Aggregate Industries Exchange
Environmental Assessment
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The DNRE proposes to remove 72.44 acres (0.34%) of the 21,046 acre Waterloo Recreation Area from recreational use for a period of approximately 10 years. This will leverage a gift acquisition of 324 acres of land from Aggregate Industries (Figure A). The 324 acres will become part of the Waterloo Recreation Area. In exchange Aggregate Industries will receive a non-metallic mineral lease which will allow mining of the 72.44 acres of Waterloo Recreation Area land. The non-metallic mineral lease will also allow Aggregate Industries to continue and complete mining of a portion of the 324-acre gifted parcel after it is gifted to the state. The 72.44 acres of state land will be referred to as the “Converted Property”. The 324-acre gift parcel will be referred to as the “Replacement Property”.

This acquisition will contribute to the DNRE’s Land Consolidation Strategy and eliminate nearly three miles of public/private boundary interface in the Waterloo Recreation Area. The project will provide 324 acres of additional recreation opportunity and contribute 7-8 million dollars to the Michigan Natural Resources Trust Fund (MNRTF), which in turn will provide funding for development of additional public recreation and purchase of recreational lands (see below). Initially 87 acres of the 324-acre parcel will provide replacement recreation.

At the conclusion of the non-metallic mineral lease, reclamation and restoration both the 72.44 acres and the entire 324-acre Replacement Property will be returned to recreational use as part of the Waterloo Recreation Area and included in the 6(f) boundary for the Waterloo Recreation Area. The non-metallic mineral lease requires reclamation and ecological restoration by Aggregate Industries.

The DNRE believes that if this proposal is not consummated, Aggregate Industries will eventually develop the 324-acre property for residential housing. A concept drawing for residential development has been prepared by Bauer-Ford Reclamation, consultants to Aggregate Industries. Aggregate Industries is unwilling to sell their 324-acre parcel to the State of Michigan for cash consideration. Throughout negotiations over the past eight years, DNRE representatives have been unsuccessful in persuading Aggregate Industries to change their position.

Residential development would have significant and irreversible negative impacts to the natural resources and to the recreational and aesthetic experiences provided by the proximal undeveloped lands of the Waterloo Recreation Area. For example, the required firearm safety zones associated with residential development could result in the loss of as much as 150 acres of recreational hunting opportunity on recreation area lands currently open to hunting. Aesthetics will change from a natural landscape to a suburban landscape. Automobile traffic will increase. Invasive plants used for residential landscaping are expected to increase. Viewsheds will be negatively impacted. There are numerous examples of the negative impacts of the development of inholdings to many Southeast Michigan state parks and recreation areas. The DNRE’s proposal will prevent incompatible development and increase recreational opportunities.
The Converted Property will remain property of the State of Michigan (DNRE). The Converted Property will be mined for sand and gravel by Aggregate Industries under a 10 year non-metallic mineral lease with the possibility of limited time extension(s), if granted at the discretion of the DNRE. Weak market demand for aggregate may be viewed by the DNRE as sufficient justification for extension(s).

An estimated 8 to 9 million tons of non-metallic minerals may be mined from the Converted Property during the lease period. Aggregate Industries will pay a production royalty rate of $0.90 per ton (2000 lbs. avoirdupois) for the minerals, with all royalties accruing to the Michigan Natural Resources Trust Fund as required by state statute.

The 72.44 acres to be converted is an irregular-shaped parcel with rolling topography (typical kettle-kame ice contact topography) and a mix of old field and young woodland cover types (Figures B, C). Long abandoned farm fields, which predate state ownership, are dominated by European pasture grasses, spotted knapweed and non-native shrubs such as autumn olive and bush honeysuckle. The young woodland is also dominated by non-native species. Much of the forested area is non-native black locust, with large areas smothered by invasive oriental bittersweet. The low quality of the extant vegetation was a primary criterion in choosing and delineating the non-metallic mineral lease area.

The conversion of the 72.44 acres will occur simultaneously with the State of Michigan taking ownership of the 324-acre Replacement Property and the signing of a non-metallic mineral lease. Aggregate Industries will complete mining on no more than 245 acres of the 324-acre Replacement Property and the 72.44 acre Converted Property, which will remain in state ownership. At the moment of the signing of the non-metallic mineral lease, the Replacement Property will provide a minimum of 87 acres of public park land (replacement) (Figures D.1, D.2). This public park land is located on the southern portion of the Replacement Property where mining and reclamation are complete.
As additional phases of reclamation and restoration of the Replacement Property are completed, additional acreage will be opened to public recreational use, until all 324 acres and the 72.44-acre Converted Property are open for public recreation.

The ice contact landform of the Converted Property formed where the Lake Erie and Saginaw Bay lobes of the Laurentide glacial ice sheets (Wisconsinan Advance) collided and piled up irregular sand and gravel ridges between them. Both properties will be reclaimed to contours that resemble and blend with this hilly kettle and kame topography, as though glacial material had been deposited in a different but similar manner (Appendix O).

The Converted Property will be restored to oak-hickory forest with several buttonbush swamp wetlands. The northern portion of the Replacement Property includes a pond with wetland margins. Uplands will be restored to oak-hickory forest, but with forest species more tolerant of wet conditions and silty soils planted on the former settling ponds. Several buttonbush swamps will be installed to mimic glacial kettle depressions. The southern portion of the Replacement Property will be restored to native grassland (prairie/barrens). Native species will be used. Plant materials will be of local genetic provenance.

The **Michigan Natural Resources Trust Fund** has been in place since 1976. It provides financial assistance to local governments and the Department of Natural Resources and Environment (DNRE) to purchase land or rights in land for public recreation or protection of land because of its environmental importance or its scenic beauty. It also assists in the appropriate development of land for public outdoor recreation. The mining royalty revenue provided to the MNRTF will be distributed through the normal application process and provide 7-8 million dollars of new recreation opportunity.
CHAPTER 2 – ALTERNATIVES CONSIDERED

2.1 Proposed Alternative

The proposal is to remove 72.44 acres (0.34%) of the 21,046-acre Waterloo Recreation from recreational use for approximately ten years. An estimated 8 to 9 million tons of non-metallic minerals will be mined from the Converted Property during this period. Once reclaimed and restored, the Converted Property will be returned to recreational use and will provide equivalent public recreation opportunities to those it provides today. A 324-acre private inholding will be acquired and provide the necessary 6(f) replacement lands. Replacement will begin with a minimum of 87 acres of land open for public recreation and incrementally increase until all 324-acres are open for public recreation and included within the 6(f) boundary.

The DNRE is pursuing this conversion for following reasons:

1) It makes possible acquisition of 324-acres of recreational land from a private landowner otherwise unwilling to sell.
2) It results in a gift acquisition of the 324-acre property valued at approximately $810,000.
3) The acquisition will contribute to the DNRE’s Land Consolidation Strategy and eliminate nearly three miles of public/private boundary interface in the Waterloo Recreation Area.
4) It will prevent development of the 324-acre inholding that is incompatible with the natural resource based recreation of the Waterloo Recreation Area.
5) There will be no net loss of recreational opportunity at any time and significant future recreational opportunity will be leveraged.
6) Once mining and reclamation are complete, the Converted Property and the entirety of the Replacement Property will be returned to public recreational use within the Waterloo Recreation Area.
7) The associated non-metallic mineral lease will provide 7-8 million dollars to the MNRTF, which will be distributed through the normal application process to eligible units of government and provide 7-8 million dollars of new recreation opportunity.
8) The reclaimed topography of both the Replacement Property and the Converted Property will be very usable for recreation. The topography will be similar to the ice contact topography and glacial outwash topography of the vicinity (Appendix O).
9) Both the Replacement Property and the Converted Property will be restored with appropriate local genotype native vegetation. Aggregate Industries will pay for the installation as a requirement of their non-metallic mineral lease. This will facilitate removal of invasive vegetation currently extant on the Converted Property and replacement with appropriate native vegetation at no cost to the State. The extant invasive vegetation threatens adjacent native habitats.

The Converted Property was chosen because it provides the quantity and quality of non-metallic minerals necessary to make the project palatable to the private landowner (Aggregate Industries). Boundaries for the converted parcel were delineated specifically to avoid high value natural resource lands. Boundaries also exclude the high ridge, locally known as “Murder Mountain”, which is valued as a scenic overlook.

This acquisition will contribute to the DNRE’s Land Consolidation Strategy and eliminate nearly three miles of public/private boundary interface in the Waterloo Recreation Area. The project will provide 324-acres of additional recreation opportunity and approximately 7-8 million dollars to the Michigan Natural Resources Trust Fund, which will provide funding for additional new recreation. At the conclusion of the non-metallic mineral lease the entire 324 reclaimed and restored acres will be included in the 6(f) boundary of the Waterloo Recreation Area.
2.1.1 Recreation Resources and Opportunities Provided by Replacement Property

At the moment of conversion, the Replacement Property will provide a minimum of 87 acres of public recreational park land. A developed public parking area (a minimum of 10 spaces) will provide improved physical access to this area. This 87 acre portion includes reclaimed aggregate mine, un-mined uplands and un-mined wetlands (Figures D.1, D.2). As phases of mining are completed, additional acreage will be made available for public recreation. At the conclusion of the non-metallic mineral lease, the entirety of the 324-acre Replacement Property will be open to the public for recreational use and included in the 6(f) boundary of the Waterloo Recreation Area.

At the moment of conversion, the Replacement Property will provide dispersed recreation opportunities, hiking, hunting, bird watching, etc. that are equal to or greater than those currently afforded by the Converted Property. At the conclusion of the non-metallic mineral lease the entirety of the 324-acre Replacement Property will provide significantly more opportunity for dispersed recreation.

Other recreational uses such as hiking or equestrian trails may be developed in the future in accordance with Recreation Division’s Management Planning Process, which has recently begun for the Waterloo Recreation Area.

2.1.2 Changes to the LWCF Section 6(f) Boundary

The 72.44 acre Converted Property will be removed from the 6(f) boundary for approximately ten years. Eighty-Seven and eventually 324-acres will be added to the 6(f) boundary as Replacement Property. At the conclusion of the non-metallic mineral lease, the Converted Property and entirety of Replacement Property will have 6(f) designation (Figure E).

2.1.3 Description of The Converted Property - Including Outdoor Recreation Facilities and Opportunities

The parcel to be converted is 72.44 acres in size. Recreational activities within 20,973.56 acres (99.66%) of the remaining park land will not be impacted by the conversion.

The 72.44 acres to be converted is an irregular-shaped parcel with rolling topography (Figure B) (typical kettle/kame ice contact topography) and a mix of old field and young woodland cover types (Figure A, C). Long abandoned farm fields, which predate state ownership, are dominated by European pasture grasses, spotted knapweed and non-native shrubs such as autumn olive and bush honeysuckle. The young woodland is also dominated by non-native species. Much of the forested area is non-native black locust,
with large areas smothered by invasive oriental bittersweet, which present an ongoing threat to the high quality oak-hickory forest and wetlands to the south, west and north of the property to be converted. A “forest” inventory was performed using standard prism point sampling. The results of the forest inventory are presented in Appendix A and support the above characterization.

Current recreational infrastructure of the Converted Property is very minimal. It includes an informal 1-2 car pull-off and a simple overlook (Figure F). The overlook includes a small cleared area, two picnic tables and posts for tethering horses. The overlook was associated with a short stretch of equestrian trail which was rerouted just outside the proposed Converted Property, during the summer of 2010.

The reroute was accomplished with input and agreement from the Waterloo Horseman’s Association. There was no net loss of trail length; the new route is slightly longer than the old.

2.1.4 Section 6(f) Parkland, Outdoor Recreation Facilities And Opportunities Remaining

The Waterloo Recreation Area offers a diverse array of recreational opportunities with both day-use activities and camping.

Recreational activities within the 20,973.56 acres (99.66%) of park land not affected by the 6(f) conversion include the following:

Gerald E. Eddy Visitor Center - Exhibits include interactive displays, multi-image slide shows, and other nature programs to orient visitors to Michigan's unique cultural and natural features.

Hunting – Waterloo Recreation Area is open to hunting following regular State regulations between September 15 and May 31. This park boasts excellent deer and turkey hunting. Rabbit and squirrel are found throughout the park. In addition, there are areas throughout the park with populations of pheasant, quail, grouse and woodcock. The area surrounding Mill and Cedar Lakes, the area surrounding Portage Lake Campground and private properties are all closed to hunting. The park is also open to trapping.

Wildlife Viewing – Waterloo Recreation Area provides a broad range of wildlife viewing opportunities. Bird watching is very popular. A main attraction is the staging and fall migration of sandhill cranes. Upwards of 4,000 of these birds may be sighted at one time.

Playgrounds – Playgrounds are available at the Portage Lake day-use area and the Sugarloaf Campground. Both are handicap-accessible.

Portage Lake Beach House – The beach house provides a changing area for swimmers at the Portage Lake beach day use area. This facility is ADA accessible.
Swimming Beaches – There is a public beach at Big Portage Lake and a “campers only” swimming beach at Sugarloaf Campground.

Fishing – ADA accessible fishing piers can be found at Big Portage Lake and Crooked Lake. All of the publicly accessible lakes and ponds in Waterloo Recreation Area may be fished. Bass, panfish, pike and other fish typical of the region inhabit the lakes of Waterloo Recreation Area.

Big Portage Lake Picnic Area – An ADA accessible picnic site is located at Big Portage Lake. It has picnic tables, grills, potable water, and toilet facilities.

Crooked Lake and Mud Lake Picnic Areas – Smaller picnic sites are located at Crooked Lake and Mud Lake. Sites at both locations are equipped with picnic tables and grills.

Hiking – Waterloo Recreation Area has over 50 miles of hiking trails, including the Waterloo-Pinckney Trail.

Equestrian Trails – Waterloo Recreation Area has over 15 miles of equestrian trails.

Mountain Biking – With access on Katz and Glenn Roads, a five mile biking trail provides a scenic and challenging trail for riders of all skill levels.

Boat Launch Sites – Public boat launch sites are located at Big Portage Lake, Cedar Lake, Green Lake, Crooked Lake, Mill Lake, Mud Lake, Winnewana Impoundment, and Walsh Lake. There is a boat launch at the Sugarloaf Campground that is limited to camper use only. The following lakes can be accessed by foot across State land: Clear Lake, Doyle Lake, Cassidy Lake, Little Portage Lake, and Merkle Lake.

Cross Country Ski – Cross county ski trails originate at the Eddy Visitor Center. These trails are ungroomed.

Metal Detecting – Metal detecting is allowed in designated areas.

2.1.5a Description of Replacement Property

The 324-acre Replacement Property (Figure G) is currently an active sand and gravel mine with a processing facility located near Green Road. Approximately 30 acres can be characterized as processing facility and processed material stockpiles.
The mine has been in operation since the 1930’s.

There are no known environmental contaminants on the property. No chemicals are used in aggregate processing, other than water. Fuel for mining vehicles and equipment is stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at the Aggregate Industries existing processing plant. The fueling facilities meet DNRE requirements.

The processing facility includes a concrete transit mix plant, where course aggregate, sand and water are combined with Portland cement into the drum of a concrete transit truck. Dry Portland cement is transported to the site by truck, and stored on site. Materials are mixed in each concrete truck inside an enclosed building.

The northern one-third (approximate) of the Replacement Property was once a complex of sand and gravel kames (ice contact landform). This topography has been significantly altered by aggregate mining. (The non-metallic lease requires contours and slopes to be sculpted to resemble and blend with the adjacent hilly kettle and kame topography, as though material had been deposited in a different but similar manner. (Appendix O))

The northern one-third also includes a 12-acre (approximate) excavated pond and a series of active and filled settling ponds (26 acres) used to wash gravel. The sediment in these settling ponds is the fine material, silt and clay, washed from gravel aggregate.

The landform of southern two-thirds (approximate) of the Replacement Property is glacial outwash and post-glacial alluvium. Aggregate mining has not significantly altered the landform and mining is substantially complete in this area.

The southern two-thirds includes 28 acres of extant natural wetland (emergent palustrine – emergent marsh) that connects to Pond Lily Lake, an emergent marsh west of the property.

A total of 42 acres of un-mined oak-hickory forest is extant south of the wetland and along the northeast and north borders. Much of this forest is considered good quality with larger diameter trees and native species.

The property has multiple access points via road frontage on Loveland and Harvey Lake Roads.

Eight-seven reclaimed acres on the southern third of the Replacement Property will be opened as public park land at the moment of conversion. Mining has concluded and the area has been reclaimed (Figures D.1, D.2.)

Active mining on the remainder of the

Figure H: Aggregate Industries – Mining and Restoration Phasing
Replacement Property is expected to conclude in 2011. The existing processing facilities and settling ponds will be used to process the gravel that is to be mined from the Converted Property until the conclusion of the non-metallic mineral lease. Stockpiles of processed sand and gravel will remain in the vicinity of the processing facility until the conclusion of the non-metallic mineral lease.

Mining, reclamation and ecological restoration of the Converted Property and those portions of the Replacement Property not open for public recreational use at the moment of conversion will be completed in phases (Figure H). As phases are completed, reclaimed and restored they will be opened for public recreational use.

The replacement and converted properties will be reclaimed to contours that resemble and blend with the hilly kettle and kame topography of adjacent recreation area lands. The northern portions of the property will be reclaimed to oak-hickory forest with a number of depressions (to be restored to forest wetlands) and include a small lake with shallow emergent marsh margins (native plants). Former settling ponds will be re-forested with appropriate native trees. The southern portion of the property will be reclaimed to primarily to native prairie grasslands. Appropriate plant materials of local genetic provenance will be used.

2.1.5b Planned Public Recreation Development of Replacement Property and Timetable for Completion

A public parking area (a minimum of 10 spaces) will be developed and open to the public at the time of conversion. The parking area will provide improved physical access to the Replacement Property.

Recreation Division has no specific plans for other recreational infrastructure at this time. The primary use of the 324-acre Replacement Property is expected to be dispersed recreation, hiking, hunting, bird watching, etc.

At the conclusion of the non-metallic mineral lease, Recreation Division will explore development of a simple overlook within or near the Converted Parcel to replace the simple overlook that will be lost.

Recreation Division will consider additional recreational development as part of the Management Planning Process that is currently underway for the Waterloo Recreation Area. The Management Planning Process provides multiple opportunities for public input. It is likely that trails will eventually be developed on the 324-acre Replacement Property.

2.2 Northeast Alternative

An alternative parcel situated north and east of 324-acre Aggregate Industries property was considered early in the negotiations with Aggregate Industries. It was rejected by the DNRE as unsuitable. The considered northeast area has the necessary quantity and quality of non-metallic mineral resources, but it supports a mature oak-hickory forest widely recognized as exemplary in quality and extent. There is also a small cemetery in the area. The natural and cultural resource values were considered too important. The proposed Converted Property has relatively low quality vegetation and lack of significant cultural resources.

