



Billing Code: 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-9923-91-Region 5]

Notice of Final Decision To Reissue the ArcelorMittal Burns Harbor, LLC Land-Ban Exemption

AGENCY: Environmental Protection Agency (EPA)

ACTION: Notice of Final Decision on a Request by ArcelorMittal Burns Harbor, LLC of Burns Harbor, Indiana to Reissue its Exemption from the Hazardous and Solid Waste Amendments of the Resource Conservation and Recovery Act.

SUMMARY: Notice is hereby given by the U.S. Environmental Protection Agency (EPA or Agency) that an exemption to the land disposal restrictions under the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) has been granted to ArcelorMittal Burns Harbor, LLC (AMBH) of Burns Harbor, Indiana, for four Class I injection wells located in Burns Harbor, Indiana. As required by 40 CFR part 148, AMBH has demonstrated, to a reasonable degree of certainty, that there will be no migration of hazardous constituents out of the injection zone or into an underground source of drinking water (USDW) for at least 10,000 years. This final decision allows the continued underground injection by AMBH of a specific restricted waste, Spent Pickle Liquor (SPL) into one Class I hazardous waste injection well specifically identified as SPL #1; and of waste ammonia liquor (WAL) into three Class I hazardous waste injection wells specifically identified as WAL #1, WAL #2 and WAL #3 at the AMBH facility. This decision constitutes a final EPA action for which there is no administrative appeal.

DATES: This action is effective as of **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

FOR FURTHER INFORMATION CONTACT: Stephen Roy, Lead Petition Reviewer, EPA, Region 5, Water Division, Underground Injection Control Branch, WU-16J, Environmental Protection Agency, 77 W. Jackson Blvd., Chicago, Illinois 60604-3590; telephone number: (312) 886-6556; fax number (312) 692-2951; email address: roy.stephen@epa.gov. Copies of the petition and all pertinent information are on file and are part of the Administrative Record. It is recommended that you contact the lead reviewer prior to reviewing the Administrative

Record.

SUPPLEMENTARY INFORMATION:

AMBH submitted a request for reissuance of its existing exemption from the land disposal restrictions of hazardous waste to include the newly-drilled WAL #3 well in July, 2013. EPA staff reviewed all data pertaining to the petition, including, but not limited to, well construction, well operations, regional and local geology, seismic activity, penetrations of the confining zone, and computational models of the injection zone. EPA has determined that the hydrogeological and geochemical conditions at the site and the nature of the waste streams are such that reliable predictions can be made that fluid movement conditions are such that injected fluids will not migrate out of the injection zone within 10,000 years, as set forth at 40 CFR part 148. The injection zone for the AMBH facility is composed of the lower Eau Claire Formation, the Mount Simon Sandstone and the upper portion of the Precambrian rocks, between 2170 and 4286 feet below the surface. The confining zone at the AMBH facility is the upper Eau Claire Formation, which is found between 1936 and 2170 feet. The confining zone is separated from the lowermost underground source of drinking water (at a depth of 726 feet below ground level) by a sequence of permeable and less permeable sedimentary rocks. This sequence provides additional protection from fluid migration into drinking water sources.

EPA issued a draft decision, which described the reasons for granting this exemption in more detail, a fact sheet, which summarized these reasons, and a public notice on November 14, 2014, pursuant to 40 CFR 124.10. The public comment period ended on December 16, 2014. EPA received no comments but during the comment period, EPA realized that the volume limitation identified in section I.B was inadvertently shown as gallons per month instead of gallons per year. The same mistake was made in Condition #8. Therefore, EPA is issuing the final exemption with this condition corrected to be consistent with the language in the AMBH UIC permits.

Conditions

This exemption is subject to the following conditions. Non-compliance with any of these conditions is grounds for termination of the exemption:

- 1) All regulatory requirements in 40 CFR 148.23 and 148.24 are incorporated by reference;

- 2) The exemption applies to the existing injection wells, Spent Pickle Liquor #1, Waste Ammonia Liquor #1, Waste Ammonia Liquor #2, and Waste Ammonia Liquor #3, located at the ArcelorMittal facility at 250 West U.S. Highway 12, Burns Harbor, Indiana;
- 3) Injection is limited to that part of the Lower Mount Simon Sandstone and the upper portion of the Precambrian rocks at depths between 2722 and 4286 feet below ground level;
- 4) Hazardous wastes denoted by the waste codes D010, D018, and D038 may only be injected into Waste Ammonia Liquor #1, Waste Ammonia Liquor #2, and Waste Ammonia Liquor #3. Hazardous waste denoted by waste code K062 may only be injected into Spent Pickle Liquor #1. Other fluids necessary for well testing, stimulation, etc. may be injected when approved by EPA;
- 5) The chemical properties of the injectate that will be monitored are limited according to the table below:

Chemical constituent or property	Concentration Limitation at the well head (mg/L)
Benzene	220 (maximum)
pH	Minimum pH is zero
Chromium	133 (maximum)
Naphthalene	260 (maximum)
Nickel	50 (maximum)
Phenol	3780 (maximum)
Pyridine	116 (maximum)
Selenium	5 (maximum)

- 6) The annual average of the specific gravity of the injected spent pickle liquor must be no greater than 1.31; the annual average of the specific gravity of the waste ammonia liquor must be no less than 0.99;
- 7) The chemical properties of the injectate that defined the edge of the plume in the demonstration are benzene for waste ammonia liquor and pH for the spent pickle liquor;
- 8) The monthly average injection rate for SPL must not exceed 175 gallons per minute and the monthly average injection rate for WAL must not exceed 300 gallons per minute, plant-wide, cumulatively covering all WAL injection wells.

- 9) This exemption is approved for the 21-year modeled injection period, which ends on December 31, 2027.
ArcelorMittal may petition EPA for a reissuance of the exemption beyond that date, provided that a new and complete no-migration petition is received at EPA, Region 5, by July 1, 2027;
- 10) ArcelorMittal shall submit monthly reports to EPA containing a fluid analysis of the injected waste which shall indicate the chemical and physical properties upon which the no-migration demonstration was based, including the physical and chemical properties listed in Conditions 5 and 6 of this exemption approval;
- 11) ArcelorMittal shall submit an annual report containing the results of a bottom hole pressure survey (fall-off test) performed on Spent Pickle Liquor #1, Waste Ammonia Liquor #1, Waste Ammonia Liquor #2, or Waste Ammonia Liquor #3 to EPA. The survey shall be performed after shutting in the well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR 146.68(e)(1). The annual report shall include a comparison of reservoir parameters determined from the fall-off test with parameters used in the approved no-migration demonstration;
- 12) The petitioner shall fully comply with all requirements set forth in Underground Injection Control Permits IN-127-1W-0001, IN-127-1W-0003, IN-127-1W-0004, and IN-127-1W-0007 issued by the US Environmental Protection Agency; and
- 13) Whenever EPA determines that the basis for approval of a petition may no longer be valid, EPA may terminate this exemption and may require a new demonstration in accordance with 40 CFR 148.20.

Electronic Access. You may access this Federal Register document electronically from the Government Printing Office under the “Federal Register” listings at FDSys

(<http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR>).

Dated: February 18, 2015.

Timothy C. Henry,

Acting Director, Water Division.

[FR Doc. 2015-05240 Filed: 3/5/2015 08:45 am; Publication Date: 3/6/2015]