



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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4WD-RCRA

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SUBJ: Evaluation of Laidlaw Environmental Services of Bartow's status under the RCRIS Corrective Action Environmental Indicator Event Codes (CA725 and CA750)
EPA I.D. Number: FLD 980 729 610

FROM: Jan Martin
South Programs Section

THRU: Kent Williams, Chief
South Programs Section *Kent Williams*

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I. PURPOSE OF MEMO

This memo is written to formalize an evaluation of Laidlaw Environmental Services of Bartow's (Laidlaw, Bartow's) status in relation to the following RCRIS corrective action codes:

- 1) Human Exposures Controlled Determination (CA725),
- 2) Groundwater Releases Controlled Determination (CA750).

The application of these event codes at Laidlaw, Bartow adheres to the event code definitions found in the Data Element Dictionary for the Resource Conservation and Recovery Information System (RCRIS).

Concurrence by the RCRA Programs Branch Chief is required prior to entering these event codes into RCRIS. Your concurrence with the interpretations provided in the following paragraphs and the subsequent recommendations is satisfied by dating and signing above. In summary, the following recommendations were made based on the evaluation:

1. CA725 IN
2. CA750 NO

II. HUMAN EXPOSURES CONTROLLED DETERMINATION (CA725)

There are five (5) national status codes under CA725. These status codes are:

- 1) YE Yes, applicable as of this date.
- 2) NA Previous determination no longer applicable as of this date.
- 3) NC No control measures necessary.
- 4) NO Facility does not meet definition.
- 5) IN More information needed.

The first three (3) status codes listed above were defined in January 1995 Data Element Dictionary for RCRIS. The last two (2) status codes were defined in June 1997 Data Element Dictionary.

Note that CA725 is designed to measure human exposures over the entire facility (i.e., the code does not track SWMU specific actions or success). Every area at the facility must meet the definition before a YE or NC status code can be entered for CA725. The NO status code should be entered if there are current unacceptable risks to humans due to releases of hazardous wastes or hazardous constituents from any SWMU(s) or AOC(s). The IN status code is designed to cover those cases where insufficient information is available to make an informed decision on whether or not human exposures are controlled. If an evaluation determines that there are both unacceptable and uncontrolled current risks to humans at the facility (NO) along with insufficient information on contamination or exposures at the facility (IN), then the priority for the EI recommendation is the NO status code.

In Region 4's opinion, the previous relevance of NA as a meaningful status code is eliminated by the June 1997 Data Element Dictionary's inclusion of NO and IN to the existing YE and NC status codes. In other words, YE, NC, NO and IN cover all of the scenarios possible in an evaluation or reevaluation of a facility for CA725. Therefore, it is Region 4's opinion that only YE, NC, NO and IN should be utilized to categorize a facility for CA725. No facility in Region 4 should carry a NA status code.

This particular CA725 evaluation is the first evaluation performed by EPA for Laidlaw, Bartow . Because assumptions have to be made as to whether or not human exposures to current media contamination are plausible and, if plausible, whether or not controls are in place to address these plausible exposures, this memo first examines each environmental media (i.e., soil, groundwater, surface water, air) at the entire facility including any offsite contamination emanating from the facility rather than from individual areas or releases. After this independent media by media examination is presented, a final recommendation is offered as to the proper CA725 status code for Laidlaw, Bartow .

The following discussions, interpretations and conclusions on contamination and exposures at the facility are based on the following reference documents: a letter from facility regarding possible groundwater contamination, Revised RFA Report (August, 1991); Revised RFI Workplan (September, 1995).

III. FACILITY SUMMARY

Laidlaw, Bartow operates a solvent recovery and hazardous waste fuel blending facility located in the Bartow Municipal Airport Industrial Park in Polk County, Florida. The facility accepts hazardous waste and off-specification solvents for reclamation to industrial grade solvents and hazardous waste for blending into hazardous waste fuels. The facility classifies the wastes it receives into 2 general categories: reclaimable solvents and fuel-grade wastes. On-site generated wastes generally consist of waste-water from sumps and runoff as well as wastes generated during facility operations.

Twelve SWMUs and 1 AOC were listed in the RFA report. No Further Action was recommended for the AOC and all but 1 of the SWMUs. Confirmatory Sampling was performed at one SWMU and did not reveal a need for further investigation. After confirmatory sampling had been completed, the facility reported the presence of low concentrations of several volatile organic compounds in 3 monitoring wells near SWMU 4, the storm water retention basin. This discovery triggered an RFI under the HSWA portion of the RCRA permit. Data regarding nature and extent of contamination is incomplete at this time because the RFI has not been completed.

IV. MEDIA BY MEDIA DISCUSSION OF CONTAMINATION AND THE STATUS OF PLAUSIBLE HUMAN EXPOSURES

Groundwater: A decision on human exposures to contamination cannot be made at this time because there is insufficient information on groundwater quality at the entire facility

Information on the presence or absence of groundwater contamination is incomplete in certain areas of the facility. These areas of the facility correspond to locations where groundwater contamination could be present given near-by SWMUs.

Information is lacking because the RFI process is not yet complete. Groundwater contamination has been documented in 3 monitoring wells near SWMU 4, the south retention pond. These wells were voluntarily installed by the facility to monitor the quality of the uppermost (unconfined) aquifer. The contamination has only been documented on-site and in the surficial aquifer. Available information indicates that drinking water wells in the area are screened in the Floridan aquifer. In this area the upper boundary of the Floridan occurs at about 100 ft bls. Hazardous constituents documented in the uppermost aquifer include tetrachloroethene at 5 $\mu\text{g/L}$ and trichloroethene at 21 $\mu\text{g/L}$.

