



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

**STATEMENT OF BASIS FOR ISSUANCE OF UNDERGROUND INJECTION
CONTROL CLASS III AREA PERMIT MAJOR MODIFICATION**

Permit Number: MI-147-3G-A001

Facility Name: St. Clair Facility

Cargill, Inc. of Minneapolis, Minnesota, has a U.S. Environmental Protection Agency (EPA) area permit for 15 Class III injection wells for the solution mining of salt in St. Clair County, Michigan. In June 2015, Cargill requested modification of the sampling locations for the wells. EPA is proposing modifications that will replace the existing permitted sampling location with updated sampling locations. EPA also proposes modifications to update inactive well and mechanical integrity permit conditions with new language that EPA uses for Class III injection wells; to remove wells #31, #35, and #37 from the list of wells authorized under this permit; and to reduce the number of wells authorized to operate under this permit to 14. Wells #31, #35, and #37 were permanently plugged and abandoned in 2009.

EPA is proposing these modifications because of alterations to the permitted facility and information received by the Director. In accordance with the conditions set forth in Title 40 of the Code of Federal Regulations (40 C.F.R.) §§ 144.39(a) and 124.5(a), the following permit conditions are proposed for modification:

PAGE/PERMIT CONDITION

Page 1

Reduce the number of wells authorized under this permit to 14.

PAGE/PERMIT CONDITION

Page 9 – Part I(E)(15) – Inactive Wells

Replace the language of the existing permit with the language in Attachment 1.

PAGE/PERMIT CONDITION

Pages 11 and 12 – Part I(E)(19) – Mechanical Integrity (MI)

Replace the language of the existing permit with the language in Attachment 2.

PAGE/PERMIT CONDITION

Page A-1 – Operating, Monitoring, and Reporting Requirements

Change the sampling location to be the intake/discharge of the brine field injection pump for Source #1, and the intake/discharge of the purge brine injection pump for Source #2.

PAGE/PERMIT CONDITION

Page D-1 – Names and Locations of Wells Authorized Under This Permit

Remove wells #31, #35, and #37.

In accordance with 40 C.F.R. § 124.5(c)(2), only those conditions proposed to be modified above are reopened for public comment. All other existing conditions of the permit shall remain in full force and effect for the duration of the unmodified permit.

No significant environmental impact should result from the proposed permit modification. In accordance with the provisions of the Safe Drinking Water Act, as amended (42 U.S.C. 300f et seq., commonly known as the SDWA) and implementing regulations promulgated by EPA at Parts 124, 144, 146, and 147 of 40 C.F.R., EPA intends to issue a permit modification for the 14 existing wells.

Issuance and Effective Date of Major Modification: In accordance with 40 C.F.R. § 124.15, the modification will become effective immediately upon issuance if EPA receives no public comments that request a change in the draft modification. However, in the event that public comments are received that request a change in the draft modification, then the modification will become effective 45 days after the date of issuance unless the modification is appealed. In accordance with 40 C.F.R. § 144.36(a), the modified permit will be in effect for the life of the facility, unless it is otherwise modified, revoked and reissued, or terminated as provided at 40 C.F.R. §§ 144.39, 144.40 and 144.41. The permit will be reviewed by EPA at least once every five years from its effective date for consistency with new or revised Federal regulations.

Questions and requests for additional information may be submitted verbally to Andrew Greenhagen at (312) 353-7648. Comments and a request for a public hearing must be made in writing to Andrew Greenhagen at the address below, or to greenhagen.andrew@epa.gov via the Internet. The public comment period will close as described in the Public Notice. The public comment period for this major modification includes the required 30 days for public comment and an additional three days for the delay caused by mailing. If EPA receives written comments indicative of significant public interest in this action, a public notice of a scheduled hearing will be published locally and mailed to interested parties.

To preserve your right to appeal any final permit decision that may be made in this matter under 40 C.F.R. Part 124, you must either participate in the public hearing or send in written comments on the draft permit decision. A public hearing is not planned at this time. The first appeal must be made to the Environmental Appeals Board; only after all agency review procedures have been exhausted may you file an action in the appropriate Circuit Court of Appeals for review.

**U.S. Environmental Protection Agency
Region 5 (WU-16J)
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Chicago, Illinois 60604-3590**



**Tinka G. Hyde
Director, Water Division**

ACTING
FOR

ATTACHMENT 1

15. Inactive Wells - After cessation of operations for a given well for two (2) years the permittee shall plug and abandon the well in accordance with the plan and 40 CFR 144.52 (a)(6) unless the permittee has:

(a) Provided notice to the Director; and

(b) Described actions or procedures, which are deemed satisfactory by the Director, that the permittee will take to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

ATTACHMENT 2

19. Mechanical Integrity (MI) - The permittee must establish and shall maintain mechanical integrity of these wells in accordance with 40 CFR 146.8. The mechanical integrity demonstration consists of two parts: Part 1 demonstrates no significant leaks in the casing, tubing, or packer and Part 2 demonstrates no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the wellbore. The permittee is required to pass both parts of the mechanical integrity demonstration for each well in accordance with Part I(E)(19)(a) and (b) of this permit and thereafter once every 60 months from the date of the last approved demonstration for a given well.

(a) Pursuant to 40 CFR 146.8(a)(1), prior to commencing injection into any newly drilled well, the permittee shall demonstrate the first part of MI by using the standard annulus pressure test or another approved method.

(b) Pursuant to 40 CFR 146.8(a)(2), prior to commencing injection into any newly drilled well, the permittee shall demonstrate the second part of MI by running a noise, temperature or oxygen activation log. However, should the nature of the casing preclude the use of a noise, temperature or oxygen activation log, then pursuant to 40 CFR 146.8(c)(3), cementing records may be used to demonstrate the presence of adequate cement to prevent fluid migration behind the outermost casing and the wellbore.

(c) The permittee shall notify the Director of his or her intent to perform any tests required by this permit and submit written procedures for the Director's approval at least 30 calendar days prior to such activities. If the proposed procedures are not appropriate for approval, EPA will require the permittee to submit new proposed test procedures for approval, or add appropriate conditions to the submitted procedures. At the discretion of the Director, a shorter time period may be allowed.

The permittee must follow the procedures approved by the Director. If the permittee is unable to follow the EPA approved procedures, then, the permittee must contact EPA to discuss the situation. When the test report is submitted, a full explanation must be provided as to why the approved procedures were not followed. If the approved procedures were not followed, EPA may require the permittee to re-run the test.

(d) The permittee shall cause all gauges used in mechanical integrity demonstrations to be calibrated to an accuracy of not less than one-half percent (0.5%) of full scale, or the accuracy specified in the approved test procedure, whichever is more precise. A copy of the calibration certificate shall be submitted to the Director or his/her representative at the time of demonstration.

(e) The permittee shall cease injection in a well if a loss of mechanical integrity occurs or is discovered during a test, or a loss of mechanical integrity as defined by 40 CFR 146.8 becomes evident during operation. Operation of the well shall not resume until the Director gives approval to recommence.

(f) The permittee shall notify the Director of a loss of mechanical integrity in accordance with the reporting procedures in Parts I (E)(10)(e) and II (B)(3)(b) of this permit.

(g) The permittee shall report the results of a satisfactory mechanical integrity demonstration as provided in Part II (B)(3)(b) of this permit. All reports of well tests which include logs must include an interpretation of results by a knowledgeable log analyst. The reports should explain any anomalies in the data, explain any variations in the procedures, and provide facts in support of any conclusions. The reports must be certified as required by Part I(E)(12) of this permit.

(h) The permittee shall demonstrate mechanical integrity at any time upon written notice from the Director.