SIZE AND SCOPE OF AGGREGATE MINING OPERATIONS VARY

There is a wide variability in the size and scope of aggregate mining operations in Minnesota. Some are active only for one season to serve road construction projects. Others are long-term sites that operate continuously over several years. The materials being mined and the mining methods also vary greatly. Some operations mine unconsolidated sand and gravel materials left by glaciers; others produce crushed rock blasted from bedrock. Some operations mine within the groundwater table and others remain above the water table. There are various types of auxiliary facilities used at an aggregate operation, such as crushers, wash plants and asphalt plants. Permits required for aggregate mining depend on the size, scope and location of the operation.

LOCAL PERMITS

Counties, townships or municipalities have the primary authority for regulating extractive uses like aggregate mining. In many counties, aggregate mining requires a Conditional Land Use Permit (CLUP) from the county planning and zoning office. A township or municipality may also require a permit in addition to (or instead of) a county permit. Local permits are generally required for new operations that exceed a certain threshold of activity, or for expansion of an existing operation. The threshold for triggering a permit varies from one county to the next and may be related to area, production volumes, or length of time. Operations that were active before the effective date of a required permit may be exempt.

Local permits may address issues such as: hours of operation, noise, traffic, dust, and reclamation. Performance bonds or some other form of financial assurance may be required. The term of local permits can vary from one year to the life of the mine. Increasingly, local authorities are requiring a mining and reclamation plan along with the permit. For more information on the local permits required for aggregate mining, contact the local county zoning or planning office.
In general, state agencies have no regulatory role in administering or reviewing local permits. Depending on the size and scope of the mining operation, however, some state and federal permits may apply to certain aggregate mining operations.

**Minnesota Department of Natural Resources (DNR)**

*Water Appropriation Permit*  A permit from the Department of Natural Resources - Division of Waters may be required if there is a need to appropriate water as part of the mining operation. Appropriation permits are required for activities such as pit dewatering or aggregate washing plants that consume water at a rate of 10,000 gallons per day or 1,000,000 gallons per year. Contact: Jim Japs (651) 297-2835

*Work in the Bed of Protected Waters Permit.* If the mining activity will impact a protected body of water, a *Work in the Bed of Protected Waters* permit may also be needed. For more information about these permits, contact the area hydrologist at the local area DNR office (see the website at [http://www.dnr.state.mn.us/waters/resources/index.html](http://www.dnr.state.mn.us/waters/resources/index.html) for the closest office, or call the general number for the division (651) 296-4800) or contact Ron Anderson at the DNR central office, Division of Waters, St. Paul, at (651) 296-0520.

*Burning Permit.* A burning permit may also be required if the applicant needs to burn brush from clearing and stripping operations. Burning permits are available at many locations throughout the state. For more information, contact your local DNR office: [http://www.dnr.state.mn.us/regions/](http://www.dnr.state.mn.us/regions/)

**Shorelands, Floodplains, Wild and Scenic Rivers.** DNR is responsible for three other programs established by law which might affect certain aggregate operations. The Shoreland Management Act, the Floodplain Management Act, and the Minnesota Wild and Scenic Rivers Act, are “land use” or “zoning” type laws that require the DNR to institute minimum statewide development standards for shoreland, floodplains and on certain rivers designated as Wild and Scenic Rivers. These standards must then be adopted through local zoning or land use ordinance. The shoreland regulations, for example, require that aggregate mining be a permissible land use within a given shoreland zoning use district. If it is a permissible use, a plan must be prepared that addresses dust, noise, hours of operation, possible pollutant discharges, erosion control, mitigation of environmental impacts, and reclamation. The law allows local units of government to be more restrictive than the minimum standards. For information on how these regulations might affect a specific operation within a shoreland, floodplain or wild and scenic river, contact your local county planning and zoning office.

**Minnesota Board of Water and Soil Resources (BWSR)**

*Wetland Permit.* The Wetland Conservation Act requires a permit for certain activities that impact wetlands. The Act requires that the project proposer follow a sequence of development steps that includes avoiding impacts to wetlands, minimizing unavoidable impacts, and mitigating for the loss of wetlands due to a specific regulated activity. The overall authority for the Wetlands Conservation Act is through the Minnesota Board of Water and Soil Resources (BWSR) with implementation through a local governmental unit. For more information, contact BWSR (central office) at (651) 296-3767 or contact your local Soil and Water Conservation District Office: [http://www.bwsr.state.mn.us/](http://www.bwsr.state.mn.us/)
Minnesota Pollution Control Agency (MPCA)

Fuel and Hazardous Materials Management. The containment, storage, recycling and disposal of used oil, lubricants, antifreeze, paint, solvents, vehicle clean wastes, recovered Freon, asbestos, PCBs, shop wastes and other hazardous materials must be in compliance with MPCA requirements. For more information, contact MPCA (general number) at (800) 657-3864 or (651) 296-6300.

Liquid Storage Tanks. Management of liquid storage tanks, whether above ground or under- ground must be in compliance with MPCA requirements. For more information, contact MPCA.

Air Quality. Aggregate mining facilities must meet minimum standards for dust and noise. Crushing operations may have to meet federal standards for emissions of particulates from processing equipment. Depending on production capacity, an air emission permit may be required. For more information, contact MPCA at (651) 282-6143 or (800) 657-3938.

Water Quality. The following activities at aggregate operations require a water quality permit from MPCA:
- Discharge from washing plants that leave the mine, whether by gravity flow or pumping.
- Pumping or siphoning out a mine to create a dewatering discharge.
- Storm water runoff from mine stockpiles and pit walls, as well as from equipment like rock crushers, hot mix asphalt, and concrete production plants.
- Generation of wastewater by air emission control systems.
For more information, contact MPCA at (651) 296-7238.

FEDERAL PERMITS

U.S. Army Corps of Engineers (COE)

Section 404 Permit. The Army Corps of Engineers is a federal agency that regulates the discharge of dredged or fill material within waters or wetlands. At aggregate mining operations, activities in wetlands that might trigger a 404 permit include mining activities, the construction of access roads, building sites, storage areas, or water retention ponds. Each county has its own project manager. General information is available from the District Office of the Army Corps of Engineers at (651) 290-5375.

ENVIRONMENTAL REVIEW

Environmental Quality Board (EQB)

Environmental Review. Rules developed by the state Environmental Quality Board determine when environmental review is needed for development projects. Environmental review in the form of an Environmental Assessment Worksheet (EAW) is required when an aggregate mining operation is expected to exceed 40 acres in size to a mean depth of 10 feet. Environmental Impact Statements (EIS) are mandatory for operations exceeding 160 acres. EAWs can be conducted on a discretionary basis if a proposed project is below the mandatory threshold under certain conditions. The EQB rules specify the governmental unit that is responsible for completing environmental review. For aggregate mining proposals, completing environmental review is the responsibility of local government, most often the county planning or zoning office in which the proposed project is located. For more information about environmental review, contact EQB at (800) 657-3794 or (651) 296-8253 or the local county zoning and planning office.