Because of the uncertainty regarding the presence or absence of groundwater contamination at questionable areas of the facility, an opinion on plausible human exposures to groundwater contamination is not possible at this time. This information will be updated when the RFI is completed.

Surface water is reasonably expected not to be contaminated.

Surface water associated with the facility is not contaminated or reasonably expected not to be contaminated at this time. Because contamination is not reasonably expected to have occurred, **there are no plausible human exposures which must be controlled due to contaminated surface water.**

Soil: A decision on human exposures to contamination cannot be made because there is insufficient information on soil quality at the entire facility

Information on the presence or absence of soil contamination is incomplete in certain areas of the facility. These areas of the facility correspond to locations where soil contamination could be present given near-by SWMUs.

Information is lacking because the RFI process is not complete. Soil contamination has not been documented at the facility but is being investigated. There is a possibility of soil contamination in and around SWMU 4, the storm water retention basin. SWMU 4 is used for storm water management at the facility. Runoff, contaminated from contact with facility surfaces, is allowed to infiltrate the soil in SWMU 4. Additionally, Groundwater contamination has been documented in 3 monitoring wells near SWMU 4, the south retention pond.

Because of the uncertainty regarding the presence or absence of soil contamination at questionable areas of the facility, an opinion on plausible human exposures to soil contamination is not possible at this time. This information will be updated when the RFI is completed.

Air is reasonably expected not to be contaminated.

Releases to air from soil, groundwater and/or surface water contaminated by SWMUs and/or AOCs at the facility is not known to be occurring at concentrations above relevant action levels or not expected to be occurring above relevant action levels. **Therefore, there is no human exposure to contamination via an air route.**

V. STATUS CODE RECOMMENDATION FOR CA725:

CA725 IN More information needed.

As explained in Section III, because there is not enough relevant information, available at this time, to make a determination as to whether human exposures are controlled, it is recommended that CA725 IN be entered into RCRIS.

VI. GROUNDWATER RELEASES CONTROLLED DETERMINATION (CA750)

There are five (5) status codes listed under CA750:

- 1) YE Yes, applicable as of this date.
- 2) NA Previous determination no longer applicable as of this date.
- 3) NR No releases to groundwater.
- 4) NO Facility does not meet definition.
- 5) IN More information needed.

The first three (3) status codes listed above were defined in January 1995 Data Element Dictionary for RCRIS. The last two (2) status codes were defined in June 1997 Data Element Dictionary.

The status codes for CA750 are designed to measure the adequacy of actively (e.g., pump and treat) or passively (e.g., natural attenuation) controlling the physical movement of groundwater contaminated with hazardous constituents above relevant action levels. The designated boundary (e.g., the facility boundary, a line up gradient of receptors, the leading edge of the plume as defined by levels above action levels or cleanup standards, etc.) is the point where the success or failure of controlling the migration of hazardous constituents is measured. Every contaminated area at the facility must be evaluated and found to have the migration of contaminated groundwater controlled before a "YE" status code can be entered.

If contaminated groundwater is not controlled in any area(s) of the facility, the NO status code should be entered. If there is not enough information at certain areas to make an informed decision as to whether groundwater releases are controlled, then the IN status code should be entered. If an evaluation determines that there are both uncontrolled groundwater releases for certain units/areas (NO) and insufficient information at certain units/areas of groundwater contamination (IN), then the priority for the EI recommendation should be the NO status code.

In Region 4's opinion, the previous relevance of NA as a meaningful status code is eliminated by the June 1997 Data Element Dictionary's inclusion of NO and IN to the

existing YE and NR status codes. In other words, YE, NR, NO and IN cover all of the scenarios possible in an evaluation or reevaluation of a facility for CA750. Therefore, it is Region 4's opinion that only YE, NR, NO and IN should be utilized to categorize a facility for CA725. No facility in Region 4 should carry a NA status code.

This evaluation for CA750 is the first formal evaluation performed for Laidlaw, Bartow . Please note that CA750 is based on the adequate control of **all** contaminated groundwater at the facility.

The following discussions, interpretations and conclusions on contaminated groundwater at the facility are based on the following reference documents: a letter from facility regarding possible groundwater contamination: Revised RFA Report (August, 1991); Revised RFI Workplan (September, 1995).

VII. STATUS CODE RECOMMENDATION FOR CA750:

CA750 NO: Releases to groundwater have occurred, and all groundwater releases at the facility are not controlled

Based on data contained in the documents referenced in Section II and summarized in the groundwater portion of Section III, releases from SWMUs and/or AOCs have contaminated groundwater at concentrations above relevant action levels.

At this time, there is limited information regarding the nature and extent of groundwater contamination at the facility. Control measures have not been implemented. Because all groundwater contamination at the facility is not controlled, it is recommended that CA750 NO be entered.

VIII. SUMMARY OF FOLLOW-UP ACTIONS

A RCRA Facility Investigation (RFI) is taking place to investigate the nature and extent of groundwater and soil contamination at the facility. Soil data will be obtained from in and around SWMU 4, the storm water retention basin. Soil gas data will be obtained on a broader scale (than in and around SWMU 4) to help define whether more extensive soil investigation is necessary. Groundwater data will be obtained from all monitoring wells at the facility, including sample data and water levels. This investigation will provide the necessary information to update the status codes for CA725 and CA750.