2.3 Fee Acquisition Alternative

The DNRE considered cash fee acquisition of the Aggregate Industries property as a viable option despite funding challenges. Unfortunately Aggregate Industries is unwilling to sell their 324-acre parcel to the
State of Michigan for cash consideration. Throughout negotiations over the past eight years, DNRE representatives have been unsuccessful in persuading Aggregate Industries to change their position.

2.4 No Action Alternative

The No Action Alternative was considered and rejected. The 324-acre Aggregate Industries property is a large and important inholding within the Waterloo Recreation Area. The property was identified in the DNRE's Land Consolidation Strategy for acquisition.

Recreation Division believes wholeheartedly that if this property is not acquired, it will be developed for 50 or more residences. This would change the character of the recreational experience for a large portion of the Waterloo Recreation Area forever. Natural habitats would remain fragmented. There are numerous examples of this occurring in many other southeast Michigan state parks and recreation areas.

The proposed agreement between the DNRE and Aggregate Industries is the result of many years of negotiation. It leverages a gift of a 324-acre inholding critical to the recreation area and 7–8 million dollars for the Michigan Natural Resources Trust Fund, which will support additional recreation. The DNRE believes this is very good deal for State of Michigan, for habitat and outdoor recreation. It preserves the current recreational experience and will provide tremendous gain in recreational opportunity within the Waterloo Recreation Area and through the Michigan Natural Resources Trust Fund, throughout Michigan.
CHAPTER 3 – AFFECTED ENVIRONMENT

3.1 Description of current state of resources expected to experience environmental impacts

The property to be converted is 72.44 acres in size. A total of 20,973.56 acres (99.66%) of the recreation area will remain. Recreational activities within the remaining park land will not be impacted by the conversion and are expected to be preserved by the conversion. The Converted Property is an irregular-shaped parcel with rolling topography (typical kettle/kame ice contact topography) and a mix of old field and young woodland cover types. There are no wetlands on the Converted Property. There are no streams, ponds or lakes on the Converted Property.

3.1.1 Extant Vegetation

Long abandoned farm fields (Figure C), which predate state ownership, are dominated by European pasture grasses, spotted knapweed and non-native shrubs such as autumn olive and bush honeysuckle.

The young upland woodland is also dominated by non-native species (Figure I). Much of the forested area is non-native black locust, with large areas smothered by invasive oriental bittersweet, which present an ongoing threat to the high quality oak-hickory forest and wetlands to the south, west and north of the property to be converted.

A “forest” inventory was performed using standard prism point sampling (Figure J). The results of the forest inventory are presented in Appendix A.

3.1.2 Geology/Soils

The ice contact topography of the Converted Property formed where the Lake Erie and Saginaw Bay lobes of the Laurentide glacial ice sheets (Wisconsin Advance) collided and piled up irregular sand and gravel ridges (kames) between them. “Kettle lakes” and “kettle wetlands” formed where gravel filled in around large blocks of ice which later melted leaving depressions. The Converted Property is part of a complex and somewhat random landform (Farrand 1982).

An estimated 8 to 9 million tons of non-metallic minerals may be mined from the Converted...
The Converted Property will be reclaimed to contours that resemble this hilly kettle and kame topography. Post-mining contours will blend with adjacent topography as though glacial material had been deposited in a different, but similar manner (Appendix O). A number of shallow ponds will be included to mimic glacial kettle depressions and restored to “buttonbush swamp”.

Throughout the site, soils are characterized as well-drained, loamy sand to sandy loam, representing three soil series: Boyer (52%), Ormas (47%), and Arkport (1%). The Boyer loamy sand soils are on the moderate-steep slopes (6–40%), with soil development down to about 2–4 feet before reaching the gravel and sand parent material. They are slightly-moderately acid at the surface, becoming alkaline at depth. The Ormas loamy sand soils are in the central portion of the site, including the old field and the more gently-sloped areas (0–12% slope) to the north. Ormas soils are relatively deep, 4–6 feet, over gravel and sand parent material, with a layer of finer texture (sandy clay loam) at 2–3 feet depth. A small area of Arkport fine sandy loam occurs in the northwest corner of the site. Arkport soils range in depth from 4–8 feet over sandy parent material, are mildly to strongly acid throughout, and contain layering and banding of various textures of sand (NRCS 2000).

3.2 Description of Existing Public Recreation Resources

The Waterloo Recreation Area (Figure K) offers a diverse array of recreational opportunities with both day-use activities and camping. Following are the recreational features of the park not affected by the conversion:
Gerald E. Eddy Visitor Center – Exhibits include interactive displays, multi-image slide shows, and other nature programs to orient visitors to Michigan's unique cultural and natural features.

**Hunting** – Waterloo Recreation Area is open to hunting following regular state regulations between September 15 and May 31. This park boasts excellent deer and turkey hunting. Rabbit and squirrel are found throughout the park. In addition, there are areas throughout the park with populations of pheasant, quail, grouse and woodcock. The area surrounding Mill and Cedar Lakes, the area surrounding Portage Lake Campground, and private properties are all closed to hunting. The park is also open to trapping.

**Wildlife Viewing** – Waterloo Recreation Area provides a broad range of wildlife viewing opportunities. Bird watching is very popular. A main attraction is the staging and fall migration of sandhill cranes. Upwards of 4,000 of these birds may be sighted at one time.

**Playgrounds** – Playgrounds are available at the Portage Lake day-use area and the Sugarloaf Campground. Both are handicap-accessible.

**Portage Lake Beach House** – The beach house provides a changing area for swimmers at the Portage Lake beach day use area. This facility is ADA accessible.

**Swimming Beaches** – There is a public beach at Big Portage Lake and a “campers only” swimming beach at Sugarloaf Campground.

**Fishing** – ADA-accessible fishing piers can be found at Big Portage Lake and Crooked Lake. All of the publicly-accessible lakes and ponds in Waterloo Recreation Area may be fished. Bass, panfish, pike and other fish typical of the region inhabit the lakes of Waterloo Recreation Area.

**Big Portage Lake Picnic Area** – An ADA-accessible picnic site is located at Big Portage Lake. It has picnic tables, grills, potable water, and toilet facilities.

**Crooked Lake and Mud Lake Picnic Areas** – Smaller picnic sites are located at Crooked Lake and Mud Lake. Sites at both locations are equipped with picnic tables and grills.

**Hiking** – Waterloo Recreation Area has over 50 miles of hiking trails, including the Waterloo-Pinckney Trail.

**Equestrian Trails** – Waterloo Recreation Area has over 15 miles of equestrian trails.

**Mountain Biking** – With access on Katz and Glenn Roads, a five-mile biking trail provides a scenic and challenging trail for riders of all skill levels.

**Boat Launch Sites** – Public boat launch sites are located at Big Portage Lake, Cedar Lake, Green Lake, Crooked Lake, Mill Lake, Mud Lake, Winnewana Impoundment, and Walsh Lake. There is a boat launch at the Sugarloaf Campground that is limited to camper use only. The following lakes can be accessed by foot across State land: Clear Lake, Doyle Lake, Cassidy Lake, Little Portage Lake, and Merkle Lake.

**Cross Country Ski** – Cross county ski trails originate at the Eddy Visitor Center. These trails are ungroomed.

**Metal Detecting** – Metal detecting is allowed in designated areas.
3.3 Vicinity Population and Service Area Demographics

Jackson County was reported to have a population of 158,422 in the 2000 census, a 5.8% increase since 1990. The population density in Jackson County is 224.2 people per square mile. Washtenaw County reported a population twice that of Jackson County with 322,895 in the 2000 census, a 14.1% increase since 1990. The population density in Washtenaw County is 454.8 people per square mile. Both county populations exceed the state average of 175 people per square mile by a large margin, particularly Washtenaw County which reflects the growth surrounding Ann Arbor.

### JACKSON COUNTY ECONOMIC CHARACTERISTICS

#### EMPLOYMENT STATUS

<table>
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<tr>
<th>Population 16 years and over</th>
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<td>Percent of civilian labor force</td>
<td>5.5</td>
<td>(X)</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>67</td>
<td>0.1</td>
</tr>
<tr>
<td>Not in labor force</td>
<td>46,237</td>
<td>37.9</td>
</tr>
</tbody>
</table>

#### Employed civilian population 16 years and over

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional, and related occupations</td>
<td>19,701</td>
<td>27.5</td>
</tr>
<tr>
<td>Service occupations</td>
<td>11,829</td>
<td>16.5</td>
</tr>
<tr>
<td>Sales and office occupations</td>
<td>17,613</td>
<td>24.6</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>281</td>
<td>0.4</td>
</tr>
<tr>
<td>Construction, extraction, and maintenance occupations</td>
<td>6,741</td>
<td>9.4</td>
</tr>
<tr>
<td>Production, transportation, and material moving occupations</td>
<td>15,530</td>
<td>21.7</td>
</tr>
</tbody>
</table>

#### INDUSTRY

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, and mining</td>
<td>777</td>
<td>1.1</td>
</tr>
<tr>
<td>Construction</td>
<td>4,072</td>
<td>5.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>16,887</td>
<td>23.6</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>2,454</td>
<td>3.4</td>
</tr>
<tr>
<td>Retail trade</td>
<td>8,665</td>
<td>12.1</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>4,199</td>
<td>5.9</td>
</tr>
<tr>
<td>Information</td>
<td>1,399</td>
<td>2.0</td>
</tr>
<tr>
<td>Finance, insurance, real estate, and rental and leasing</td>
<td>2,831</td>
<td>3.9</td>
</tr>
<tr>
<td>Professional, scientific, management, administrative, and waste management services</td>
<td>4,057</td>
<td>5.7</td>
</tr>
<tr>
<td>Educational, health and social services</td>
<td>14,261</td>
<td>19.9</td>
</tr>
<tr>
<td>Arts, entertainment, recreation, accommodation and food services</td>
<td>5,024</td>
<td>7.0</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>3,419</td>
<td>4.8</td>
</tr>
<tr>
<td>Public administration</td>
<td>3,650</td>
<td>5.1</td>
</tr>
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</table>

#### CLASS OF WORKER

<table>
<thead>
<tr>
<th>Class of Worker</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private wage and salary workers</td>
<td>58,987</td>
<td>82.3</td>
</tr>
<tr>
<td>Government workers</td>
<td>8,562</td>
<td>11.9</td>
</tr>
<tr>
<td>Self-employed workers in own not incorporated business</td>
<td>3,993</td>
<td>5.6</td>
</tr>
<tr>
<td>Unpaid family workers</td>
<td>153</td>
<td>0.2</td>
</tr>
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</table>
### INCOME IN 1999

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Households</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>4,293</td>
<td>7.4</td>
</tr>
<tr>
<td>$10,000 to $14,999</td>
<td>3,736</td>
<td>6.4</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>7,399</td>
<td>12.7</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>7,457</td>
<td>12.8</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>10,620</td>
<td>18.2</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>13,050</td>
<td>22.4</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>6,585</td>
<td>11.3</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>3,696</td>
<td>6.3</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>662</td>
<td>1.1</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>820</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Median household income (dollars)</strong></td>
<td><strong>43,171</strong></td>
<td></td>
</tr>
</tbody>
</table>

### WASHTENAW COUNTY ECONOMIC CHARACTERISTICS

#### EMPLOYMENT STATUS

<table>
<thead>
<tr>
<th>Population 16 years and over</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In labor force</strong></td>
<td>179,279</td>
<td>69.2</td>
</tr>
<tr>
<td>Civilian labor force</td>
<td>179,189</td>
<td>69.1</td>
</tr>
<tr>
<td>Employed</td>
<td>172,373</td>
<td>66.5</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6,816</td>
<td>2.6</td>
</tr>
<tr>
<td>Percent of civilian labor force</td>
<td>3.8 (X)</td>
<td></td>
</tr>
<tr>
<td>Armed Forces</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Not in labor force</td>
<td>79,883</td>
<td>30.8</td>
</tr>
</tbody>
</table>

#### OCCUPATION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional, and related occupations</td>
<td>83,275</td>
<td>48.3</td>
</tr>
<tr>
<td>Service occupations</td>
<td>23,115</td>
<td>13.4</td>
</tr>
<tr>
<td>Sales and office occupations</td>
<td>38,976</td>
<td>22.6</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>507</td>
<td>0.3</td>
</tr>
<tr>
<td>Construction, extraction, and maintenance occupations</td>
<td>9,702</td>
<td>5.6</td>
</tr>
<tr>
<td>Production, transportation, and material moving occupations</td>
<td>16,798</td>
<td>9.7</td>
</tr>
</tbody>
</table>

#### INDUSTRY

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, and mining</td>
<td>1,047</td>
<td>0.6</td>
</tr>
<tr>
<td>Construction</td>
<td>6,762</td>
<td>3.9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>26,637</td>
<td>15.5</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>3,361</td>
<td>1.9</td>
</tr>
<tr>
<td>Retail trade</td>
<td>17,284</td>
<td>10</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>5,834</td>
<td>3.4</td>
</tr>
<tr>
<td>Information</td>
<td>5,385</td>
<td>3.1</td>
</tr>
<tr>
<td>Finance, insurance, real estate, and rental and leasing</td>
<td>7,682</td>
<td>4.5</td>
</tr>
<tr>
<td>Professional, scientific, management, administrative, and waste management services</td>
<td>18,707</td>
<td>10.9</td>
</tr>
<tr>
<td>Educational, health and social services</td>
<td>56,181</td>
<td>32.6</td>
</tr>
<tr>
<td>Arts, entertainment, recreation, accommodation and food services</td>
<td>13,276</td>
<td>7.7</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>5,833</td>
<td>3.4</td>
</tr>
<tr>
<td>Public administration</td>
<td>4,384</td>
<td>2.5</td>
</tr>
</tbody>
</table>

#### CLASS OF WORKER

<table>
<thead>
<tr>
<th>Class of Worker</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private wage and salary workers</td>
<td>132,125</td>
<td>76.7</td>
</tr>
</tbody>
</table>
Government workers 30,995 18
Self-employed workers in own not incorporated business 8,772 5.1
Unpaid family workers 481 0.3

INCOME IN 1999

Households 125,465 100
Less than $10,000 9,960 7.9
$10,000 to $14,999 5,715 4.6
$15,000 to $24,999 12,388 9.9
$25,000 to $34,999 13,577 10.8
$35,000 to $49,999 18,493 14.7
$50,000 to $74,999 24,139 19.2
$75,000 to $99,999 16,365 13
$100,000 to $149,999 15,960 12.7
$150,000 to $199,999 4,467 3.6
$200,000 or more 4,401 3.5
Median household income (dollars) 51,990
*(x) denotes less than 1%

Source: United States 2000 Census
CHAPTER 4 – ENVIRONMENTAL IMPACTS

4.1 Sand and Gravel Extraction

The Converted Property will be mined for sand and gravel under a 10-year lease with the possibility of limited extension(s) if granted at the discretion of the DNRE. An estimated 8 to 9 million tons of non-metallic minerals may be mined from the Converted Property during the lease period.

The ice-contact landform of the Converted Property formed where the Lake Erie and Saginaw Bay lobes of the Laurentide glacial ice sheets (Wisconsinan Advance) collided and piled up irregular sand and gravel ridges between them. The landform of the property will be altered, but the post mining contours and slopes will be sculpted to be comparable to those found in the surrounding Interlobate Region. Reclaimed contours will resemble and blend with this hilly kettle and kame topography as though glacial material had been deposited in a different, but similar manner (Appendix O). Shallow depressions will be created to mimic glacial kettle depressions (buttonbush swamp). Kettle wetlands are not extant on the Converted Property but are common nearby.

4.2 Sand and Gravel Processing – Transit Mix Plant

Aggregate Industries currently operates a non-metallic mineral crushing facility under a special land use permit issued by Waterloo Township, along with an annual operating permit, also issued by the township (Appendix C). The state has issued a “General Permit to Install for Nonmetallic Mineral Crushing Facilities” (Appendix B).

There are no known environmental contaminants on the property. No chemicals are used in aggregate processing, other than water. Fuel for mining vehicles and equipment is stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at the Aggregate Industries existing processing plant. These facilities meet DNRE requirements.

The processing facility includes a concrete transit mix plant, where course aggregate, sand and water are combined with Portland cement into the drum of a concrete transit truck. Dry Portland cement is transported to the site by truck, and stored on site. Materials are mixed in each concrete truck inside an enclosed building.

Cement can irritate skin, eyes and lungs by skin contact, eye contact, or inhalation. Risk of injury depends on duration and level of exposure and individual sensitivity.

Hazardous materials in wet concrete and mortar include:

- alkaline compounds such as lime (calcium oxide) that are corrosive to human tissue
- trace amounts of crystalline silica which is abrasive to the skin and can damage lungs
- trace amounts of chromium that can cause allergic reactions

We believe this is a minor and contained concern with minimum hazard. Worker safety is regulated under Michigan Occupational Safety and Health Administration, MIOSHA.

There are no expectations of even minor hazards persisting after the processing facility is removed and the land restored.
4.3 Noise

Noise will be produced by machinery during aggregate mining of the Converted Property and a portion of the 324-acre Replacement Property. Articulated front-end loaders will be the primary means of excavation. Material may be placed into a mobile field crusher located near the point of excavation. This portable primary crushing unit will only crush oversized materials; less than one percent of the materials placed in the unit. Representatives from MDRE, Recreation Division were able to carry on conversation at normal voice levels, while observing active mining with an operating mobile field crusher at a distance of approximately 75 yards. Sand and gravel will be transported to the existing Aggregate Industries processing plant by conveyor(s). The conveyor system makes very little noise. Normal voice conversation is possible within feet of the conveyor. Aggregate Industries has modified the “backing-up” warning beacons on their mobile equipment from the familiar repetitive loud “beep” to a sound that mimics the loud call of a sandhill crane (wading-bird).

Aggregate Industries currently operates a non-metallic mineral crushing facility under a special land use permit issued by Waterloo Township, along with an annual operating permit, also issued by the township (Appendix C). Material mined from the Converted Property will be processed at the facility. The parameters of the crushing facility and its location will not change. Therefore, noise levels are not expected to change from current levels and have not been the subject of complaints.

Gravel trucks will exit the processing facility using existing routes. Noise levels from gravel trucks are not expected to change. Truck traffic associated with aggregate mining will be similar to extant levels on Loveland and Harvey Lake Roads, which varies with the volume of aggregate need to fulfill contracts. Truck traffic associated with Aggregate Industries’ mining will be eliminated at the conclusion of the mining lease.

