Minnesota Pollution Control Agency

STATE OF MINNESOTA

Minnesota Pollution Control Agency

INDUSTRIAL DIVISION
PUBLIC NOTICE OF INTENT TO REISSUE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/
STATE DISPOSAL SYSTEM (SDS) PERMIT MN0068241

Public Comment Period Begins: **June 15, 2012**
Public Comment Period Ends: **July 16, 2012**

Current Permit Issued: August 21, 2007
Current Permit Expiration Date: July 31, 2012

Name and Address of Permittee:
Essar Steel Minnesota LLC
555 West 27th St
Hibbing, MN 55746

Facility Name and Location:
Essar Steel Minnesota LLC
17113 County Road 58
T 56 & 57 N, R 22 & 23 W
Nashwauk, Itasca County, Minnesota

Receiving Water for Mine Pit Dewatering: Ann Mine Pit/Sullivan Mine Pit (Class 2B, 3C, 4A, 4B, 5, 6 Waters)

Description of Permitted Facility
Essar Steel Minnesota LLC (ESML) has applied for reissuance of its NPDES/SDS permit. The permit application includes proposed modifications to the original Minnesota Steel Industries (MSI) Project which completed an Environmental Impact Statement (EIS) and was permitted in August 2007. The proposed ESML modifications project include all the activities covered under the original MSI project including mining, ore processing, direct reduced iron (DRI) production and steel-making, but would entail higher taconite pellet production and associated mining and tailings generation rates. The proposed ESML modifications include an increase in taconite pellet production from 4.1 million metric tons/year of low-flux DRI feed grade taconite pellets to 6.5 million metric tons/year of high flux blast furnace grade pellets or 7.0 metric tons/year of low-flux, DRI grade taconite pellets. The project also planned an increased mining rate which will reduce the 20-year life of the mine to 15 years.

A supplemental EIS was completed by the Minnesota Department of Natural Resources in December 2011 to evaluate impacts associated with the increase in capacity, construction and operation of the modified mine plan, new crushing/concentrating lines, expansion of the indurating furnace, and a reduction in capacity to produce DRI and steel slabs. The permitted facility description and permit requirements in the draft permit reflect changes evaluated during the 2011 Supplemental Environmental Impact Statement.

At this time, Essar Steel Minnesota is currently undergoing construction of the proposed facility and has not yet initiated operation. The principal activities at this facility will include open-pit taconite mining of the Biwabik Iron Formation at a rate of approximately 24.0 million metric tons of ore per year, crushing, concentrating, and pelletizing a combination of approximately 6.5 million metric tons of high-flux oxide pellets or approximately 7.0 million metric tons of low flux/DRI oxide grade pellets; direct iron reduction of approximately 1.8 million metric tons of iron pellets; and production of approximately 1.5 million metric tons of steel slabs using arc furnaces, ladle metallurgy furnaces, and casters.

Taconite ore will be mined from Pit 5 and Pit 6 (adjacent and including to the Draper Annex Pit) using open-pit mining methods. The ore processing facilities will consist of a crusher, concentrator, pellet plant, and direct reduced iron (DRI) plant. Crushed ore will be conveyed to the concentrator where the magnetic iron oxide materials (concentrate) will be separated from the nonmagnetic waste (tailings). Tailings from the concentrator will be pumped to a tailings thickener where solids will be thickened by sedimentation into tailings slurry. The tailings slurry will be pumped from the thickener to a new tailings basin to be constructed on the site of the former Butler Taconite facility tailings basin. The steel manufacturing facilities will include one electric arc furnace, water pre-treatment and water recovery and reuse system (WRRS), one ladle furnace, one thick slab caster, one tunnel furnace, a vacuum degasser, a hot strip rolling mill, and a sheet steel coiler.

Water for the steel making operations will be supplied from stormwater collected from the plant and production/storage areas, and maintenance dewatering of ore mining Pits 5 and 6, as well as the natural ore Ann and Sullivan Pits. Water will also be appropriated from Pits 1 and 2 for use as process water. Water utilized in the DRI and Steel Mill production operations will be routed to the WRRS located in the plant area near the DRI building and is conceptually designed as follows: Influent to the WRRS will be routed to an equalization/storage system consisting of two storage tanks and a diversion basin that will provide at least 24 hours of storage when the production plant is running at full capacity. The WRRS will collect and treat process water streams, remove blow-down streams, and receive make-up water such that undesirable constituents can be removed and disposed and recovered water can be reused at the facility. The WRRS design may include the following unit operations: influent flow equalization, precipitation, clarification, pH adjustment, filtration, reverse osmosis, and brine concentration via evaporation and crystallization. All process water treated via the WRRS will be either reused or evaporated. There will be no discharge from the WRRS. Solids generated by the WRRS will be tested and characterized as either hazardous or non-hazardous and will be further evaluated for beneficial use suitability. Solids that are found not suitable for beneficial use will be disposed in an appropriate certified landfill.

