MODIFICATION OF LAND APPLICATION PERMIT
APPENDIX "B" TO PERMIT No. LA-000050-02

PERMITTEE NAME: THE AMALGAMATED SUGAR COMPANY, PAUL FACILITY

EFFECTIVE DATE
OF THIS MODIFICATION: NOVEMBER 27, 1996

Complete Description of Modification:

I Schedule A is hereby modified, adding the following conditions:

7) Any additional land which the facility wishes to incorporate into the wastewater-land application permit, without technical review or modification of the permit by the Idaho Department of Health and Welfare (hereinafter referred to as "Department"), must be utilized as per the following requirements:

a. All applicable terms in the existing facility wastewater-land application permit shall be complied with when utilizing additional land.

b. Written notice to utilize additional land shall be made to the Department thirty (30) days prior to utilization of additional land, including topographic maps showing the additional land shall be submitted along with brief descriptions of proposed land management.

c. Additional land shall be assigned environmental hydraulic management unit reporting numbers by the Department prior to utilization.

d. Buffer zones of 300 feet between dwellings and wastewater-land application sites must be maintained.

e. The permittee is allowed to land apply sugar beet processing wastewater to additional land at the following *de minimis* rates not to exceed the most restrictive limit specified in the table below. No limit in this table shall be exceeded.

Site Loading Parameters	Site Loading Limits[1]
WW[2] Loading GS[3] (ac-in/ac-yr)	Irrigation Water Requirement (IWR)[4]
NVDS[5] Loading (lb/ac-yr)	4,000
COD loading (GS) (lb/ac-d) monthly average	50 (GS)
Nitrogen Loading (lb/ac-yr)	250

1) The values in the table represent maximum limits of various constituents that may be applied.
2) WW = wastewater loading. A WW hydraulic loading rate limit per acre is given in the event the permittee does not wish to utilize the entire acreage of a permitted hydraulic management unit. So long as the permittee stays below the total WW loading limit, WW may be applied to select portions of hydraulic management units so long as the WW hydraulic loading rate (ac-in/ac) is not exceeded.
3) NGS = non-growing season; defined as November 1 through April 30. GS = growing season; defined as May 1 through October 31.
4) IWR is defined on page IV-6 of the *June 1996 Handbook for Application of Municipal and Industrial Wastewater, Section IV - 1994 Technical Interpretive Supplement.*
5) NVDS = non-volatile dissolved solids; This is a rough measure of inorganic TDS (salts). It may be calculated by subtracting volatile dissolved solids (VDS) from total dissolved solids (TDS). This total includes both wastewater and supplemental irrigation water NVDS.

f. Monitoring of Additional Land: The facility shall monitor the operation and efficiency of wastewater-land application to additional land and report data and calculations as per Schedule B of permit no. LA-000050-02.

g. Should the facility wish to load additional acreage above *de minimis* loading rates described above, a modification to the permit shall be submitted for review and approval by the Department.

h. Additional land utilized for de minimis wastewater loading shall be zoned appropriately and shall receive necessary zoning approval prior to utilization.

8) The Gillette - 155 Acreage (155 Acres) is permitted for condensate wastewater-land treatment according to the limits set forth in the table below. No limit in this table shall be exceeded.

Acreage/Site Loading Limits[1]	Offsite proposed New Acreage
Acres	155
WW[2] Loading - Total (ac-in/ac-yr[3])	9.5
WW Loading - NGS[4] (ac-in/ac-yr)	9.5
WW NVDS[5] Loading (lb/ac-yr)	642
GS[6] COD loading (lb/ac-d)	50
NGS COD[6] loading (lb/ac-d)	25
Nitrogen Loading[7] (lb/ac-yr)	150% of crop uptake or 300 lb/ac-yr
Phosphorus Loading (lb/ac-yr)	150% of crop uptake

1) The values in the table represent maximum limits of various constituents that may be applied.
2) WW = wastewater loading
3) A WW hydraulic loading rate limit per acre is given in the event the permittee does not wish to utilize the entire acreage of a permitted hydraulic management unit. So long as the permittee stays below the total WW loading limit, WW may be applied to select portions of hydraulic management units so long as the WW hydraulic loading rate (ac-in/ac-yr) is not exceeded.
4) NGS = non-growing season; defined as November 1 through March 31. GS = growing season; defined as April 1 through October 31.
5) NVDS = non-volatile dissolved solids; This is a rough measure of inorganic TDS (salts). It may be calculated by subtracting volatile dissolved solids (VDS) from total dissolved solids (TDS).
6) NGS COD loading limit of 25 lb/ac-d is based on a 151 day NGS season; GS COD loading limit of 50 lb/ac-d is based on a 214 day growing season.
7) Either limit of 150% of crop uptake *or* 300 lb/ac-yr may be employed at the discretion of the permittee.

a. Buffer zones of 300 feet between dwellings and the Gillette-155 wastewater-land application site shall be maintained. Other buffer zone requirements may be stipulated pending Department approval of the comprehensive buffer zone plan required as per Schedule C no. 8 of WLAP Permit no. LA-000050-02.

b. Monitoring of the Gillette-155 acreage: The facility shall monitor the operation and efficiency of wastewater-land application to additional land and report data and calculations as per Schedule B of the permit.

c. All domestic and municipal wells closer than 1/4 mile from the Gillette-155 Acreage shall be included for evaluation in the Well Location Acceptability Analysis, currently in process, for the permitted facility.

II. Appendix A of the permit is hereby modified as follows:

1) The following Enviornmental monitoring serial number is hereby added.

Hydraulic Management Unit
MU-005008
Gillette-155 Acreage
155 Acres

2) The attached site map of the Gillette-155 Acreage is hereby added to Appendix "A".

The Department, including its agents, employees and representatives, shall not be liable for any injuries or damages to persons or property resulting from the issuance of this permit modification or the acts or omissions of the permittee in carrying out activities pursuant to this permit modification. The permittee shall hold harmless and indemnify the Department with respect to any and all claims or causes of action arising from or on account of activities carried out by the permittee pursuant to this permit modification.

The modification described above and referred to as Appendix "B" is hereby approved. This appendix to the permit is incorporated into and constitutes a part of Permit No. LA-000050-02. This appendix must be attached to the permit. The permit is incomplete and unlawful under the Wastewater-Land Application Permit Regulations without this appendix attached.

Signed,

Wallace N. Cory

WALLACE N. CORY, P.E., ADMINISTRATOR
DIVISION OF ENVIRONMENTAL QUALITY
IDAHO DEPARTMENT OF HEALTH AND WELFARE

11/27/96
DATE