The Converted Property is surrounded by Aggregate Industries and State land. The nearest residences are located greater than a quarter mile from the Converted Property to the northwest. A combination of hilly topography, prevailing wind direction and heavily forested plant communities ameliorate noise disturbance.

Section 9.06 of the Waterloo Township Sand and Gravel Extraction Ordinance requires that noise must be controlled so as not to cause a nuisance or hazard to any adjoining property or public road. Aggregate Industries will comply with this local ordinance. The DNRE non-metallic mineral lease requires compliance with local ordinances and permits. Should noise ever become an issue, residents will have two sources of remedy, the DNRE and Waterloo Township. It is anticipated that all proposed activities associated mining the Converted Property will be a negligible increase over existing levels.

4.4 Surface Water – Wetlands – Floodplain

There are no wetlands (National Wetlands Inventory) or surface waters (ponds, streams) extant on the Converted Property. Approximately 5.5 acres of wetland will be created on the Converted Property. Over five acres of wetland will be created on the Replacement Property.

The Converted Property is upland and not within a 100-year floodplain (FEMA).

Impact to surface water quality on the Converted Property will be negligible. Runoff from rainfall or snowmelt will be routed to depressional areas and remain on site. Special attention will be given not to allow surface runoff from the proposed site to affect adjacent properties.
A Soil Erosion and Sedimentation Control Permit will also be required for mining on the Converted Property. This is a State permit issued by Jackson County. The required soil erosion and sedimentation control measures will prevent adverse runoff or erosion.

Fuel for on-site vehicles and mining equipment will not be stored on the Converted Property. Fuel will be stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at Aggregate Industries’ existing processing plant. Refueling of equipment will not take place on the Converted Property, but instead will be refueled at Aggregate Industries’ re-fueling area located at their processing facility. This site is audited on a yearly basis. Fuel storage and the re-fueling station are in compliance with DNRE requirements and a DNRE, “No Spill, Prevention, Control and Counter Measures Plan” is in place (Appendix D).

Material mined on the Converted Property will be transported via conveyor belt to Aggregate Industries’ existing processing facility. Aggregate Industries’ wash facilities and lagoon system have been used to process aggregate for many years without impact to local hydrology, wells or surface water quality. The effluent discharged is rinse water used to wash gravel. Water drawn from an existing created lagoon is used to wash gravel. The wash water is then returned to flow through a series of lagoons, where the fine materials (clay particles and stone fines) settle out. The wash water eventually re-enters the original lagoon where it is used again. No chemicals are used in the process. Suspended solids in the wash water do not pose a groundwater or surface water threat. Sediment is unable to migrate beyond the lagoons. The created pond north of Green Road is over five acres in size. As a consequence, the use of surface water is permitted under DNRE Inland Lake Permit 06-38-0043P11 (issued 4-5-2007 and expires 4-5-2012) (Appendix E). An annual report is a requirement of this permit. Aggregate Industries also has a General Ground Water Permit to discharge wash water back into the pond (DNRE Permit GW-151-0083 issued April 1, 2010, Appendix F).

4.5 Ground Water

Sand and gravel mining has some potential to increase the vulnerability of an aquifer to be contaminated, because it decreases the distance between the groundwater table and the land surface. However, the potential for sand and gravel mining to introduce contaminated into groundwater is considered to be very low. Aggregate Industries does not use chemicals mine or process the gravel. Only water is used to process (wash) gravel within a closed lagoon system. Only naturally occurring glacial materials, sand and gravel will be mined from the State land (Converted Property).

Fuels and lubricants for on-site vehicles and mining equipment are a possible source of contaminants. Fuel for on-site vehicles and mining equipment will not be stored on the Converted Property. Fuel will be stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at Aggregate Industries’ existing processing plant. Refueling of equipment will not take place on the Converted Property, but instead will be refueled at Aggregate Industries’ re-fueling area located at their processing facility. This site is audited on a yearly basis. Fuel storage and the re-fueling station are in compliance with DNRE requirements and a DNRE, “No Spill, Prevention, Control and Counter Measures Plan” is in place (Appendix D). The threat of contamination is less than that for agricultural land. Once mining is complete this minor threat ends.

Mining on state land will stop above the groundwater level (approximately 980 feet), except for the creation of several shallow ponds, 0.5–1.5 acres in size and less than 4 feet deep (976 feet) which will be created at the request of the DNRE. These ponds will approximate naturally-occurring glacial “kettle” ponds with the restoration goal of establishment of a buttonbush swamp (inundated shrub swamp) community.
Potential effects on groundwater quantity and nearby surface water features were assessed by Aggregate Industries’ consultant JFNew, Inc. After reviewing groundwater data, well records, soil survey, and soil boring data, JFNew concluded that there would be no adverse affect on local hydrologic features such as wells, wetlands, lakes, or streams as a result of mining on the Converted Property.

Mining operations are expected to have negligible affect of the level of nearby Clear Lake or water-wells.

Local residents have voiced concern that Clear Lake could be drained. The surface elevation of Clear Lake is approximately **12 feet lower** than the groundwater table beneath the state land to be mined (Figure L). Exploratory borings on the State land to be mined have determined that the groundwater table is between 979 feet and 981 feet above sea level. This correlates with groundwater data from the **Michigan Groundwater Mapping Project**. The surface of Clear Lake is 968 feet above sea level. If there is a hydrologic connection between the groundwater beneath the state land to be mined and Clear Lake, groundwater would tend to move towards the Lake.

The closest water wells are approximately 1,500 – 2,000 feet from the boundary of the Converted Property (DNRE Water Well and Pump Records, Wells 1573-1575, 1568-1570, 3668, 5660 and 5990).

There is no known evidence that mining and gravel processing by Aggregate Industries’ have negatively impacted ground water in the past.

**4.6 Air Quality**

Aggregate Industries will be operating the proposed mine in compliance with the DNRE General Permit-to-Install for Nonmetallic Mineral Crushing Facilities (Appendix C).

Scott Miller, Manager, DNRE, Air Quality Division, Jackson District Office stated that he has not had complaints about Aggregate Industries’ Chelsea operation (Replacement Property). If current practices continue, he does not anticipate air quality (dust) issues.

The proposed project will produce insignificant emissions with the burning of diesel fuel by surface mining equipment. Insignificant adverse air quality effects are anticipated to occur from this source.

Fossil fuels will be consumed by mining equipment and processing facility. If the need for aggregate is not met in this location, it will be met elsewhere. Given the property’s proximity to highway projects, it is likely that significant savings in fossil fuel consumption and CO₂ production will be realized.
Fugitive dust contributing to the particulate matter contaminant is a concern. Aggregate Industries has extensive experience with dust control on aggregate mining operations throughout the region. Aggregate Industries will be in violation of their DNRE air quality permit if dust leaves the property. The conditions of the permit as they apply to production limits, equipment maintenance, and visible emissions, will be strictly adhered to during the life of the mine. It is therefore expected that the proposed mine operation will not cause any adverse air quality impacts or negatively impact any adjacent properties.

According to the Michigan Climatologist Office prevailing winds for Jackson County are westerly with southwest winds most common. East winds are least common.

Given Aggregate Industries’ fugitive dust control measures, prevailing winds, topography, forest cover, long distance to residences (minimum of 1,300 feet), and conveyor transport of materials it is highly unlikely that any fugitive dust will reach residences on Clear Lake. Clear Lake residents have voiced this concern. Wind direction data collected at the nearby Chrysler Proving Grounds suggests that winds from the ESE, SE, and SSE, (winds that could carry dust towards the Clear Lake residences) occur only about 14% of the time during the summer months.

4.7 Wildlife Habitat

Virtually all vegetation will be removed from the 72.44-acre Converted Property to facilitate aggregate removal. There is general agreement within the DNRE that the property does not support important or uncommon wildlife habitat. The Converted Property was reconnoitered by Amy Clark Eagle, former DNRE, habitat biologist; Scott Hanshue, Fisheries Biologist; Recreation Division’s ecologist, Glenn Palmgren; Ray Fahlsing, Stewardship Unit Manager; Robert Clancy, Recreation Division’s ecological restoration specialist, and biologists from JFNEW, environmental consultants to Aggregate Industries.

The 72.44 acres to be converted is an irregular-shaped parcel with rolling topography (typical kettle/kame ice contact topography) and a mix of old field and young woodland cover types. Long abandoned farm fields which predate state ownership are dominated by European pasture grasses, spotted knapweed and non-native shrubs such as autumn olive and bush honeysuckle. The young woodland is also dominated by non-native species. Much of the forested area is non-native black locust, with large areas smothered by invasive oriental bittersweet, which present an ongoing threat to the high quality oak-hickory forest and wetlands to the south, west and north of the property to be converted. A “forest” inventory was performed using standard prism point sampling. The results of the forest inventory are presented in Appendix A and support the above characterization.

Recreation Division seeks to maintain and restore endemic natural landscapes within state parks and recreation areas that are representative of the area’s natural heritage. The Converted Property in its current state does not fulfill this desire. Much of the property supports a cornucopia of non-native species reflective of the property’s agricultural past and lack of natural areas management. The Converted Property is a source for non-native plants invading nearby intact native natural communities. If the deal with Aggregate Industries is not consummated, it will still be the desire of Recreation Division to remove the invasive trees, vines, shrubs and herbs and restore native vegetation to area. It is highly unlikely that funding and staffing would ever allow for this ecological restoration.

Habitat of higher ecological value will be restored at the conclusion of the non-metallic mineral lease. In the meantime, the Replacement Property will provide significant new wildlife habitat. Once restored, the southern two-thirds of the property will provide much needed and critical habitat for grassland birds. This may facilitate restoration of additional grassland habitat on State land east of the Replacement
Property. Once restored to forest the northern one-third of the Replacement Property will reconnect closed canopy forest fragmented by historical private mining.

4.8 Protected Species

There are no documented occurrences of state or federal listed species on the Converted Property or the Replacement Property. The DNRE, Wildlife Divisions has issued an opinion that there will be no negative impacts to any state or federal endangered or threatened animals (Appendix G).

There is a 1947 record for the Waterloo Recreation Area for the federal endangered Indiana bat. The 1947 observation references a Sylvan Pond, which likely refers to a once impounded forest wetland located approximately 1.5 mile to the northeast of the Converted Property. There are anecdotal reports from birdwatchers for the State threatened cerulean warbler “along Green Road, between Clear Lake Road & Loveland Road”. The exact location, whether or not these were breeding birds and the veracity of the observations are not known.

JFNew, Inc., Aggregate Industries’ environmental consultant also concluded “The presence or potential use of this habitat by any protected species is not expected to occur”.

The high quality forest to the north and west of the Converted Property has the potential for closed canopy songbirds such as hooded warblers (state special concern) and cerulean warblers (state threatened). The Converted Property is young low quality forest dominated by non-native trees and vines, which does not provide quality habitat for these species.
CHAPTER 5 – COORDINATION AND CONSULTATION

5.1 Public Information and Meetings

December 3, 2009 – Public Notice (Appendix H)
- Proposed non-metallic mineral lease to Aggregate Industries published in the Jackson Citizen Patriot newspaper, Jackson Michigan

January 7, 2010 – Natural Resources Commission Agenda (Appendix I)
- Public notice that the proposed non-metallic mineral lease to Aggregate Industries will be presented to the NRC for information

January 7, 2010 – Natural Resources Commission Minutes (Appendix J)
- Proposed non-metallic mineral lease to Aggregate Industries was presented to the Commission for information

January 19, 2010 – Waterloo Township Board Meeting Agenda and Minutes (Appendix K)
- DNRE representative made a presentation on the proposed non-metallic mineral lease to Aggregate Industries and gift of land.
- This meeting was advertised by Waterloo Township and was placed on their website.

March 13, 2010 – Public Information Meeting (Appendix L)
- Advertised by neighbor notification and Waterloo Township’s website.
- Thirty-six people attended the meeting. The sign-in sheet is in Appendix L.

March 13, 2010 – Public Tour of Converted Property, March 24, 2010 Newspaper Article (Appendix M)
- Chelsea Standard publishes account of the March 13, 2010 public information meeting and tour.

September 27, 2010 – Public Meeting for 6(f) Conversion (Appendix N)
- Department of Natural Resources and Environment’s (DNRE) process of complying with the National Park Service conversion requirements, as they relate to a 324-acre gift of land, and a ten year non-metallic mineral lease to mine sand and gravel on 72.44 acres of State-owned land and to solicit written public comment.
- Advertised by press release, neighbor notification and Waterloo Township website.
- Sixty-five people attended the meeting. The sign-in sheet is in Appendix N.

5.2 Consultation for Site Review and Environmental Assessment Preparation

1. Glenn Palmgren, Ecologist
   Michigan Department of Natural Resources and Environment
   Recreation Division

2. Robert E. Clancy, Ecological Restoration Specialist
   Michigan Department of Natural Resources and Environment
   Recreation Division

3. Paul Curtis, Park Management Plan Administrator
   Michigan Department of Natural Resources and Environment
   Recreation Division

4. Paul Yauk, Lands Coordinator
   Michigan Department of Natural Resources and Environment
   Recreation Division

5. Amy Clark Eagle, Wildlife Biologist (former)
   Michigan Department of Natural Resources and Environment
   Wildlife Division (now with Forest Management Division)
6. Kristin Bissell, Wildlife Biologist
   Michigan Department of Natural Resources and Environment
   Waterloo Wildlife Office
   Wildlife Division

7. Karen Cleveland, All Bird Biologist
   Michigan Department of Natural Resources and Environment
   Wildlife Division

8. Scott Hanshue, Fisheries Biologist
   Michigan Department of Natural Resources and Environment
   Fisheries Division

9. Kristen Bennett, District Planner
   Michigan Department of Natural Resources and Environment
   Recreation Division

10. Thomas Wellman, Manager, Mineral and Land Management Section
    Michigan Department of Natural Resources and Environment
    Forest Management Division
    Mineral and Land Management

11. Thomas Hoane, Geologist
    Michigan Department of Natural Resources and Environment
    Forest Management Division
    Mineral and Land Management

12. Scott Miller, Manager
    Michigan Department of Natural Resources and Environment
    Air Quality Division, Jackson District Office

13. Robert Ford
    Bauer-Ford Reclamation
    Division of Landscape Architects and Planners, Inc.

14. JFNew, Inc – Environmental Consultants to Aggregate Industries
    11181 Marwill Avenue
    West Olive, MI 49460

15. Christopher Hoving, DNRE – Endangered Species Coordinator
    Michigan Department of Natural Resources and Environment
    Wildlife Division

16. Lori Sargent – Nongame Wildlife Biologist
    Michigan Department of Natural Resources and Environment
    Wildlife Division
REFERENCES

4. State Climatologist Office
## PRISM - POINT SAMPLING TALLY SHEET

**F = 10**
**N = 3**
**Crew** Palmgren, Pline
**Location** Waterloo-Al-Stand 1
**Date** 05-Nov-10

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| Per Acre | 283.9 | 139.9 | 45.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Avg. Basal Area/Acre** 90.00 sq. ft.
**Total Trees Tallied** 27
Basal Area by Species, Stand 1

- Black Locust: 53.3; 59%
- Black Cherry: 26.7; 30%
- Red Maple: 10.0; 11%
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Basal Area by Species, Stand 2

- Pignut Hickory: 60.0; 41%
- Black Oak: 45.0; 31%
- Shagbark Hickory: 30.0; 21%
- Black Cherry: 10.0; 7%
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| Species BA | 6.7 | 26.7 | 23.3 | 10.0 | 3.3 | 0.0 | 0.0 |
| Factor Sum | 143.2 | 306.3 | 196.2 | 24.1 | 114.6 | 0.0 | 0.0 |
| Per Acre   | 47.7 | 102.1 | 65.4 | 8.0 | 38.2 | 0.0 | 0.0 |

Avg. Basal Area/Acre 70.00 sq. ft.
Total Trees Talled 21
Basal Area by Species, Stand 3

Red Maple: 26.7; 38%
Black Cherry: 23.3; 33%
Black Oak: 10.0; 14%
Black Locust: 6.7; 10%
Red-Cedar: 3.3; 5%
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Trees: 59.7, 54.2, 23.0, 354.8, 67.7, 18.3, 50.9, 9.4
Per Acre: 19.9, 18.1, 7.7, 118.3, 22.6, 6.1, 17.0, 3.1

Total Trees Tallied: 35
Basal Area by Species, Stand 4

- Black Oak; 33.3; 28%
- Red Oak; 20.0; 17%
- White Oak; 10.0; 9%
- Red Maple; 30.0; 26%
- American Elm; 13.3; 11%
- Slippery Elm; 3.3; 3%
- Shagbark Hickory; 3.3; 3%
- Black Cherry; 13.3; 11%
# PRISM - POINT SAMPLING TALLY SHEET

**Crew:** Palmgren, Pline  
**Location:** Waterloo-Al-Stand 5  
**Date:** 05-Nov-10

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<th>90.00 sq. ft.</th>
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<tbody>
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</table>
Basal Area by Species, Stand 5

- Black Cherry: 46.7; 52%
- Red Maple: 6.7; 7%
- Black Oak: 20.0; 22%
- American Elm: 6.7; 7%
- Black Walnut: 3.3; 4%
- Slippery Elm: 3.3; 4%
- Red-Cedar: 3.3; 4%
- Black Cherry: 46.7; 52%
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</table>

| Species BA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trees      | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Per Acre   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Avg. Basal Area/Acre 0.00 sq. ft.
Total Trees Tallied 0
APPENDIX B
SUMMARY
On July 7, 1999, the Michigan Department of Environmental Quality (Department), Air Quality Division (AQD) issued the attached general permit to install for nonmetallic mineral crushing facilities. This general permit was issued pursuant to R 336.1201a of the Administrative Rules for Air Pollution Control (Rule 201a) and provides a streamlined permitting alternative for affected facilities which meet the specified applicability criteria. Prior to finalizing, the Department held a 30-day public comment period and public hearing on a proposed general permit. The final permit incorporated changes to the proposed permit, in response to the comments that were received. On March 20, 2000, the general permit was revised to address the issue of applicability for a source, process or process equipment that may be identified in a consent order or consent judgment. The general permit was revised in September 2000 to include a new version of the General Information form EQP5727, revise the language in General Condition 18 and make changes to the submittal requirements for relocations. On April 1, 2002, the permit was revised to update the Department address, the Internet Home Page, and the fugitive dust plan to be consistent with fugitive dust plans for other types of sources. The permit is being revised at this time to revise the general conditions, reformat the special conditions, clarify the process form and instructions to due to errors encountered with previous applications, and update the district map addresses and telephone numbers.