Coarse and fine tailings separated from iron oxide materials in the concentrator will be pumped to tailings thickeners. Tailings slurry of approximately 33 percent solids will be transported to the basin at an average rate of approximately 12,000 gallons per minute. By reusing all the process water from the pellet plant; and treating and reusing all process water from the DRI, melt shops and steel mill; the only water entering the tailings basin will be precipitation and the water used to convey tailings to the basin from the concentrator.

A seepage collection and return system will be constructed to collect any potential seepage and return it back to the tailings basin to ensure there is no discharge to surface waters from the tailings basin. The permit includes requirements to monitor ground water quality at five monitoring wells surrounding the tailings basin to detect any changes in ground water chemistry.

For a more detailed description of the proposed facility, the Minnesota Pollution Control Agency (MPCA) recommends review of the proposed NPDES/SDS permit, the permit application and the statement of basis.

The location of the Facility is shown on the attached map.

Preliminary Determination on the Draft Permit
The MPCA Commissioner has made a preliminary determination to reissue this NPDES/SDS permit for a term of approximately five years.

A draft permit is available for review at the MPCA office at the St. Paul address listed below, at the Duluth regional office located at 525 Lake Avenue South, Suite 400, Duluth, MN 55802 and on-line at http://www.pca.state.mn.us/news/data/index.cfm?PN=1.

A copy of the draft permit will be mailed to you if the MPCA receives your written or oral request at this office. If you have questions about this draft permit or the Commissioner's preliminary determination, please contact Stephanie M. Handeland at 651-757-2405.

Written Comments
You may submit written comments on the conditions of the draft permit or on the Commissioner's preliminary determination.

Written comments must include the following:

1. A statement of your interest in the permit application or the draft permit.
2. A statement of the action you wish the MPCA to take, including specific references to sections of the draft permit that you believe should be changed.
3. The reasons supporting your position, stated with sufficient specificity as to allow the Commissioner to investigate the merits of your position.

Petition for Public Informational Meeting
You also may request that the MPCA Commissioner hold a public informational meeting. A public informational meeting is an informal meeting that the MPCA may hold to solicit public comment and statements on matters before the MPCA, and to help clarify and resolve issues.

A petition requesting a public informational meeting must include the following information:

1. A statement identifying the matter of concern.
2. The information required under items 1 through 3 of "Written Comments," identified above.
3. A statement of the reasons the MPCA should hold a public informational meeting.
4. The issues that you would like the MPCA to address at the public informational meeting.

Petition for Contested Case Hearing
You also may submit a petition for a contested case hearing. A contested case hearing is a formal evidentiary hearing before an administrative law judge. In accordance with Minn. R. 7000.1900, the MPCA will grant a petition to hold a contested case hearing if it finds that: (1) there is a material issue of fact in dispute concerning the application or draft permit; (2) the MPCA has the jurisdiction to make a determination on the disputed material issue of fact; and (3) there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of the contested case hearing would allow the introduction of information that would aid the MPCA in resolving the disputed facts in making a final decision on the draft permit. A material issue of fact means a fact question, as distinguished from a policy question, whose resolution could have a direct bearing on a final MPCA decision.

A petition for a contested case hearing must include the following information:

1. A statement of reasons or proposed findings supporting the MPCA decision to hold a contested case hearing according to the criteria in Minn. R. 7000.1900, as discussed above.
2. A statement of the issues proposed to be addressed by a contested case hearing and the specific relief requested or resolution of the matter.

In addition and to the extent known, a petition for a contested case hearing should also include the following information:

1. A proposed list of prospective witnesses to be called, including experts, with a brief description of proposed testimony or summary of evidence to be presented at a contested case hearing.
2. A proposed list of publications, references, or studies to be introduced and relied upon at a contested case hearing.
3. An estimate of time required for you to present the matter at a contested case hearing.

MPCA Decision

You may submit a petition to the Commissioner requesting that the MPCA Citizens' Board (Board) consider the permit issuance. To be considered timely, the petition must be received by the MPCA by 4:30 p.m. on the date the public comment period ends, identified on page 1 of this notice. Under the provisions of Minn. Stat. § 116.02, subd. 6(4), the decision whether to issue the permit and, if so, under what terms will be presented to the Board for decision if: (1) the Commissioner grants the petition requesting the matter be presented to the Board; (2) one or more Board members request to hear the matter before the time the Commissioner makes a final decision on the permit; or (3) a timely request for a contested case hearing is pending. You may participate in the activities of the Board as provided in Minn. R. 7000.0650.

The written comments, requests, and petitions submitted on or before the last day of the public comment period will be considered in the final decision on this permit. If the MPCA does not receive written comments, requests, or petitions during the public comment period, MPCA staff as authorized by the Board, will make the final decision on the draft permit.

Comments, petitions, and/or requests must be submitted in writing on or before the end date of the public comment period identified on page 1 of this notice to:

Stephanie M. Handeland SP-5
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Location of Permitted Facility