  
Eastern Regional Office  
4601 N. Monroe, Suite 202  
Spokane, WA 99205-1295**

**Chewelah Public Library  
301 East Clay Avenue  
Chewelah, WA 99109-8936**

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**For technical questions  
and/or submission of  
written comments contact:**

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1-800-826-7716**

**To be on the Mailing List  
Contact:**

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**PUBLIC COMMENT  
PERIOD FOR THE L-BAR  
AGREED ORDER, DRAFT  
CLEANUP ACTION PLAN**

**May 4, 2000 through June 5,  
2000.**

Two ditches - the Main Ditch and the West Ditch - run through the Site. Both ditches previously discharged into the Colville River; however, discharge from the Main ditch has stopped since 1995 as a result of actions taken by Northwest Alloys in response to an Emergency Enforcement Order issued by Ecology under MTCA in 1994.

L-Bar Products Inc., a subsidiary of Reserve Industries Corporation operated the facility from 1978 to 1991 when it filed for bankruptcy under Chapter 11. The major operation at the plant was to recover magnesium from flux bars (FB) generated from magnesium production, which were supplied mostly by NWA. Recovery was made by crushing and grinding the FBs to a powder and screening out the magnesium granules. The remaining material was called flux bar residue (FBR). The FBs and FBRs consisted mainly of spent flux of metal chlorides and some nitride compounds that produced ammonia when reacting with water. Prior to 1997, most of these materials had been designated as state-only dangerous wastes due to fish toxicity. More than 100,000 tons of materials (under a covered pile, in buildings, and on top of the magnesite pile) remained on Site after the plant's closure.

Past operating practices and inadequate storage of FBs and FBRs have resulted in elevated levels of mostly chloride and ammonia in shallow ground water and surface water. Most of the materials remaining on Site have continued to leach salts and ammonia into shallow ground

water and surface water in two ditches at the Site.

In 1993 and 1994, Ecology and NWA undertook emergency and interim remedial actions to reduce risks to human health and the environment. Also, in 1994, Ecology named NWA, L-Bar Products, Inc. and Reserve Industries Corporation Potentially Liable Persons (PLPs) for the Site. In response to an Emergency Enforcement Order issued by Ecology in 1994, NWA constructed a water retention structure that eliminated direct discharge of Main Ditch surface water to the river.

An Agreed Order became effective in 1995 that included provisions for conducting interim actions and a Remedial Investigation and Feasibility Study.

This Site was also selected to serve as a MTCA demonstration pilot project under House Bill 1810. As a result of this selection, several supplemental studies were also conducted to assess and quantify potential ecological risks.

Interim actions that were conducted at the Site included: management of stored Site waters in the Evaporation Pond through land application in the North Field during the summer months; and the removal and disposal of about 65,000 tons of FB and FBRs from atop and around the magnesite residue pile.

### **REMEDIAL INVESTIGATION/ FEASIBILITY STUDY (RI/FS)**

The RI was completed in 1998. The L-Bar Phase I Remedial

Investigation Final Report, August 1998 presents the results of the investigations. The findings of the RI show that FB and FBR materials serve as the primary source of the ammonia, chloride, and Total Dissolved Solids (TDS) in the shallow ground water, soils, and in surface water in two on-site ditches. The shallow ground water is not a drinking water aquifer; however, it discharges to the Colville River which is a Class A surface body of water of the State. The West Ditch also discharges to the Colville River. River sampling shows a slight increase in ammonia and chloride concentrations when comparing upstream to downstream results. However, surface water criteria have not been exceeded in the river.

Several Site-related constituents including chloride and TDS do not have available toxicity factors but are present at concentrations that exceed ground water quality criteria. Human health risk estimates for constituents having toxicity factors are all below the risk limits specified by MTCA. No excessive risk was identified for aquatic or benthic biota in the Colville River.

The Cleanup Levels Development and Feasibility Study Report presents the cleanup levels for the Site, the points of compliance for the cleanup levels, the remedial action objectives, and the evaluation of alternatives that will address the substances that exceed the cleanup levels. The alternatives that are evaluated include: no action; source removal with natural attenuation and monitoring; source removal with ground water interception and land

application; source removal with ground water interception and surface water collection; and source removal and soil excavation with removal or treatment of excavation water. These alternatives are evaluated and compared with MTCA criteria. Source removal with natural attenuation and monitoring is recommended as the preferred alternative.

## **DRAFT CLEANUP ACTION PLAN (DCAP)**

The DCAP is a document prepared by Ecology, which describes the selected cleanup actions, specifies cleanup standards, and identifies other requirements for the Site. MTCA provides specific criteria for selecting cleanup actions and requires that the selected cleanup actions be protective of human health and the environment, comply with cleanup standards and all state and federal laws. The selected cleanup action will provide permanent solutions to the maximum extent practicable, in a reasonable time frame and include monitoring to ensure compliance. The cleanup actions selected by Ecology consist of the following:

- Source Removal - FB and FBR materials primarily under the covered pile will be removed and disposed of appropriately. These materials will be characterized to determine the appropriate disposal sites. Compliance will be made with all federal, state and local regulations.
- Monitoring – Contaminants in ground water, surface water, and soils are expected to decrease over time due to

natural attenuation. Monitoring will be performed in accordance with MTCA to ensure that cleanup standards are met and to confirm that natural attenuation is occurring.

- Institutional controls including deed restrictions will be placed on affected properties.
- Discharge of surface water from the West Ditch to the Colville River will continue and must comply with the substantive requirements of an NPDES permit.

This selected remedial action meets all the requirements of MTCA and has been determined to constitute all known, available, and reasonable methods for prevention, control, and treatment (AKART).

## **SUBSTANTIVE NPDES REQUIREMENTS**

The West Ditch is a point source discharge to the Colville River. Pursuant to RCW 70.105D.090, a National Pollutant Discharge Elimination System (NPDES) permit is not required for remedial actions conducted under a MTCA Agreed Order. However, all substantive requirements for a NPDES permit must be met.

Permit limits for the West Ditch Discharge are required for ammonia and chloride and are set for three seasonal periods in the year. Final discharge limits are determined from mixing zone calculations and waste load allocations for the Colville River. Additional river monitoring will be required to verify these final limits. Interim limits are also established for the period of time during which

compliance with the final limits is deferred.

## **WHAT HAPPENS NEXT?**

Public comment on the proposed Agreed Order, the DCAP, the NPDES Substantive Requirements, and the SEPA DNS will be considered and modifications will be made, if necessary. A Final Cleanup Action Plan will be issued and will replace the DCAP as the enforceable attachment to the Agreed Order. A Material Removal and Disposal Management Plan will be submitted for Ecology's review and approval within 90 days of the effective date of the Order. The public will have an opportunity to review and comment on this plan.

## **ECOLOGY WANTS YOUR COMMENTS!**

This public comment period represents an opportunity to have your comments heard by Ecology. **You may review and comment on these draft documents May 4, 2000 through June 5, 2000.** Copies are available for public review at the repositories listed in the shaded box on page one. To review more detailed Site documents than those in the information repositories, contact Johnnie Harris of Ecology at (509) 456-2751 to schedule an appointment. Files may be reviewed Monday through Thursday, 8 a.m. – 5 p.m. by appointment only.

**Please submit written comments by June 5, 2000** to Teresita Bala, Site Manager, at the Ecology address listed in the shaded box on page one. Ecology will review and

respond to all written comments received and will revise the above documents, if necessary. A Responsiveness Summary will be prepared by Ecology and made available for public review at the repository locations if significant public comments are received.