BACKGROUND
Rule 201a allows the Department to issue a general permit to install covering numerous similar stationary sources, processes or process equipment, after public notice and opportunity for public participation. The use of general permits provides a streamlined permitting alternative for processes that meet the following general criteria:

a) The processes must produce the same or reasonably similar products.

b) The processes must emit the same or similar air contaminants.

c) The method for capturing and controlling the air contaminants must be the same or limited to a small number of specific alternatives.

d) The processes must be subject to the same emission limitations, monitoring requirements, federal standards, or state rules.

A person who owns or operates a stationary source, process or process equipment that qualifies for a general permit to install approved by the Department, may apply for coverage under the terms and conditions of the general permit. Owners/operators who apply to the Department for coverage under the general permit to install must certify that the equipment they will be installing meets the necessary criteria for applicability and that they will comply with the special conditions of the permit. These conditions may include site restrictions, emission or material usage limits, process/operational limits, equipment requirements, monitoring requirements or recordkeeping requirements which are
necessary to ensure that the equipment will operate in compliance with all applicable air pollution control rules. A person always has the option of applying for a case-by-case permit to install pursuant to Rule 201 if they are unable to comply with the conditions of the general permit to install.

This general permit is applicable to facilities which crush and process rock, stone, concrete, recycled asphalt, sand, gravel or soil for the construction and transportation industry. The State of Michigan currently has over one hundred sixty nonmetallic mineral processing facilities in operation. On April 2, 1999, the Department proposed a general permit to streamline the review of permit applications from these facilities, and to allow the facilities more operational flexibility. The Department held a comment period from April 2, 1999 to May 3, 1999 and a public hearing on May 6, 1999, to receive comments on the proposed general permit. The Department received numerous written comments during the comment period as well as during the public hearing. These comments were reviewed by AQD staff and considered for the final version of this general permit. The general permit for nonmetallic mineral crushing facilities requires water spray or baghouse dust collectors as control, to be operated when necessary to meet applicable emission limits.

**APPLICABLE REQUIREMENTS**
The following state and federal requirements are considered applicable to all sources, processes, or process equipment and are addressed in the General Conditions of the permit.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Description</th>
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<tbody>
<tr>
<td>R 336.1201a</td>
<td>State rule that gives the Department authority to issue a general permit to install.</td>
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<tr>
<td>R 336.1201(4)</td>
<td>State rule that gives the Department authority to void a permit.</td>
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<tr>
<td>R 336.1207(1)</td>
<td>State rule that gives the Department authority to deny a permit.</td>
</tr>
<tr>
<td>R 336.1219</td>
<td>State rule that requires written notification of change of ownership.</td>
</tr>
<tr>
<td>R 336.1301</td>
<td>State rule that sets the standards for density of particulate emissions.</td>
</tr>
<tr>
<td>R 336.1370</td>
<td>State rule that requires the proper disposal of collected air contaminants.</td>
</tr>
<tr>
<td>R 336.1901</td>
<td>State rule that prohibits the emission of air contaminants, which interfere with the enjoyment of life and property and/or has injurious effects to health or safety.</td>
</tr>
<tr>
<td>R 336.1910</td>
<td>State rule that requires a pollution control device be operated properly.</td>
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<tr>
<td>R 336.1912</td>
<td>State rule that requires notice of abnormal conditions or malfunctions, which result in emissions in excess of the standards.</td>
</tr>
<tr>
<td>R 336.2001, 2003, 2004</td>
<td>State rules that allow the Department to request performance testing, and specify how the test should be conducted.</td>
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The following state and federal requirements are considered applicable to nonmetallic mineral crushing facilities and were considered in the development of the general permit to install. These requirements are addressed in the Special Conditions of the permit.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Description</th>
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<tr>
<td>R 336.1205</td>
<td>State rule that requires a permit to limit the amount of potential emissions.</td>
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<td>R 336.1303</td>
<td>State rule that requires grading of visible emissions by a qualified observer.</td>
</tr>
<tr>
<td>R 336.1331</td>
<td>State rule that limits emissions of particulate matter.</td>
</tr>
<tr>
<td>R 336.1371</td>
<td>State rule that requires the submittal of a fugitive dust program if requested.</td>
</tr>
<tr>
<td>40 CFR Part 52.21 (c)&amp;(d)</td>
<td>Federal regulation, Prevention of Significant Deterioration (PSD) of Air Quality and the National Ambient Air Quality Standards (NAAQS).</td>
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2
APPLICABILITY CRITERIA

To qualify for the general permit to install, based on the applicable requirements a nonmetallic mineral crushing facility must meet the following criteria:

- The general permit to install shall apply to nonmetallic mineral crushing facilities used to crush and process nonmetallic minerals including rock and stone, concrete, recycled asphalt, sand, gravel or soil. The facility may not crush or process slag, asbestos tailings or asbestos containing waste materials.
- The facility shall have no outstanding unresolved violations of any of the Michigan Department of Environmental Quality Air Pollution Control rules, orders, or permits; or Federal air quality regulations.
- The crusher(s) shall be located a minimum of 500 feet from any residential or commercial establishment or place of public assembly.
- At any given site, all nonmetallic mineral crushing facilities combined shall process no more than 2,000,000 tons per year unless a site specific permit covers the location.
- All equipment associated with the nonmetallic mineral crushing facility shall be labeled with company identification numbers as specified in the general permit application.
- A copy of this general permit and conditions shall be clearly posted in the operator's office or workstation.
- The nonmetallic mineral crushing facility shall meet all requirements of the fugitive dust plan specified in the Appendix of the special conditions of the general permit.
- The nonmetallic mineral crushing facility shall meet all applicable requirements of the Federal New Source Performance Standards, Subpart OOO, for nonmetallic mineral crushing facilities.
- Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may alternatively be installed in lieu of water spray for any particular piece of equipment. Operation of the control equipment is required only when necessary to meet applicable emission limits.
- The general permit shall not apply to a source, process, or process equipment that is included in an existing permit to install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgment.

PERMIT CONDITIONS

The general permit to install must be consistent with the permit content requirements of Rule 205(1)(a). This rule requires that if a permit to install includes limitations, which restrict the potential to emit of a stationary source, process, or process equipment to a quantity below that which would constitute a major source, the permit shall contain emission limits which are enforceable as a practical matter.

Attachment A lists the terms and special conditions for the general permit to install. These terms and conditions prescribe the applicable site restrictions, emission limits, material usage limits, process/operational limits, equipment requirements, testing requirements, monitoring requirements and recordkeeping requirements which are necessary to ensure that a nonmetallic mineral crushing facility will comply with all state and federal applicable requirements.

EMISSIONS

A majority of the particulate emissions from these types of processes are fugitive in nature. Particulate mass emission limits from nonmetallic mineral crushing facilities are not required in the general permit because these limits would not be enforceable as a practical matter. Limits on production and opacity limits are used in place of mass emission limits, and a concentration limit of 0.04 pound of particulate per 1,000 pounds of exhaust gas is included in the special conditions if a baghouse is utilized for control. The table below shows the potential emissions from one of these facilities. The potential emissions have been calculated based on a production rate of 2,000,000 tons
per year. An emission factor of 0.15 pound of particulate per ton of product, taken from the Michigan Air Emissions Reporting System (MAERS) procedures for mineral product processes, is for particulate matter 10 microns and less (PM-10). In addition, an 80% control efficiency has been applied for a well maintained fugitive dust plan which is part of the general permit, emissions controlled by water sprays and/or compliance with all opacity limits.

\[(2,000,000 \text{ tons/year}) \times (0.15 \text{ lb PM-10/ton of product}) \times (1 \text{ ton/2000 lb}) \times (1-0.80) = 30 \text{ TPY}\]

Emissions from the burning of fuel in process equipment were not included because the fuel burning process itself is exempt from the permitting process under R 336.1285(g).

<table>
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<tr>
<td>Sulfur Dioxide</td>
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</tr>
<tr>
<td>Volatile Organic Compounds</td>
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<tr>
<td>Oxides of Nitrogen</td>
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<td>Particulate Matter less than 10 microns</td>
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<tr>
<td>Lead</td>
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</table>

NA = Not Applicable

**AMBIENT AIR IMPACTS**

The general permit provides for opacity limits, a fugitive dust control program and the operation of control equipment when necessary to meet applicable emission limits. Based upon engineering judgment and past experience, operation of the nonmetallic mineral crushing facilities in compliance with the general permit to install terms and conditions will minimize impact upon the ambient air.

**APPLICATION FOR A GENERAL PERMIT**

If the owner/operator of a nonmetallic mineral crushing facility decides to install and operate the process under the terms of this general permit to install, then it is the responsibility of the owner/operator to apply to the Department for coverage under the general permit. Installation of equipment prior to granting of a permit to install, including a general permit to install, is a violation of Rule 201.

Application forms, which include all information necessary to determine qualification for and to ensure compliance with the general permit to install, are attached. The forms are also available on the Internet or may be obtained by contacting Ms. Karla Lowrie at 517-373-7066. The Air Quality Permit Web Page is located at [http://www.deq.state.mi.us/aps](http://www.deq.state.mi.us/aps).

The owner/operator shall submit the completed application forms to the AQD Permit Section. Upon receipt, Permit staff will review the application for completeness. The general permit to install for nonmetallic mineral crushing facilities will be granted by the Department to qualifying sources, processes or process equipment, within 30 days of receipt of a complete application. The AQD will mail to the facility, a copy of the general permit to install and a letter acknowledging that the facility owner/operator intends to install and operate a nonmetallic mineral crushing facility in accordance with the terms and conditions of the general permit. The Department will maintain and make available to the public, upon request, a list of the persons that have been authorized to install and operate a stationary source, process or process equipment pursuant to each general permit to install issued by the Department.
ATTACHMENT A
GENERAL CONDITIONS

1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.

2. Operation of any process or process equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. [R336.1901]

3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. [R336.1207(1)(b)]

4. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5).

5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.

6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility’s facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.

8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.

9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation or construction of the equipment allowed by this general permit to install. [R336.1201(4)]
10. Except as provided in subrules (2) and (3) or unless the special conditions of the general permit to install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. [R336.1301(1)]
   a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
   b) A visible emission limit specified by an applicable federal new source performance standard.
   c) A visible emission limit specified as a condition of this general permit to install.

11. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R336.1370(2). [R336.1370]

12. The Department may require the permittee to conduct acceptable performance tests, at the permittee’s expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. [R336.2001]

13. Any required testing protocol shall conform to a format acceptable to the AQD. [R336.2003(1)]

14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. [R336.2001(4)]

15. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. [R336.1910]

16. For a stationary source that becomes a major source, as defined by R336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R336.1211(1)(a).

17. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R336.1215(3) or apply for a modification pursuant to R336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.
ATTACHMENT A
SPECIAL CONDITIONS

Flexible Group Identification

<table>
<thead>
<tr>
<th>Flexible Group ID</th>
<th>Flexible Group Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGCRUSHING</td>
<td>A nonmetallic mineral crushing facility consisting of crusher(s) and associated process equipment including grinding mills, drills, screening operations, bucket elevators, belt conveyors, loading and bagging operations, storage bins, enclosed truck or railcar loading stations and any other material handling equipment operated at the site. Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may alternatively be installed in lieu of water spray for any particular piece of equipment. Operation of the control equipment is required only when necessary to meet applicable emission limits. [R 336.1201a(1), R336.1205, R336.1301, R336.1303, R336.1331, R336.1901, and R336.1910]</td>
</tr>
</tbody>
</table>

Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.

The following conditions apply to: FGCRUSHING

Emission Limits
1.1 The particulate matter (PM) emissions from each baghouse dust collector portion of FGCRUSHING shall not exceed 0.04 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. [R336.1331]

Visible Emission Limits
1.2 Visible emissions from FGCRUSHING shall not exceed the limits in the following table: [R336.1205, R336.1301, R336.1901, 40 CFR 60.670]

| Equipment                                                      | Opacity Limit (%) |
|                                                               |                   |
| 1.2a Any equipment enclosed within a building                 | No visible emissions |
| 1.2b All crushers                                              | 15                |
| 1.2c Screens                                                  | 10                |
| 1.2d Rock drills                                               | 5                 |
| 1.2e Conveyors/Transfer points                                | 10                |
| 1.2f Wash screens and all subsequent equipment downstream up to the next crusher or storage bin | No visible emissions |
| 1.2g All equipment controlled by a baghouse dust collector    | 7                 |
| 1.2h Wheel loaders and truck traffic                          | 5                 |
| 1.2i Material storage piles                                   | 5                 |
| 1.2j Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes | 10                |

Material Usage Limits
1.3 The permittee shall not process more than 2,000,000 tons of any non-metallic mineral through FGCRUSHING per year per site. [R336.1205]
1.4 The annual production limit of 2,000,000 tons per year per site shall not apply if FGCRUSHING is operated at a location that is covered by a site specific air use permit. At such a location, the annual material processed shall be in conjunction with the production limit contained in the permit for that location. All other conditions and restrictions of this permit shall apply when operating at such location. [R336.1201, R 336.1205, R 336.1901]

1.5 The permittee shall not crush any asbestos tailings or asbestos containing waste materials, as defined by the National Emission Standard for Hazardous Air Pollutants regulations, in FGCRUSHING. [40 CFR 61.141]

Process/Operational Limits
1.6 The permittee shall not operate FGCRUSHING unless the program for continuous fugitive emissions control for all facility roadways, the facility yard, all storage piles, and all material handling operations specified in Appendix A has been implemented and is maintained. [R336.1205, R336.1371, R336.1901]

Equipment
1.7 Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may be installed in lieu of water spray for any particular piece of equipment. The control equipment shall be properly operated as necessary to comply with all emission limits. [R336.1205, R336.1301, R336.1303, R 336.1331, and R336.1910]

Testing
1.8 Within 60 days after achieving maximum production rate, but not later than 180 days after initial startup of FGCRUSHING, verification of visible emission rates and particulate emission rates from all NSPS subject crushers, screens, all transfer points on conveyors, and all other miscellaneous equipment associated with FGCRUSHING and covered by the NSPS Subpart OOO, by testing at owner’s expense, in accordance with 40 CFR Part 60 Subparts A and OOO, will be required. No less than 14 days prior to the anticipated test date, visible emission observation procedures must be approved by the District Supervisor. Also, no less than 7 days prior to the anticipated test date, the permittee shall notify the District Supervisor of the test date. If after the anticipated test date has been submitted to the District Supervisor, there is a delay in conducting the test, the permittee shall submit to the District Supervisor notice of the new test date. This notification shall be done a minimum of 3 days prior to the rescheduled test taking place. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 30 days following the last date of the test. [R336.1301, R336.2001, 40 CFR Part 60 Subparts A & OOO]

Monitoring
1.9 The permittee shall keep, in a satisfactory manner, daily and annual records of the amount of material processed for each site at which the facility operates. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1201a(1), R336.1205]

Recordkeeping/Reporting/Notification
1.10 The permittee shall notify the AQD, within 15 days after initial startup of FGCRUSHING, of the actual date of initial startup. [R336.1201, 40 CFR Part 60 Subpart A]
Permit Dates
1.11 The permittee shall label all equipment associated FGCRUSHING within 45 days of initial start up according to the company IDs specified in the application (Form EQP5756). Labels shall be in a conspicuous location on the equipment. [R336.1201, 40 CFR 60.670]

Miscellaneous/Allowed Modification
1.12 The permittee shall not replace or modify FGCRUSHING, or any portion of FGCRUSHING, including control equipment, unless all of the following conditions are met: [R336.1201a(1), 40 CFR Part 60 Subparts A and OOO, R336.2001]

a) The permittee shall update the general permit by submitting a new Process Information Form (EQP5756) to the Permit Section and District Supervisor, identifying all existing and new or additional equipment added to the process a minimum of 10 days before the equipment is replaced or modified.

b) The permittee shall continue to meet all general permit to install applicability criteria after the replacement or modification is complete.

c) The permittee shall keep records of the date and description of the replacement or modification.

d) The permittee shall notify the Air Quality Division, within 15 days after startup of any new or additional equipment, of the actual date of initial startup.

e) All new or additional equipment that is subject to the federal NSPS Subpart OOO, which has not been previously tested, shall comply with the testing requirements of the NSPS.

1.13 The permittee shall not relocate FGCRUSHING to any new geographical site in Michigan unless all the following criteria are met: [Act 451 324.5505(5), R336.1201, R336.1205, R336.1901]

a) The facility shall have no outstanding unresolved violations of any of the Michigan Department of Environmental Quality Air Pollution Control rules, orders, or permits; or Federal air quality regulations.

b) A notice of intent to relocate (Relocation Notice Form EQP5757); a copy of the original general permit forms (EQP5727, EQP5729 and EQP5756); any Process Information forms for previous modifications; and a proposed site plan identifying the proposed new geographical site and the probable duration at the new site shall be provided to the appropriate district office and the Permit Section not less than 10 days prior to the scheduled relocation. All residential or commercial establishments and places of public assembly within 1,000 feet of the proposed facility site shall be clearly identified on the proposed site plan.

c) The crusher(s) shall be located a minimum of 500 feet from any residential or commercial establishment or place of public assembly.

d) A copy of this general permit and conditions shall be clearly posted in the operator's office or workstation.
APPENDIX A
Fugitive Dust Control Plan

I. Plant

The drop distance at each transfer point throughout the plant shall be reduced to the minimum the equipment can achieve.

II. Truck Traffic

On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six inches of the top of any sideboard, side panel or tailgate, otherwise, the truck shall be tarped.

III. Site Roadways and the Plant Yard

(a) The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet an opacity limit of five percent.

(b) All paved roadways and the plant yards shall be swept as needed between applications of dust suppressants.

(c) Any material spillage on roads shall be cleaned up immediately.

(d) A record of all applications of dust suppressants and roadway and the plant yard sweepings shall be kept on file for the most recent five-year period and be made available to the AQD upon request.

IV. Storage Piles

(a) Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.

(b) Stockpiles shall be watered on an as needed basis in order to meet an opacity limit of five percent. Equipment to apply water or dust suppressant shall be available at the site, or on call for use at the site, within a given operating day.

(c) A record of all watering shall be kept on file for the most recent five-year period and be made available to the AQD upon request.

V. AQD/MDEQ Inspection

The provisions and procedures of this plan are subject to adjustment by written notification from the AQD, if following an inspection, the AQD finds the fugitive dust requirements and/or the permitted opacity limits are not being met.
Instructions: Use this form to request authority to install and operate a source, process or process equipment under the terms and conditions of a general permit to install pursuant to Rule 201a. Prepare this form together with one or more of the forms identified in Item 19, according to type of source, process or process equipment, which will be installed and operated. Please submit all information, including forms, in duplicate. NOTE: This general permit does not apply to a source, process, or process equipment that is included in a Permit to Install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgment.

1. FACILITY CODES
STATE REGISTRATION NUMBER (SRN) STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

2. APPLICANT NAME (Business license name of the corporation, partnership, individual or government agency that owns the facility)

3. APPLICANT MAILING ADDRESS (Street Address or P.O. Box Number)

4. CITY 5. STATE 6. ZIP CODE

7. NAME OF AUTHORIZED COMPANY MEMBER

8. TITLE (person identified in Item 7) 9. TELEPHONE NO. (person identified in Item 7)
( ) -

10. CONTACT PERSON (technical point of contact, if different than name in Item 7) 11. TELEPHONE NO. (contact person)
( ) -

12. EQUIPMENT OR PROCESS LOCATION (complete Items 12 - 15 if different than mailing address)

13. CITY 14. ZIP CODE 15. COUNTY

16. EQUIPMENT IS (check one) New Existing 17. PRIOR AIR PERMIT NO. (existing equipment only)

18. EQUIPMENT OR PROCESS INSTALLATION TIMETABLE (enter dates in Items 18a - 18d for those which apply)
FOR NEW EQUIPMENT (PROCESS INSTALLATION OR CONSTRUCTION) 18a. START DATE 18b. COMPLETION DATE
FOR EXISTING EQUIPMENT (PROCESS MODIFICATION OR RELOCATION) 18c. START DATE 18d. COMPLETION DATE

19. THE FOLLOWING COMPLETED FORMS ARE ATTACHED TO AND MADE A PART OF THIS PERMIT APPLICATION (check all that apply)

<table>
<thead>
<tr>
<th>TYPE OF FORM</th>
<th>NUMBER ATTACHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQP</td>
<td></td>
</tr>
<tr>
<td>EQP5729 - ADDITIONAL INFORMATION</td>
<td>(complete one form for each process - insert form number and type of process in spaces provided)</td>
</tr>
</tbody>
</table>

Applicant Certification: I certify, under penalty of law, that this permit application and the attachments identified in Item 19 were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

20. SIGNATURE (person identified in Item 7) 21. DATE

Submit this completed application and the attachments identified in Item 19 to:
PERMIT SECTION, AIR QUALITY DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 30260, LANSING, MI 48909-7760

DEQ USE ONLY - DO NOT WRITE BELOW

<table>
<thead>
<tr>
<th>DATE APPLICATION COMPLETE</th>
<th>DATE OF DETERMINATION OF NON-APPLICABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE GENERAL PERMIT TO INSTALL GRANTED</th>
<th>SIGNATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE GENERAL PERMIT TO INSTALL REVOKED</td>
<td>SIGNATURE</td>
</tr>
</tbody>
</table>

EQP5727 (Revised 9/2000)
## General Permit to Install Application
### Additional Information

**Instructions:** Use this form to include additional information or attachments. Prepare and submit this form with General Information form (EQP5727).

<table>
<thead>
<tr>
<th>1. FACILITY CODE</th>
<th>2. ID (Provide the identification number of the device, emission unit or stack/vent for which additional information is being submitted.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE REGISTRATION NUMBER (SRN)</td>
<td></td>
</tr>
</tbody>
</table>

3. **WHAT TYPE OF ADDITIONAL INFORMATION ARE YOU SUBMITTING WITH THIS APPLICATION? (check all that apply)**

- [ ] ATTACHMENT (if checked, describe and list what is attached. May include drawings, charts, calculations, assumptions, etc.)
- [ ] TECHNICAL (Specialized information regarding the installation, construction, or use of a process or stack/vent)
- [ ] GENERAL (Any supplemental information that is not technical information)

4. **ADDITIONAL INFORMATION NARRATIVE** (A brief description of the information or attachment. May include calculations, design parameters, small diagrams, etc.)

---

EQP5729 (Revised 1/2003)
Instructions: Use this form to request authority to install and operate a nonmetallic mineral crushing facility, under the terms and conditions of a general permit to install pursuant to Rule 201a. If two or more primary crushers operate in parallel, each constitutes a separate facility. Complete a separate copy of this form for each facility. Prepare and submit this form with the General Information form (EQP5727).

For a Modification: Complete Items 1 - 9. Identify all existing and new or additional process equipment. Certify and submit pages 1 and 2 of this form to the Permit Section and the appropriate district office. See map for district office locations.

1. FACILITY CODE

2. MINE/QUARRY NAME

STATE REGISTRATION NUMBER (SRN)  

3. AMOUNT PROCESSED AT THIS SITE  
(tons per year)

4. DESCRIPTION (Brief description of this facility or proposed modification. Attach a detailed site map showing all site characteristics including the location of any residential and/or commercial establishments and places of public assembly located within 1,000 feet of the proposed site)

5. DOES THIS FACILITY HAVE ANY OUTSTANDING UNRESOLVED AIR VIOLATIONS?  

6. ARE THE CRUSHER(S) LOCATED A MINIMUM OF 500 FEET FROM ALL RESIDENTIAL OR COMMERCIAL ESTABLISHMENTS OR PLACES OF PUBLIC ASSEMBLY?  

7. WAS THIS FACILITY PREVIOUSLY PERMITTED PURSUANT TO RULE 201? IF YES, PERMIT NO. ____________

8. APPLICATION IS FOR  
NEW GENERAL PERMIT  
MODIFICATION TO EXISTING GENERAL PERMIT - PERMIT NO. ____________

9. FOR A MODIFICATION: IS THE FACILITY CURRENTLY IN COMPLIANCE WITH ALL CONDITIONS OF THE EXISTING GENERAL PERMIT, INCLUDING BUT NOT LIMITED TO THE TESTING OF ALL NSPS SUBJECT EQUIPMENT?  

Instructions for completing the following Items: Each piece of equipment must have a unique identification number (ID). The ID may be any combination of up to 10 letters, numbers or keyboard characters with no spaces between characters. Provide an ID and complete all items for each piece of process equipment at the facility. A manufactured date is required. If a device is shop built, the manufactured date may be estimated. If a device is not subject to NSPS Subpart OOO, an explanation is required. Use Additional Information form EQP5729 if more space is needed. Use as many copies of page 2 as needed to list all process equipment.

Device Description (crusher-type, screen, conveyor, drill, etc.)  
DEVICE ID (Assign an identification number for this device)

MAKE AND MODEL  

SERIAL NUMBER  
MANUFACTURED DATE (MM/DD/YY)

MAXIMUM RATED CAPACITY  
(tons per hour)

CONTROL?  

YES  
NO

CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?  

YES, HAS DEVICE BEEN TESTED?  

YES, DATE TEST PASSED  
NO, DATE TEST SCHEDULED

NO, REASON NOT SUBJECT

Device Description (crusher-type, screen, conveyor, drill, etc.)  
DEVICE ID (Assign an identification number for this device)

MAKE AND MODEL  

SERIAL NUMBER  
MANUFACTURED DATE (MM/DD/YY)

MAXIMUM RATED CAPACITY  
(tons per hour)

CONTROL?  

YES  
NO

CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?  

YES, HAS DEVICE BEEN TESTED?  

YES, DATE TEST PASSED  
NO, DATE TEST SCHEDULED

NO, REASON NOT SUBJECT

This page must be certified by an authorized employee

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF AUTHORIZED EMPLOYEE  
DATE

EQP5756 (Revised 7/2003)
<table>
<thead>
<tr>
<th>DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)</th>
<th>DEVICE ID (Assign an identification number for this device)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAKE AND MODEL</td>
<td></td>
</tr>
<tr>
<td>SERIAL NUMBER</td>
<td></td>
</tr>
<tr>
<td>MANUFACTURED DATE (MM/DD/YY)</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM RATED CAPACITY (tons per hour)</td>
<td>CONTROL?</td>
</tr>
<tr>
<td>IS DEVICE SUBJECT TO NSPS?</td>
<td>YES, HAS DEVICE BEEN TESTED?</td>
</tr>
<tr>
<td>NO, REASON NOT SUBJECT</td>
<td></td>
</tr>
</tbody>
</table>

**DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)**

**DEVICE ID (Assign an identification number for this device)**

**MAKE AND MODEL**

**SERIAL NUMBER**

**MANUFACTURED DATE (MM/DD/YY)**

**MAXIMUM RATED CAPACITY (tons per hour)**

**CONTROL?** | YES | NO

**IS DEVICE SUBJECT TO NSPS?**

- YES, HAS DEVICE BEEN TESTED? | YES, DATE TEST PASSED | NO, DATE TEST SCHEDULED
- NO, REASON NOT SUBJECT

**DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)**

**DEVICE ID (Assign an identification number for this device)**

**MAKE AND MODEL**

**SERIAL NUMBER**

**MANUFACTURED DATE (MM/DD/YY)**

**MAXIMUM RATED CAPACITY (tons per hour)**

**CONTROL?** | YES | NO

**IS DEVICE SUBJECT TO NSPS?**

- YES, HAS DEVICE BEEN TESTED? | YES, DATE TEST PASSED | NO, DATE TEST SCHEDULED
- NO, REASON NOT SUBJECT

**DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)**

**DEVICE ID (Assign an identification number for this device)**

**MAKE AND MODEL**

**SERIAL NUMBER**

**MANUFACTURED DATE (MM/DD/YY)**

**MAXIMUM RATED CAPACITY (tons per hour)**

**CONTROL?** | YES | NO

**IS DEVICE SUBJECT TO NSPS?**

- YES, HAS DEVICE BEEN TESTED? | YES, DATE TEST PASSED | NO, DATE TEST SCHEDULED
- NO, REASON NOT SUBJECT

**DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)**

**DEVICE ID (Assign an identification number for this device)**

**MAKE AND MODEL**

**SERIAL NUMBER**

**MANUFACTURED DATE (MM/DD/YY)**

**MAXIMUM RATED CAPACITY (tons per hour)**

**CONTROL?** | YES | NO

**IS DEVICE SUBJECT TO NSPS?**

- YES, HAS DEVICE BEEN TESTED? | YES, DATE TEST PASSED | NO, DATE TEST SCHEDULED
- NO, REASON NOT SUBJECT

**DEVICE DESCRIPTION (crusher-type, screen, conveyor, drill, etc.)**

**DEVICE ID (Assign an identification number for this device)**

**MAKE AND MODEL**

**SERIAL NUMBER**

**MANUFACTURED DATE (MM/DD/YY)**

**MAXIMUM RATED CAPACITY (tons per hour)**

**CONTROL?** | YES | NO

**IS DEVICE SUBJECT TO NSPS?**

- YES, HAS DEVICE BEEN TESTED? | YES, DATE TEST PASSED | NO, DATE TEST SCHEDULED
- NO, REASON NOT SUBJECT
**GENERAL PERMIT TO INSTALL APPLICATION**

**RELOCATION NOTICE**

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

**Instructions:** Use this form to request authority to relocate a nonmetallic mineral processing facility under the terms and conditions of a general permit to install pursuant to Rule 201a. A copy of the original general permit forms (EQP5727, EQP5729, and EQP5756) and any additional Process Information forms for modifications to this plant must be submitted with this form. Attach a detailed site map for the new location which shows all site characteristics including the location of any residential and/or commercial establishments and places of public assembly which are located within 1,000 feet of the proposed site. Certify and submit this form and any attachments to the Permit Section and the appropriate district office for the new location. See map for district office locations.

<table>
<thead>
<tr>
<th>1. FACILITY CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE REGISTRATION NUMBER (SRN)</td>
</tr>
</tbody>
</table>

| 2. APPLICANT NAME | Business license name of the corporation, partnership, individual or government agency that owns the facility |

| 3. APPLICANT MAILING ADDRESS | Street Address or P.O. Box Number |

| 4. CITY | 5. STATE | 6. ZIP CODE |

| 7. NAME OF AUTHORIZED EMPLOYEE |

| 8. TITLE | person identified in item 7 |
| 9. TELEPHONE NO. | person identified in Item 7 |

| 10. CONTACT PERSON | technical point of contact, if different than name in Item 7 |
| 11. TELEPHONE NO. | contact person |

**CURRENT PLANT LOCATION**

| 12. MINE/QUARRY NAME |
| 13. GENERAL PERMIT NUMBER |

| 14. STREET ADDRESS |

| 15. CITY | 16. ZIP CODE | 17. COUNTY |

| 18. SECTION | 19. TOWNSHIP | 20. RANGE |

**NEW PLANT LOCATION**

| 21. MINE/QUARRY NAME |

| 22. STREET ADDRESS |

| 23. CITY | 24. ZIP CODE | 25. COUNTY |

| 26. SECTION | 27. TOWNSHIP | 28. RANGE |

| 29. DATES PLANT IS TO BE LOCATED AT THIS SITE TO |
| 30. AMOUNT TO BE PROCESSED AT THIS SITE (tons per year) |

| 31. DIRECTIONS FROM NEAREST TOWN |

**Applicant Certification:** I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| SIGNATURE OF AUTHORIZED EMPLOYEE | DATE |

---

EQP5757 (Revised 7/2003)
Mr. Randi Willie
Mr. Leon Belden
580 S. Wolf Rd.
Des Plaines, IL 60016

RE: Aggregate Industries Renewal Permit 2010

Dear Mr. Randi Willie & Mr. Leon Belden;

On June 15, 2010, the Waterloo Township Board granted approval of the renewal of the Aggregate Industries (AI) special use permit but attached the following seven conditions:

1. A new bond amount is set at $824,500 plus Township administrative fee, to be updated immediately upon the granting of this permit renewal.
2. Mining activity is limited to the “Excavation and Reclamation” plan and other details provided to the township in the 2009 annual renewal report dated April 15, 2010.
3. Adequate topsoil will be used in the final restoration of the Dault parcel as suggested by OHM engineering. Subject to final review by the township and its agents.
4. Reclamation must begin along the western property line (north of pond Lilly, south of Green Road) before next year’s annual renewal if no formal plan has been agreed upon to continue mining in this direction.
5. Reseeding of the area on the south end of the parcel (which was previously under seeded) to be completed within 60 days of the granting of this permit renewal.
6. Provide an updated reclamation plan to the township within 60 days of the granting of this permit renewal.
7. Replacement of the trees on the Dault parcel that have died, to be placed in the locations indicated on the approved reclamation plan for this parcel, to be completed within 60 days of the granting of this permit renewal.

On August 24, 2010 I was able to perform a thorough site inspection with the assistance of Leon Belden of AI. The weather at the time of the inspection was 78°, clear, sunny, with a slight breeze. The inspection began at the south end of the site and moved north.

Dault Parcel: Two minor washouts were observed where topsoil had been eroded and vegetation was absent. Mr. Belden indicated that he was in process of scheduling repairs now that September was here and that the hot summer months had passed. He was planning to re-spread topsoil, plant fresh seed mix, and mulch the areas affected by erosion.
In addition, landscaping trees which had been transplanted but did not survive were observed to have been removed and replaced. Based upon earlier correspondence and understanding, AI made certain plant substitutions to bring the new landscaping into compliance with Township regulations. This actually resulted in a number of trees being planted for landscaping which exceeded the requirements of the permit.

**Original Extraction Parcel:** The conveyor previously used had been disassembled and was expected to be removed shortly. A large berm of topsoil was observed which was being stored for future reclamation purposes. At this point in the inspection, we moved northerly across previously reclaimed Green Road to observe the ponds.

**North of Green Road:** The wash water lake and settling ponds were observed along with the water line conveying water south to the wash plant. Standpipes were observed in the settling ponds and found to be clean and functional. The wash water lake was clean except for a single vein of in situ clay which was visible from the shore.

In conclusion, the seven conditions required from the have been satisfied:

1. A bond has been received in the amount of $1,000.00 and $5,000.00.
2. The excavation has been limited to permitted areas only.
3. The Dault parcel had been seeded and vegetated earlier this year. A few minor eroded areas are being reinforced with topsoil, seed and mulch as the weather permits.
4. No action is required at this time.
5. Refer to #3 above.
6. An updated reclamation plan was received by the Township on August 17, 2010.
7. Replacement trees have been installed on the Dault parcel.

Based on the results of the site inspection performed August 24, 2010, and the conditions identified in the motion to approve made at the June 15, 2010 Township Board Meeting, all Township requirements have been satisfied. As such, Waterloo Township approves the Aggregate Industries Renewal Permit.

Sincerely,

Bruce Pindzia, P.E.
Zoning Administrator

Cc: Township Board; Township Lawyer
SPILL PREVENTION CONTROL
AND COUNTERMEASURE PLAN

AGGREGATE INDUSTRIES
CHELSEA PLANT
4950 LOVELAND ROAD
GRASS LAKE, MICHIGAN

JULY 2008
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1.0 INTRODUCTION [40 CFR 112]

Owners and/or operators of onshore and offshore sites that have the potential to discharge oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines are required to prepare a Spill Prevention Control and Countermeasure (SPCC) Plan per 40 CFR Part 112.7. The SPCC Plan is to be prepared within six months after a site begins operations and be fully implemented as soon as possible, but no later than one year after site operations begin. The U.S. Environmental Protection Agency (EPA) defines oil as:

Oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged soil.

The SPCC Plan is required to be reviewed and certified by a Registered Professional Engineer, who attests that the SPCC Plan has been prepared in accordance with good engineering practices. As required by 112.3(e)(1), Aggregate Industries Chelsea Plant (AI) will maintain a copy of the SPCC Plan onsite, which will be made available to the Regional Administrator and the Michigan Department of Environmental Quality (MDEQ) upon request.

AI stores up to 4,380 gallons of oil onsite, which exceeds the 1,320-gallon aggregate aboveground storage capacity exemption.
2.0 CERTIFICATIONS [40 CFR 112.7]

2.1 PLANT MANAGER/FACILITY SELF CERTIFICATION

I am familiar with the requirements of 40 CFR part 112, the Aggregate Industries Chelsea Aggregate Plant located at 4950 Loveland Road, Grass Lake, Michigan, and with the SPCC Plan prepared for this facility. The Chelsea Aggregate Plant has less than 10,000 gallons of above ground oil storage capacity onsite and has had no single discharge as described in section 112.1(b) exceeding 1,000 gallons. The company also has had no two discharges as described in section 112.1(b), each exceeding 42 gallons within any 12-month period, in the three years prior to the SPCC plan self-certification date (or since becoming subject to this part if the facility has been in operation for less than three years). Therefore, the Chelsea Aggregate Plant is considered a qualified facility and is eligible for self-certification. This SPCC plan has been prepared in accordance with accepted and sound industry practices and standards and with the 40 CFR part 112 rule requirements. The procedures for required inspections and testing have been established, and the Plan is being fully implemented. This Plan does not deviate from rule requirements except as allowed and as certified by a PE.

I certify that this SPCC Plan is approved and Management has committed the resources necessary to implement this plan.

[Signature]
Martin Landes, Regional Environmental Advisor
Date: 7/15/06

[Signature]
Frank O’Laughlin, Environmental Advisor
Date: 4/12/10
3.0 GENERAL FACILITY DESCRIPTION [40 CFR 112.7(a)]

3.1 FACILITY CONFORMANCE [40 CFR 112.7(A)(1)]

Al is in compliance with the Part 112 Oil Prevention Rules.

3.2 ALTERNATE ENVIRONMENTAL PROTECTION [40 CFR 112.7(a)(2)]

No alternate environmental protection is required at the Al site.

3.3 FACILITY INFORMATION [40 CFR 112.7(a)(3)]

Al is a sand and gravel wash plant that normally operates 10 to 12 hours per day, five to six days per week, from March through November or December. The site is approximately 342 acres in size. The sand and gravel plant is located centrally in the western portion of the site, and oils are stored inside the Shop, which is located centrally in the eastern portion of the site. The sand and gravel processing operations onsite require the storage and use of oil or oil products that are stored in aboveground storage tanks (ASTs) (see Table 1, Oil Storage Tanks). The types of oils and a description of their storage containers are listed in Section 5.0, Spill Potential.

A concrete batch plant is located in the eastern portion of the site, south of the Shop, which is leased by Al to another corporation. Oils stored for use by the concrete plant are not included in this plan.

Discharge prevention measures are described in Section 6.0, Prevention Measures. Discharge or drainage controls, such as secondary containment and other structures, are discussed in Section 6.1, Containment and/or Diversionary Systems. Loading and unloading procedures are discussed in Section 6.6, Facility Tank Car or Truck Loading/Unloading. A Location Map and Site Plan are included as Figures 1 and 2, respectively.

3.4 COUNTERMEASURES AND DISPOSAL METHODS [40 CFR 112.7(a)(3)(iv), (v)]

Specific countermeasures for discharge discovery, response, and cleanup are discussed in Section 6.0, Prevention Measures.
4.0 SPILL RESPONSE [40 CFR 112.7(a)(3)(vi)]

Emergency contact information including site Emergency Coordinators, the National Response Center (NRC), state and federal agencies, and cleanup contractors is provided at the beginning of this report. In the event of a spill or release to the environment, specific state or federal agencies require notification. If a release occurs of a polluting material above the threshold reportable quantity (TRQ), the state requires the owner or operator to contact the state, using the Pollution Emergency Alert System (PEAS) number or by contacting the local district office, within 24 hours. The owner or operator must also determine if the released material triggers any federal reportable quantity (RQ) limits. If a release over the federal RQ has occurred, the owner must notify the NRC and the state within 24 hours. Additional details related to reporting requirements are discussed later in this report in Section 4.1, State of Michigan Spill Reporting Requirements, and Section 4.2, Federal Spill Reporting Requirements. A Decision-Making Tree for Reporting Oil Spills is provided as Appendix 1.

Once the state has been notified and it is determined that no federal RQs have been triggered, the owner is required to properly collect, clean up, and dispose the released material. Spill response equipment consists of oil adsorbent material, which is stored inside the Shop, and stockpiled sand, which is located throughout much of the site. Figure 3, Oil Storage Locations, highlights the locations of this spill response equipment.

Ordinary spills that pose no danger to health or the environment will be handled by trained employees in the immediate vicinity. They will eliminate the source of the spill, as needed (i.e., rolling a drum so that a puncture will not drain, turning off a valve, placing a container in an upright position, etc.), prevent the spill from entering any drain system, soak up the spill with absorbents, and properly dispose the waste. Only trained personnel, wearing appropriate protective equipment and clothing (including boots), will handle a spill cleanup. Physical contact will be avoided.

In the event of a larger release, staff members in the immediate vicinity shall notify their Supervisor, who will evaluate the spill as an incidental or emergency release. If it is considered an emergency release, the Supervisor shall notify the Emergency Coordinator or Emergency Coordinator Alternate, who, if necessary, will contact an outside contractor to respond to the site and clean up the release.

See Site Procedure 7, attached.
Examples of an emergency release follow. An emergency release may:

- Cause high levels of exposure to toxic substances.
- Be life- or injury-threatening.
• Require employees to evacuate the area.
• Pose conditions that are immediately dangerous to life or health.
• Pose a fire and/or explosion hazard.
• Require immediate attention because it poses an oxygen-deficient condition.

Spilled materials will be transferred into marked containers for reclamation or disposal. Spilled waste products, contaminated soils, and other contaminated materials will be disposed at a licensed disposal or treatment facility in accordance with all local, state, and federal regulations. AI must determine whether any waste produced is hazardous or nonhazardous prior to disposal. This can be accomplished by reviewing the Material Safety Data Sheets for the material that generated the waste, by laboratory analysis of the waste (ignitability, corrosivity, reactivity, and/or Toxicity Characteristic Leaching Procedure), or by having knowledge of the waste. If required, a Hazardous Waste Manifest will be prepared.

4.1 STATE OF MICHIGAN SPILL REPORTING REQUIREMENTS

A spill or release to be reported to the MDEQ is generally defined as a loss that exceeds the TRQ for releases of oil and other polluting materials, as specified by the Part 5 rules. However, the MDEQ has exempted leaks or spills of oil to the ground surface that are less than 55 gallons and are recovered within 24 hours. In the event this exemption does not apply, the TRQ for oil released to the waters of the state is any quantity that causes unnatural turbidity, color, oil films, foams, solids, or deposits in the water. The TRQ for oil released to the ground is 50 pounds. Table 1 lists the TRQ, in gallons, for each petroleum material at the AI site.

In case of a nonexempt spill or loss of oil to the environment, equal to or greater than the TRQ (see Table 1), the Emergency Coordinator will immediately notify the MDEQ district office or the 24-hour PEAS number, which are listed below.

<table>
<thead>
<tr>
<th>Jackson District Office (Business Hours)</th>
<th>517-780-7690</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-Hour PEAS</td>
<td>1-800-292-4706</td>
</tr>
</tbody>
</table>

The following information should be available to communicate to emergency response authorities:

• Address of the facility.
• Telephone number of the facility.
• Date and time of the discharge.
• Type of material discharged.

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• Estimate of the total quantity discharged.
• Estimate of the total quantity discharged that could reach a surface water body.
• Source and cause of the discharge.
• What media the discharge has impacted, e.g., soils, surface water, groundwater, and air.
• Any damages or injuries caused by the discharge.
• Actions being used to stop, remove, and mitigate the effects of the discharge.
• If an evacuation of the site or surrounding area is needed.
• The names of individuals and/or organizations who have also been contacted.

Within ten days after a release, a written report must be filed describing the cause of the release, its discovery, and the measures taken to remove the polluting material from the environment of the state and/or a schedule of when response measures will be completed to prevent similar releases in the future.

The Emergency Coordinator or an Emergency Coordinator Alternate is responsible for completing and submitting the MDEQ Spill or Release Report form, provided in Appendix 2, for every release, as well as maintaining an onsite file of completed forms. Appendix 2 also contains an Environmental Release Reporting Form, which serves as an internal tool for data collection.

4.2 FEDERAL SPILL REPORTING REQUIREMENTS

In the event AI experiences a release of 1,000 gallons of oil in a single discharge or over 42 gallons in each of two discharges in any 12-month period, AI will notify the NRC within 24 hours. Once the released material has been recovered and cleaned up, a report is required to be forwarded to the EPA, Region V office, Chicago, Illinois, within 60 days of the release. The following information will be submitted:

• Name of site.

• Name of site owner/operator.

• Location of site.

• Maximum storage or handling capacity of the site and daily usage.

• The corrective actions and/or countermeasures taken including an adequate description of equipment repairs and/or replacements.

• Description of the site including maps, flow diagrams, and topographic maps.
• The cause of the spill including a failure analysis of the system in which the failure occurred.

• Preventive measures taken, or contemplated, to minimize the possibility of reoccurrence.

• Any other information that would be reasonably required, which is pertinent to the SPCC or discharge.

The EPA also requires reporting to the NRC when the released oil causes “a film or sheen upon or discoloration of the surface of water or adjoining shorelines” or causes “a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.”

According to the Clean Water Act, as amended by the Oil Pollution Act, certain facilities that store and use oil are required to prepare and submit plans to respond to a worst case discharge of oil and to a substantial threat of such a discharge. An owner or operator of a “substantial harm” facility must develop and implement a Facility Response Plan (FRP). A “substantial harm” facility is a facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on navigable waters or adjoining shorelines. AI is not required to prepare a FRP, as indicated in the Certification of the Applicability of the Substantial Harm criteria (Appendix 3).
5.0 SPILL POTENTIAL [40 CFR 112.7(b)]

Following is a list of spill potentials that exist at the AI site from oils or polluting materials stored onsite.

There are two exterior ASTs located at the AI site: a 3,000-gallon diesel fuel AST and a 1000-gallon diesel fuel AST (see Table 1). The 3,000-gallon diesel fuel AST is located within a steel containment structure located southwest of the Shop. The 1,000-gallon diesel tank is located within steel containment structure located east of the powerhouse at the plant near the sand heater. There are also three 275-gallon motor oil ASTs located inside the eastern portion of the Shop.

Discharge from the ASTs is prevented by visual inspections, which are conducted weekly. AI will insure that all ASTs have appropriately constructed secondary-containment structures, as discussed in later sections of this plan. Any spills that occur from these tanks would be contained by their respective secondary-containment structures. ASTs are filled/emptied by contractors at varying frequencies, depending on the use of the tank contents, in accordance with policies discussed in the Facility Tank Car Loading/Unloading section of this plan.

Spills could potentially occur at the site due to equipment failure or operational error. Equipment failure, which could include complete or partial failure of an AST, tank truck leaks or failures, leaking valves, and hose leaks during unloading, could range in severity from minor leaks to complete loss of tank contents. Complete failure of an AST or tank truck compartment could result in an instantaneous loss of the entire contents of the vessel (up to 3,000 gallons for the diesel fuel AST or 1,000 gallons for a tank truck compartment). In the event of a partial failure of an AST or a tank truck compartment, the rate and total volume of release would depend upon the size and location of the failure relative to the vessel's liquid level. The rate of release from a leaking hose or valve may be up to one gallon per minute (gpm), depending on the size of the leak, and the total volume discharged would be dependent upon the location of the leak relative to the oil vessel's liquid level. Thus, releases due to equipment failure would vary in size, but with proper maintenance and regular inspection of control equipment, they can be prevented.

Spills due to operational error would also vary in size, but would generally be relatively small and easily contained within close proximity to the spill. The highest potential for a spill due to operational error would be from tank overfill. Up to 60 gpm may be discharged due to tank overfill. The total volume from such a release would likely be no more than 120 gallons, because a contractor or AI personnel are present during tank unloading and could respond to the overfill. Such spills can be prevented by proper employee training and by maintaining visual liquid-level-indicator gauges on the oil tanks.
The maximum quantity of oil which could be discharged from the facility as a result of equipment or operational failure would be the entire contents of the 3,000-gallon diesel fuel AST. However, AI maintains appropriate secondary-containment structures to capture releases and minimize the chance of a discharge from the site. Secondary-containment details are discussed in the following section. Figure 3 indicates the direction of surface drainage when no secondary containment is present.
6.0 PREVENTION MEASURES

6.1 CONTAINMENT AND/OR DIVERSIONARY SYSTEMS [40 CFR 112.7(c)]

AI maintains appropriate structures to contain oil or polluting materials, thus prohibiting them from entering the environment. The 3,000-gallon diesel fuel AST is secondarily contained by a steel structure with a total volume of approximately 4,100 gallons, which has sufficient capacity to contain the tank's contents, the volume occupied by the tank's pump, and freeboard for precipitation. The 1,000-gallon diesel fuel AST is secondarily contained by a steel structure which has sufficient capacity to contain the tank's contents, the volume occupied by the tank's pump, and freeboard for precipitation. The three interior ASTs and oil storage drums are contained by the Shop walls and floor grading. Details of secondary containment are included as Appendix 4.

Any release from an AST would be captured by its containment system, and the oil would be pumped back into the tank, if appropriate. The tanks are located in an area where staff members are working. In the event of a release, they would be able to see the release and notify the appropriate onsite personnel to initiate emergency response procedures.

6.2 ALTERNATE TO SECONDARY CONTAINMENT [40 CFR 112.7(d)]

As specified in 40 CFR 112.7(d), a facility may use alternate means of secondary containment if it is determined that the installation of any of the secondary-containment structures specified in the SPCC rules is not practicable. However, the facility must explain in the SPCC Plan why such measures are not practicable, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping, and provide in the SPCC Plan an oil spill contingency plan.

At this time, no alternate secondary containment is required at AI.

6.3 INSPECTIONS AND RECORDS [40 CFR 112.7(e)]

Inspections will be completed and records maintained by AI for the oil storage locations. Staff working in the vicinity of oil storage locations will visually monitor the tanks, piping, and drums. The site has both interior and exterior lighting to allow visual inspection of oil storage areas in the event of a release. Oil storage areas are formally inspected weekly. The inspection records will be maintained in the Scale House for a period of three years (see Appendix 5 for a copy of the inspection forms).
6.4 STAFF TRAINING AND SPILL PREVENTION PROCEDURES [40 CFR 112.7(f)]

AI has trained responsible staff regarding applicable pollution control laws, rules, and regulations. Designated staff are responsible for emergency procedures onsite, e.g., the Emergency Coordinator and Alternate. On site training is conducted annually to update staff on safety and environmental requirements. Documentation of all training is maintained at AI’s Kalamazoo office. Mr. Randy Allen, the Plant Manager of the site, is the designated discharge prevention coordinator.

6.5 SECURITY [40 CFR 112.7(g)]

The entire 342-acre site is enclosed with a fence. Site access is provided by Loveland Road, with a guardhouse at the gate. On weekends and during plant shutdowns, the gate is locked. The Shop is locked when unattended.

All valves that permit outward flow of the tanks’ contents to the surface will be securely locked in the closed position when in nonoperating or nonstandby status. The starter control on all oil pumps will be locked in the off position or located at a site accessible only to authorized staff when the pumps are in a nonoperating or nonstandby status.

6.6 FACILITY TANK CAR OR TRUCK LOADING/UNLOADING [40 CFR 112.7(h)]

AI contracts tanker trucks to fill the diesel fuel and motor oil ASTs and to remove oil from the waste oil AST. The procedure for loading/unloading oil for removal is documented as part of our ISO 14001 EMS. Please see the appropriate site procedures (SPR2 Fuel Delivery) attached for reference.
In the event of a release, the contractor and/or AI personnel will be available to carry out appropriate response measures. Oil adsorbent material is available inside the Shop, which may be used to contain released oil.

If the managed material is a hazardous waste or nonhazardous liquid industrial waste (such as used oils), the transporter and vehicle must be licensed, and a hazardous waste manifest must accompany the shipment. If the waste is a nonhazardous liquid, the hazardous waste manifest supplied by the state must still be used, along with the appropriate nonhazardous codes. Manifest handling procedures, such as signing, sending copies to the MDEQ, and keeping manifest copies for a minimum of three years, must also be followed. The manifest instructions are printed on the back of the Michigan Hazardous Waste Manifest.

6.7 CONFORMANCE WITH STATE OF MICHIGAN RULES [40 CFR 112.7(j)]

Oil pollution prevention in the state is regulated by Part 5, Spillage of Oil and Polluting Materials, administrative rules promulgated pursuant to Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Because AI does not store any polluting materials, other than oil, in excess of applicable threshold management quantities, AI may comply with the Part 5 rules by fully complying with federal oil pollution prevention requirements, i.e., preparing this SPCC Plan, and reporting all releases of oil, as described in the previous section of this SPCC Plan (State of Michigan Spill Reporting Requirements).
7.0 REQUIREMENTS FOR ONSHORE FACILITIES [40 CFR 112.8]

7.1 FACILITY DRAINAGE [40 CFR 112.8(b)]

Any release from the oil tanks will be captured by the secondary containment around the tanks. Any precipitation or other material that collects in exterior containment structures will be removed with a pump. Al personnel will inspect the condition of accumulation before pumping to ensure no oil is discharged from the containment structures.

7.2 BULK STORAGE TANKS [40 CFR 112.8(c)]

The diesel fuel and some waste oil ASTs are constructed of steel, which is compatible with the oils being stored within the tanks. The waste oil AST is constructed of plastic, which is appropriate for this material. The motor oil ASTs have visual liquid-level-indicator gauges, which will help prevent overfilling of these tanks. The waste oil AST is translucent, which allows visual determination of the liquid level of the tank. Al plans to install a visual liquid-level-indicator gauge on the diesel fuel AST. Exterior and interior ASTs will be drained and inspected for integrity every 5 and 10 years, respectively, or whenever material repairs are made.

7.3 FACILITY TRANSFER OPERATION [40 CFR 112.8(d)]

Motor oil stored inside ASTs in the Shop is transferred via pipes to a compressed-air dispensing system located at the western end of the shop where vehicle servicing is conducted.

Piping that is not in use or is out of service will be capped or blank-flanged. Piping located overhead is out of the reach of lift trucks or other onsite vehicles. All piping is suspended so that minimum abrasion and corrosion occurs. The piping has been installed to allow for expansion and contraction.

The pipes and pumps are inspected weekly by site staff as part of the weekly checklist. Any problems with the piping or joints should be noticed immediately by site staff working in the area and/or during monthly inspections.
8.0 RECOMMENDATIONS

The P.E. certification of this SPCC Plan is contingent upon the implementation of the following Good Engineering Practices:

- All tank truck loading/unloading must be conducted upon an impervious surface, and AI must provide a mechanism to prevent vehicles from departing before complete disconnection of oil transfer lines such as warning signs, wheel chocks, or a vehicle break interlock system. In addition, all oil unloading areas must have secondary containment sufficient to contain at least a minor spill of at least 50 gallons. This may be accomplished by constructing a curb around the unloading area or by requiring contractors to place drip pans capable of containing at least 50 gallons under transfer points. If a curb is constructed, a means to drain precipitation from the unloading area must be incorporated. Any accumulated precipitation must be removed prior to making any connections and unloading.

- All drums stored indoors should be stored on spill pallets, unless a marked drum storage area is established that maximizes the distance between the drums and Shop entrances.
Notice of Authorization

Permit Number 06-38-0043-P
Expiration Date: 4/5/2012

The State of Michigan, Department of Environmental Quality, Land and Water Management Division, 301 E. Louis Glick Hwy., Jackson, Michigan, 49201-1535, 517-780-7690, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and specifically:

- Part 31 Floodplain/Water Resources Protection.
- Part 301 Inland Lakes and Streams.
- Part 303 Wetland Protection.
- Part 315 Dam Safety.
- Part 325 Great Lakes Submerged Lands.
- Part 323 Shorelands Protection and Management.
- Part 353 Sand Dune Protection and Management.

Authorized activity:

**************************MODIFIED PERMIT**************************

Enlarge an existing 4.98 acre pond, over a five year period, by dredging an additional approximate 1,200,000 cubic yards of material, to create a lake 19 acres in final size with a depth of approximately 40 feet, as part of a sand and gravel mining operation. All work authorized by this permit shall be completed in accordance with the attached specifications and modified plans dated March 13, 2007.

To be conducted at property located: Jackson County, Waterbody: Freshwater Lake Section 1, Town 2S, Range 2E, Waterloo Township

Permittee: Aggregate Industries Inc
911 Hatfield Avenue
Kalamazoo, MI 49001

Steven E. Chester, Director
Department of Environmental Quality

Justin Pung
District Representative

This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.

Please refer to the above Permit Number with any questions or concerns.
April 1, 2010

Mr. Martin Landes
822 Schuster Avenue
Kalamazoo, Michigan 49001

Dear Mr. Landes:

SUBJECT: Aggregate Industries-Chelsea Plant
Rule 2215-10-4 General Permit Certificate of Coverage
Waterloo Township, Jackson County

Enclosed is a copy of the General Permit Certificate of Coverage No. GW1510083 which was approved for issuance under Rule 2215 of the Part 22 Administrative Rules of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, by the Department of Natural Resources and Environment (Department). The General Permit Certificate of Coverage is for a gravel, sand, limestone, or dolomite mining operation facility discharging only washwater without additives that meet the requirements of the general permit.

The issuance of this permit does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Department permits, or approvals from other units of government as may be required by law.

If there are questions regarding the permit requirements, please contact the Groundwater Permits Unit, Permits Section, Water Bureau, at 517-373-8148.

Sincerely,

James R. Janiczek, Chief
Groundwater Permits Unit
Permits Section
Water Bureau

cc: Jackson County Health Department
Mr. Jon Russell, DNRE - Jackson
This Certificate of Coverage (COC) is for Gravel, Sand, Limestone or Dolomite Mining Operations which meet the criteria established for general permits pursuant to the Administrative Rule, R 323.2215, promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.3101 through 324.3119 of the Compiled Laws of Michigan. Failure to comply with the terms and provisions of the General Permit may result in civil and/or criminal penalties as provided in Part 31. This COC does not relieve the discharger from obtaining and complying with any other permits required under local, state, or federal law.

<table>
<thead>
<tr>
<th>COC No.</th>
<th>GW1510083</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Name</td>
<td>Aggregate Industries, Chelsea Plant</td>
</tr>
<tr>
<td>Facility Address</td>
<td>4950 Loveland Road, Grass Lake, Michigan 49240</td>
</tr>
<tr>
<td>Permittee Name</td>
<td>Aggregate Industries</td>
</tr>
<tr>
<td>Facility Owner Address</td>
<td>822 Schuster Avenue, Kalamazoo, Michigan 49001</td>
</tr>
<tr>
<td>Telephone</td>
<td>269-321-3802</td>
</tr>
<tr>
<td>COC Issued Date</td>
<td>April 1, 2010</td>
</tr>
<tr>
<td>General Permit Expiration Date</td>
<td>April 1, 2015</td>
</tr>
<tr>
<td>Application Renewal Deadline</td>
<td>October 4, 2014</td>
</tr>
<tr>
<td>Discharge Location Description</td>
<td>Waterloo Township, Jackson County, Michigan</td>
</tr>
<tr>
<td>Annual Flow</td>
<td>270,000,000 Gallons</td>
</tr>
<tr>
<td>Treatment Method</td>
<td>Special Classification</td>
</tr>
<tr>
<td>Disposal Method</td>
<td>Seepage Bed - Rapid Rate</td>
</tr>
</tbody>
</table>

This COC supersedes COC No. GW1510083 issued to this facility on May 20, 2005.

This COC is based upon the information submitted in the application received by the Department of Natural Resources and Environment (Department), and any subsequent amendments.

In accordance with Section 324.3122 of the Michigan Act, the permittee shall make payment of an annual permit fee to the Department for each December 15 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. The fee shall be postmarked by March 1 for notices mailed by January 15. The fee is due no later than 45 days after receiving the notice for notices mailed after January 15.

James R. Janiczek, Chief, Groundwater Permits Unit
Permits Section - Water Bureau
Michigan Department of Natural Resources & Environment

Attachment: General Permit No. 2215-10-4
MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
WATER BUREAU
GROUNDWATER DISCHARGE GENERAL PERMIT
2215-10-4

This general permit is issued under the provisions of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, being Sections 324.3101 through 324.3119 of the Compiled Laws of Michigan, and the Administrative Rules promulgated thereunder. This general permit does not relieve the discharger from obtaining and complying with any other permits required under local, state, or federal law.

<table>
<thead>
<tr>
<th>Authorization:</th>
<th>Rule 2215</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Operation:</td>
<td>Gravel, Sand, Limestone or Dolomite</td>
</tr>
<tr>
<td>Discharge Category:</td>
<td>Washwater Without Additives</td>
</tr>
<tr>
<td>Type of Wastewater:</td>
<td>Process</td>
</tr>
<tr>
<td>Method of Disposal:</td>
<td>Groundwater or Ground</td>
</tr>
<tr>
<td>Issue Date:</td>
<td>April 1, 2010</td>
</tr>
<tr>
<td>Expiration Date:</td>
<td>April 1, 2015</td>
</tr>
</tbody>
</table>

**Authorization to Discharge** in accordance with the limitations and conditions as set forth in this permit as authorized pursuant to R 323.2215.

The Michigan Department of Natural Resources and Environment (Department) has determined that gravel, sand, limestone or dolomite mining facilities discharging only washwater without additives, into the groundwater or onto the ground of the state are appropriately and adequately controlled by a general permit. Pursuant to this general permit, a discharge may begin as soon as the conditions of the general permit have been met.

In accordance with Section 324.3122 of the Michigan Act, the permittee shall make payment of an annual permit fee to the Department for each December 15 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department’s annual notice. The fee shall be postmarked by March 1 for notices mailed by January 15. The fee is due no later than 45 days after receiving the notice for notices mailed after January 15. Fees paid in accordance with the Michigan Act are not refundable.

This general permit supersedes all Permits and Exemptions for discharges of Washwater Without Additives issued by the Department to facilities with the same or substantially similar types of operation.
All construction, maintenance, operations, and monitoring of this facility must comply with the conditions set forth in this general permit by the Department. Failure to comply with the terms and provisions of this general permit may result in civil and/or criminal penalties as provided in Part 31.

James R. Janiczek, Chief
Groundwater Permits Unit
Water Bureau
Department of Natural Resources and Environment
A. Authorization Conditions
1. No discharge can occur until the discharger requests a certificate of coverage on a form approved by the Department and obtains a certificate of coverage authorizing the discharge.

2. The discharge shall only consist of washwater without additives. Washwater without additives is defined as wastewater which results from cleaning operations, to which no detergents, surfactants, or other chemicals have been added to enhance, accelerate or improve the cleaning process. The washwater shall be used to wash and sort uncontaminated gravel, sand, limestone or dolomite, and to remove general inert substances such as uncontaminated soils from gravel, sand, limestone or dolomite, where the washing process does not add significant additional contaminants to the water.

3. The source of the washwater shall be from a municipal water supply or a water supply meeting state or federal criteria for use as potable water or another source of water meeting the standards of R 323.2222 or another source of water approved by the Department as meeting the conditions of R 323.2204.

4. The discharge of washwater shall only be on property owned by the discharger unless the discharger has written authorization from the landowner for such a discharge.

5. Effluent shall not be applied within 100 feet of property lines unless the Department specifically approves a lesser distance.

6. All treatment or control facilities or systems installed or used to achieve compliance with this general permit shall be maintained in good working order and operated as efficiently as possible.

7. The discharger shall maintain, on site, a log detailing the daily discharge volume of washwater without additives. The log shall be available for inspection and submitted to the Department upon request. Records shall be retained for a period of three years unless otherwise required by the Department. The Department may approve alternative monitoring frequencies.

B. Transfer of Ownership
In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall submit to the Department 30 days prior to the actual transfer of ownership or control a written agreement between the current permittee and the new permittee containing: 1) the legal name and address of the new owner; 2) a specific date for the effective transfer of permit responsibility, coverage and liability; and 3) a certification of the continuity of or any changes in operations, wastewater discharge, or wastewater treatment.

If the new permittee is proposing changes in operations, wastewater discharge, or wastewater treatment, the Department may propose modification of this permit in accordance with applicable laws and rules.

C. Change or Modification of Treatment or Discharge
If at any time the discharge fails to meet a qualifying condition of this general permit, the general permit and any specific certificate of coverage no longer applies, and the discharger must obtain an appropriate authorization.
D. By-Passing
Any diversion from or bypass of treatment facilities is prohibited, except where unavoidable to prevent loss of life, personal injury, or severe property damage. The discharger shall immediately notify the Department of any such occurrence by telephone at 1-800-292-4706. Such notice shall be supplemented by a written report within ten days detailing the cause of such diversion or bypass and the corrective actions taken to minimize adverse impact and eliminate the need for future diversion or bypass.

E. Cessation of Discharge-Related Activities
If all or any portion of the authorized treatment facilities and discharge areas are intended to be eliminated, the discharger shall comply with the requirements of R323.2226.

F. Reporting Requirements
Except as provided in Section D, all notices, reports, and other submissions required by and pursuant to this general permit shall be submitted to:

Groundwater Permits Unit
Water Bureau
Department of Natural Resources and Environment
P.O. Box 30273
Lansing, Michigan 48909-8130
Telephone: 517-373-8148

G. Spill Notification
The permittee shall immediately report any release of any polluting material which occurs to the surface waters or groundwater of the state, unless the permittee has determined that the release is not in excess of the threshold reporting quantities specified in the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code), by calling the Department at the number indicated in the certificate of coverage, or if the notice is provided after regular working hours call the Department’s 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706 (calls from out-of-state dial 1-517-373-7660).

Within ten (10) days of the release, the permittee shall submit to the Department a full written explanation as to the cause of the release, the discovery of the release, response (clean-up and/or recovery) measures taken, and preventative measures taken or a schedule for completion of measures to be taken to prevent reoccurrence of similar releases.

H. Duty to Comply
All discharges authorized herein shall be consistent with the terms and conditions of this permit and the facility's certificate of coverage (COC). The discharge of any pollutant identified in this permit and/or the facility’s COC more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit and the facility's COC. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit or the facility's COC constitutes a violation of the Michigan Act and constitutes grounds for enforcement action; for COC termination, revocation and reissuance, or modification; or denial of an application for permit or COC renewal.
I. Operator Certification
The permittee shall have the waste treatment facilities under direct supervision of an operator certified at the appropriate level for the facility certification by the Department, as required by Sections 3110 and 4104 of the Michigan Act.

J. Power Failures
In order to maintain compliance with the effluent limitations of this permit and prevent unauthorized discharges, the permittee shall either:
1. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit; or
2. upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

K. Waste Treatment Residues
Residuals (i.e. solids, sludges, biosolids, filter backwash, scrubber water, ash, grit or other pollutants) removed from or resulting from treatment or control of wastewaters, shall be disposed of in an environmentally compatible manner and according to applicable laws and rules. These laws may include, but are not limited to, the Michigan Act, Part 31 for protection of water resources, Part 55 for air pollution control, Part 111 for hazardous waste management, Part 115 for solid waste management, Part 121 for liquid industrial wastes, Part 301 for protection of inland lakes and streams, and Part 303 for wetlands protection. Such disposal shall not result in any unlawful pollution of the air, surface waters or groundwaters of the state.

L. Right of Entry
The permittee shall allow the Department, any agent appointed by the Department, upon the presentation of credentials:
1. to enter upon the permittee’s premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
2. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods and equipment regulated or required under this permit; and to sample any discharge of pollutants.

M. Availability of Reports
Except for data determined to be confidential under Rule 2128 (Rule 323.2128 of the Michigan Administrative Code), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Sections 3112, 3115, 4106 and 4110 of the Michigan Act.

N. Civil and Criminal Liability
Except as provided in permit conditions on "Bypass", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.
O. State Laws
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

P. Property Rights
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits or approvals as may be required by law.
Wildlife Division has reviewed the proposed non-metallic mineral lease to Aggregate Industries in Jackson County. It is our opinion that no federal or state endangered or threatened species will be negatively impacted by this project. The project should have no impact on rare or unique natural features at the locations specified above if it proceeds according to the plans provided.

Species known from the vicinity of the project, but are not necessarily known to occur in the project area itself, include:

- Indiana Bat (*Myotis sodalis*) – This federal and state endangered mammal is known from a single historical record at "Sylvan Pond" in the 1940s. Located approximately 1.5 miles to the northeast of the project site, Sylvan Pond was an impoundment created as a trout pond. The impoundment no longer exists. There are no other occurrence records for the Indiana bat within the Waterloo Recreation area. In 2005, Indiana bat was documented approximately eight miles to the northwest of the project area and also approximately 12 miles south of project area.

  Indiana Bat requires large tracts of floodplain forest habitat or mature hardwoods adjacent to floodplain/riparian areas. There are no floodplain forests currently within or immediately adjacent to the project site. There are small buttonbush swamps near the project site to the north. The Aggregate Industries property includes a pond and settling lagoons.

  The Indiana Bat requires mature trees with cavities or loose bark for roosting and maternity sites. While these types of trees do occur north of the project site, Indiana Bats have not been documented within the project site and would be unlikely to use the predominantly young, invasive trees in the project site. The long-term forest restoration proposed as a requirement of the non-metallic mineral lease would potentially create new habitat for Indiana Bat.

- Henslow's Sparrow (*Ammodramus henslowii*) – This state endangered bird requires open grasslands to breed. The state land to be mined has a small grassy opening, but it is not of sufficient size to support breeding Henslow's Sparrows. However, once restored the southern portion gift property will provide suitable habitat for Henslow's Sparrow in the
future. The project would potentially have a net benefit to this species. If the state land to
to the east of the gift property were also restored to grassland, significant benefit to grassland
birds including the Henslow's sparrow could be realized.

- **American Chestnut (Castanea dentata)** – This state endangered tree was historically a
component of oak-hickory forests in the area and was documented in the high-quality forest
along McClure Road to the east of the site in the 1980s–1990s. It is unlikely to occur within
the project site due to the disturbed nature and relatively young age of the forest vegetation.
However, the proposed forest restoration on the project site after mining could potentially
provide a suitable site for chestnut to be reintroduced, if local genetic sources are still
available. An inventory (prism sampling) completed to document the forest character of the
state property to be lease did not detect the presence of American chestnut.

- **Cerulean Warbler (Dendroica cerulea)** – There are no documented nesting records within
the state property to be leased or the Aggregate Industries property to be acquired. This
state threatened bird is well known from the high-quality oak forest along McClure Road,
extending west across the northern and western edge of the project area. Ceruleans tend to
prefer old open-canopy oak forests in this area of the state. It is likely that their nesting is
confined predominantly to the high-quality forest adjacent to, but outside the project site.

Upon completion of restoration after mining, cerulean warblers would likely use the restored
oak hickory forest. Since more suitable habitat for this species would eventually be created
under the proposal than exists presently within the project site, the project could potentially
have a net benefit to this species.

- **Least Shrew (Cryptotis parva)** – This state threatened mammal has a historical record from
the 1920s in the general vicinity of Waterloo. This species is found in dry grassy sites with
dense vegetation. The small opening at the project site is not known to harbor Least Shrew.
The extensive grassland habitat proposed to be restored after mining as a result of the lease
agreement would increase the amount of suitable habitat for this species in the local area,
resulting in a potential net benefit of the project to this species.

Thank you in for your coordination in addressing the protection of Michigan's natural resource
heritage. If you have further questions, please call me at 517-373-9418 or e-mail at
SargentL@michigan.gov.
Dave,

This past Tuesday (1/17), Ray Fahlsing, Scott Hanshue and I had a chance to meet and walk through parts of the area associated with LTA #20050400 ( Aggregate Industries). I just had a couple of quick comments to forward to you regarding the proposed exchange:

> The DNR land that is to be mined appears to be mostly old field (some of it very old), and is full of invasive plants. Most of the higher quality hardwood community and associated wetlands are separated from the area proposed for mining by ridges which should help to protect these higher quality areas from erosion and other threats posed by the mining activities.

> As this will be a value for value exchange, not necessarily all of the proposed area will be mined. Therefore, I would encourage reserving land that buffers these ridges to the extent possible - asking that they be the last areas mined (and hopefully not mined at all) so as to retain the protection they provide, and the current geography of the site.

> The northern portion of the land that we will acquire from Aggregate Industries is surrounded on three sides by high quality hardwood forest. By working to restore the exchanged land, we will be creating a more intact forested community, with less edge and associated threats that will provide even better habitat for wildlife species that depend on forest interiors.

> By allowing mining in the areas proposed, we will effectively (though not necessarily in the most efficient manner) wipe out a large source of invasive plants and potentially provide some further protection of the higher quality areas from these invasives - especially if the restoration efforts include vigilant invasives prevention strategies.

Therefore, Shannon and I support the proposed land transaction and would very much like to have this office involved in the planning and implementation of the restoration efforts.

Thanks,

Amy
Jackson Citizen Patriot
214 S. Jackson St., Jackson, MI 49201

AFFIDAVIT OF PUBLICATION

State of Michigan, ss
County of Jackson)
Sheryl L. DeVriendt being duly sworn, deposes and says that he/she is
principal clerk of the Jackson Citizen Patriot; that said Jackson Citizen
Patriot is a newspaper published and circulated in the County of Jackson,
and the attached notice has been duly published in said newspaper on the
following dates:
December 03, 2009

Customer Name:
AGGREGATE INDUSTRIES MIDWEST REGION

Sheryl L. DeVriendt

Subscribed and sworn to before me this 7th day of December A.D. 2009

Brenda M. Truskowski
NOTARY PUBLIC IN AND FOR THE COUNTY OF KENT, STATE OF MICHIGAN

My Commission Expires: January 29, 2014

BRENSA M. TRUSKOSKI
Notary Public, State of Michigan
County of Kent
My Commission Expires: 01/29/2014
Acting in the County of Kent

AFFIDAVIT OF PUBLICATION
JACKSON CITIZEN PATRIOT
JACKSON, MICHIGAN

IN THE MATTER OF
AGGREGATE INDUSTRIES MIDWEST REGION
822 SCHUSTER AVE.
KALAMAZOO MI 49001

Received and filed this 7th day of December A.D. 2009

0003527402
10:15 a.m.  NRC POLICY COMMITTEE ON WILDLIFE AND FISHERIES  
Room 202  
1. Tracking Legally Shot Game Animals  
2. Resident Goose Fee Structure  
3. Inland Consent Decree Update  
4. Elk Management Plan  
5. Deer and Elk Season Update  
*6. Quality Deer Management Association (QDMA)/DNR – Memorandum of Understanding  

12:30 p.m.  NRC POLICY COMMITTEE ON LAND MANAGEMENT  
Room 202  
1. Potash Lease and Nonmetallic Procedures  
2. Gas Storage Lease and Procedures  
3. Phase III Land Consolidation Update  
4. Land Appraisal Review  
5. Aggregate Industries Land Gift/Lease  
6. Timber Sales Minimum Bid  

*2:00 p.m.  NRC POLICY COMMITTEE ON TECHNOLOGY, INFORMATION, MARKETING AND EDUCATION  – Room 202  
1. Private Funds and How They Support DNR Priorities  
2. Outdoor Recreation: Agency Industry Roundtable  
*3. Governor’s Environmental Justice Work Group Update
AGENDA – NATURAL RESOURCES COMMISSION
January 7, 2010
Page 2

3:00 p.m.  COMMITTEE OF THE WHOLE

1. Director’s Action Items – Discussion
2. Legislative Update
3. DNR Spend Plan
*4. Deer Range Improvement (DRIP) Funding
5. Michigan Bear Hunters – Bear Patch Program
6. DNR/DEQ Transition
*7. Special Recognition

4:30 p.m.  PUBLIC APPEARANCES BEFORE THE
NATURAL RESOURCES COMMISSION

Jack Kleinhart
Ted Beals, Waterloo Township Planning Commissioner –
Lease Mining and Land Transfer
Erin McDonough, MUCC – Various Natural Resource Issues
Amy Spray, MUCC – Goose Control
Craig Clark – Quality Deer Management
Chauncey Moran
Dale Sheltrown – Deer Hunting

5:00 p.m.  SHIKAR-SAFARI CLUB INTERNATIONAL, OFFICER OF THE
YEAR AWARD PRESENTATION

5:10 p.m.  PARTNERS IN CONSERVATION AWARD PRESENTATIONS

REGULAR MEETING OF THE
NATURAL RESOURCES COMMISSION

I. NATURAL RESOURCES COMMISSION ACTION

A. Approval of Minutes – December 3, 2009
Natural Resources Commission Meeting

B. Resident Canada Goose Management
Wildlife Conservation Order Amendment No. 1 of 2010 .................1-8

C. Tracking Legally Shot Game Animals
Wildlife Conservation Order Amendment No. 2 of 2010 ...............9-13

D. Hunt Drawing Success Notifications and Turkey License
Technical Amendment
Wildlife Conservation Order Amendment No. 3 of 2010 ...............14-18
E. Gift of Land – State Forest Trail
   Ionia to Lowell Railroad Corridor Phase II – Ionia and Kent Counties
   Land Transaction Case #20080192 ........................................................................ 19-23

II. FOR INFORMATION ONLY – DIRECTOR’S ACTION IN FEBRUARY

A. Updated Nonmetallic Mineral Salt Lease and Nonmetallic Mineral Leasing Procedures
   FOR INFORMATION ONLY ...................................................................................... 24-53

B. Updated Underground Natural Gas Storage Lease and Leasing Procedures
   FOR INFORMATION ONLY ...................................................................................... 54-75

III. DIRECTOR’S ACTION ITEMS

A. Order to Regulate Fees Charged to Enter Michigan State Parks and Recreation Areas
   Land Use Order of the Director Amendment No. 1 of 2010 .......................... 76-82

B. Statewide Trout, Salmon, Whitefish and Lake Herring Regulations (FO-200) ................................................................. 83-112

C. Sturgeon Regulations – Statewide (FO-240) ............................................. 113-117

D. One Direct Nonmetallic Sand and Gravel Lease in Jackson County .................. 118-120

E. Land Transactions (Listing Page 121)

1. Wildlife Land Acquisition and State Forest Boundary Dedication
   Sault Ste. Marie Management Unit – Chippewa County
   The Hay Lake Environmental & Development Inc. Tract
   Land Transaction Case #20080213 ................................................................. 122-126

2. Wildlife Land Acquisition
   Crystal Falls Management Unit – Iron County
   The Lone Cedar Environmental, LLC Tract
   Land Transaction Case #20090075 ................................................................. 127-130

3. State Forest Land Acquisition
   Atlanta Management Unit – Montmorency County
   The Murray Tract
   Land Transaction Case #20090176 ................................................................. 131-134
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<tr>
<td></td>
<td>Waterloo Recreation Area – Jackson and Washtenaw Counties</td>
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<tr>
<td></td>
<td>The Aggregate Industries Tract</td>
</tr>
<tr>
<td></td>
<td>Land Transaction Case #20050400 ......................... 135-139</td>
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<th>Sale of Easement over State-owned Land</th>
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<td></td>
<td>Atlanta Management Unit – Montmorency County</td>
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<tr>
<td></td>
<td>Land Transaction Case #20080305 ......................... 140-143</td>
</tr>
</tbody>
</table>

If you are unable to attend the Natural Resources Commission meeting but wish to submit written comments on Agenda items, please write to: Natural Resources Commission, P.O. Box 30028, Lansing, Michigan 48909 or e-mail at: glodent@michigan.gov. If you would like further information on Agenda items or would like to address the Commission, please contact Teresa Gloden at 517-373-2352, or e-mail: glodent@michigan.gov. Persons with disabilities needing accommodations for the meeting should contact Teresa Gloden at 517-373-2352.

LOOK FOR THIS AGENDA AND OTHER NATURAL RESOURCES COMMISSION ITEMS ON THE DNR WEB PAGE AT: [http://www.michigan.gov/dnr](http://www.michigan.gov/dnr) and click on the “Natural Resources Commission” Quick Link.
MINUTES
NATURAL RESOURCES COMMISSION
JANUARY 7, 2010
LANSING CENTER
333 E. MICHIGAN
LANING

PRESENT FOR THE NRC
Keith Charters, Chair
Frank Wheatlake, Vice-Chair
Mary Brown
Hurley Coleman
John Madigan
Tim Nichols
J. R. Richardson

PRESENT FOR STAFF
James Riley, Legal Counsel
Rebecca Humphries, Director
Rodney Stokes, Chief of Staff
Mindy Koch, Resource Management Deputy
Stacy Welling, UP Field Deputy
Dan Eichinger, Legislative Liaison
Teresa Gloden, Assistant to the NRC
Other DNR Staff

COMMITTEE OF THE WHOLE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT (DNRE) - TRANSITION UPDATE

Bruce Rasher, DNRE Transition Coordinator, discussed the Governor’s Executive Order that transfers the Department of Natural Resources (DNR) and Department of Environmental (DEQ) into the DNRE. This transfer is set to occur on January 17, 2010. A transition report has been submitted to the Governor and is currently being reviewed to assure all of the legal matters are in compliance. Mr. Rasher said he has met with many stakeholder groups as well as employees of both departments asking for input. He highlighted the recommendations in the transition report and noted that all employees along with the appropriate funds and responsibilities will transfer. The DNR and DEQ will be abolished.

Mr. Rasher noted that the DNRE Director and the NRC will continue to interact, although the NRC will no longer select the Director.

The DNRE will be divided into three areas: Resource Management; Stewardship; and Environmental Protection. All of the current programs will fall under one of these
categories. The current divisions in DNR and DEQ will be reduced from 16 to nine. **Mr. Rasher** noted this does not mean the programs are being eliminated, just that the organizational structure will look different. The new structure will be a work-in-progress and will be developed over the next six months utilizing process re-engineering. To develop the most optimal organization, employees, stakeholder groups and other governmental entities will be involved.

The Transition Report recommends consolidating administrative functions to create a “center of excellence” in performing the administration functions. Program administrators will, however, continue to make budget decisions for their programs though the budget development process will be centralized.

The report also recommends creation of a new role of the eco-regions. There will be four eco-regions: the southeast (Lake Erie) region; the northeast (Lake Huron) region; the western Lower Peninsula (Lake Michigan) region; and the Upper Peninsula region. Regional directors will perform in a strategic role and coordinate planning across the various programs. This responsibility would include decision-making on permits and plans.

**Commissioners** urged the availability of the report because there is a short period of time in which to adjust the February 4, 2010 NRC meeting to accommodate changes.

**Commissioner Coleman** questioned the ultimate goal of the report. **Mr. Rasher** replied the focus will be on ecosystems, being transparent, and on a government that is closer to the citizens in decision-making.

**DIRECTOR’S ACTION ITEMS - DISCUSSION**

**Commissioner Madigan** asked if changes to the trout regulations in Lake Superior are anticipated. **Dr. Kelley Smith** said staff is working with the tribes in that area to determine if changes are needed and said if populations increase, changes will be considered.

**Commissioner Coleman** asked for discussion at a future meeting regarding the benefits of natural gas leasing.

**LEGISLATIVE UPDATE**

Dan Eichinger, Legislative Liaison, presented the following update:

Legislative session will resume on January 13, as work ramps up again after the holiday recess. Once again the budget will be the primary topic during the legislative session. The legislature concluded its work by passing a number of bills the Department has been working on in 2009.

**Wrap Up**

**HB 5380** passed without amendment by the Senate and will extend the authority for the Natural Resources Commission to regulate supplemental feeding in the state until January 1, 2016. The bill passed on a unanimous vote in the Senate.
SB 934 exempts ATVs from certain requirements under Part 811 of NREPA when those vehicles are being used in conjunction with a farming activity.

SB 388 was passed, though in substantially different form than previous versions of the bill. This bill was the primary bill in the recreation passport package. The bill was substituted to provide a short-term extension of the motor-vehicle permits. Work is slated to resume in January on the recreation passport.

HB 5087 revised the definition of an off-road vehicle.

Looking Ahead

In addition to continuing work on the package of bills regarding fish possession, the DNR will also work with the sponsors of a bill that creates a moose hunting advisory council and directs the Commission to issue orders creating a moose hunting season.

MONTHLY SPEND PLAN AND BUDGET UPDATE

Mark Bouvy and Jason Crandall, Office of Budget and Support Services, presented the monthly spend plan for January 2010, as well as presenting a budget update. The January 2010 budget update can be viewed at the following address:


Additional columns have been added to include “History,” “Legal Coordination,” and "Mackinac Island."

Details of each fund were briefly reviewed. The DNR continues to monitor revenues against projections, and makes spend plan adjustments as needed. Impacts of significant adjustments were highlighted.

SPECIAL PRESENTATION – STEVE CHESTER

Director Humphries noted that DEQ Director Steve Chester was a leader on the Governor’s environmental cabinet team. He performed his responsibilities as DEQ Director with the utmost integrity. Director Humphries presented him with a white pine plaque with heartfelt admiration for his leadership on climate change, his steadfast support of staff leadership development, and especially for his deep sense of environmental integrity.

Director Chester left his post as DEQ Director effective January 4, 2010. He thanked the DNR for this recognition and was humbled by it. He believes that the creation of the DNRE and the recombination of the DNR and DEQ will work. He stressed the importance of a continuing focus on climate change and the potential of bolstering the state’s economy if the Climate Action Plan is implemented.
UP HABITAT MEETING FOLLOWUP – DEER RANGE IMPROVEMENT PROGRAM (DRIP)

In the fall 2009, Director Humphries, Russ Mason, Commissioners Richardson and Madigan, and other staff met to discuss several changes being made in the DRIP. Following are those changes:

- Convert the DRIP coordinator into a vacant UP wildlife biologist position.
- Directing each biologist spend a portion of their time on private lands management.
- The capital outlay appropriation for deer acquisition had been exhausted as had the fund balance in DRIP. The DRIP program would be living off annual income, and another capital outlay request would not be sought.

Several Commissioners followed up with questions of Wildlife Division on the current level of funding for DRIP, how it is being spent and where. And, as a result, Commissioner Madigan and Director Humphries have been reviewing the DRIP expenditures.

Act 106 of 1971 created the DRIP Fund as a sub-fund of the Game and Fish Fund by earmarking $1.50 of each deer license sold (not seniors). Revenue totals approximately $2.2 to $2.8 million annually. The funds are “appropriated for the purpose of improving and maintaining habitat for deer, for the acquisition of land required for an effective program of deer habitat management and payment of ad valorem taxes on lands on lands acquired under this section.” Historically the DNR has used DRIP funds to fund Wildlife staff to develop habitat plans and implement habitat work on state forest lands in the northern two thirds of the state.

For decades the DNR studied deer biology in penned study areas in the UP and the northern Lower Peninsula (LP) using research grants. Just as the DNR has moved away from penned research, work has shifted to habitat work to address changing deer range needs.

At the time DRIP funds were first established, funds were routinely used to conduct non-commercial forest treatments to establish early succession cover on the deer range. As timber markets allowed the DNR to use commercial sales of these same treatments, more funding was available for reestablishing deer range in the UP and the northern Lower Peninsula (LP). This included oak plantings, white pine plantings, and jack pine plantings. More recently, DRIP funds were also utilized to develop openings, improve mesic conifer cover and cedar regeneration in the UP.

In the 1990s, we moved into deer range acquisition as a priority as identified by the Habitat Work Group.

As the DNR looks at the DRIP program, it is important the DRIP funds be used to complete the highest priority deer range work. As Director Humphries reviewed the expenditures, she believed a disproportionate amount of DRIP funds were currently being spent on jack pine work in the northeastern part of the LP. This has occurred for a couple of reasons:
First, the other funding to complete jack pine work (of which DRIP was a part) has declined, and includes federal Section 6 funds and non-game funds.

Secondly, DRIP was being used to maximize State Wildlife Grant money (federal).

While DRIP funds have been used for jack pine work since the inception of the DRIP program (and it meets the requirements of DRIP funds), it does not honor the intent of the earmark by our users, at this level of spending. Thus, Director Humphries gave Wildlife Division several directives:

1) Stop using DRIP funds for jack pine work and to work with Lynne Boyd, Chief of FMFM, to try to identify a more appropriate funding source to match the federal grant that supports jack pine management for Kirtland’s warbler range.

2) Bring the NRC current DRIP priorities and a plan to work together to update our future direction for the use of these funds.

3) Discuss ideas for updating guidance documents for DNR employees to use in deer range management.

The priorities for the use of DRIP funds have changed with the current needs, and she believes it is critical that the DNR look to the future and use DRIP for the following:

- On highest deer range needs;
- That the work supports the updated deer management plan;
- Uses the best science for habitat management;
- Uses the up-to-date habitat inventory data.

With that as background, Director Humphries thanked the Commission for asking the pressing questions.

Commissioner Madigan believes that sportsmen and sportswomen in Michigan are willing to pay for a product if the revenue goes where it is intended to go. In this case, it is even more critical since the need for deer habitat is becoming so critical.

Commissioner Richardson said it is important to look at what is available to save the deer herd in the western UP.

Chairman Charters said that there was no misuse of the DRIP funds. However, there are better uses for the DRIP funds.

**MICHIGAN BEAR HUNTERS – BEAR PATCH PROGRAM**

Adam Bump, Wildlife Division, thanked Matt Pedigo, President, Phil Hewett, Vice President, Michigan Bear Hunters Association (MBHA), for taking over the bear patch program two years ago. In 2008, 1500 patches were sent out, and this year, 1200 have been sent out and the orders are still coming in. Mr. Hewitt said they are pleased to be able to continue to fund the program.
DIRECTOR HUMPHRIES’ REPORT

Director Humphries said she was selected by the NRC to become DNR Director in April of 2004. She said it has been an honor to be the Director and she said she intends to be a part of the new DNRE. She believes the DNRE will be a great department.

Commissioners Brown and Coleman stated their support for Director Humphries as Director of DNRE.

CLOSED SESSION

The NRC and Director Humphries went into a closed meeting from 4:35 p.m. to 5:10 p.m. to discuss matters of litigation and personnel matters as appropriate under the Open Meetings Act.

SHIKAR-SAFARI CLUB INTERNATIONAL WILDLIFE OFFICER OF THE YEAR AWARD

Chairman Charters said the Shikar-Safari International Wildlife Officer of the Year Award is one of the major awards in Law Enforcement Division for recognizing outstanding performance.

This honor also carries the distinction of being Michigan’s Conservation Officer of the Year. The nominations are submitted by conservation officers based on established criteria related to officer duties and personal attributes.

Gunnar Klarr, representing Shikar-Safari Club International, said Shikar-Safari was established in the 1950s. Originally, it was established to raise private funds to invest in natural resources across the world to train wildlife officers. The projects were good, but soon the founders realized the most important individuals to invest in were those on the front lines. About 35 years ago, the Wildlife Officer of the Year Award was established. The Award presentation takes place once a year in each of the 50 states.

The 2010 Wildlife Officer of the Year Award was presented to Detective Jason Haines. Detective Haines expressed appreciation for this Award. He commended and thanked his co-workers and detectives in his unit and especially thanked his wife, Lisa, for her support and patience as he performs his job.

PUBLIC APPEARANCES

Ted Beals, Waterloo Planning Commission, Jackson
Jack Kleinhart
Erin McDonough, MUCC
Amy Spray, MUCC
Chauncey Moran
Dale Sheltrown
Kirk Melhaff, Gooseworks
Chris Compton, Goose Busters
Mark Melchoir, Wildlife Control Training Club
Tim Cosper
Ted Beals, Waterloo Planning Commission, Jackson County, supports the transfer of land from Bill Smith Sand and Gravel (Aggregate Industries) to the DNR. However, he does not necessarily support approval to allow extension of the current mining onto adjacent wooded hills within the boundaries of the Waterloo Recreation Area on state land. He strongly urged full discussion with the township and its residents about the specifics of the control of operations during the years prior to reclamation.

Jack Kleinhart apologized for past negative comments to Commissioner Madigan and said he wishes to work together. He believes within a period of time, people will choose to go against the baiting and feeding law which currently bans feeding and baiting in the Lower Peninsula. There is a petition in progress to override the baiting ban and he does not believe the ban is justified. He believes history will tell if the ban is the right thing to do or not.

Erin McDonough, MUCC, noted that Michigan Out-of-Doors were filming the meeting and doing a live feed. This will likely be common practice at future NRC meetings.

Ms. McDonough said it was her first NRC meeting commenting as Executive Director of MUCC. She said sportsmen and sportswomen have expressed concerns regarding the creation of the DNRE, specifically the utilization of restricted funds and assuring those funds are utilized for their intended purpose. She asked for fund transparency. She also stressed that quality hunting is key in recruitment and retention.

Chairman Charters said the NRC will continue to be transparent.

Amy Spray, MUCC, said they believe that some level of fees must be charged to applicants for their participation in the goose roundup program. The primary beneficiaries in the goose roundup process are the commercial and residential association properties, and they have never paid their fair share of the costs. Many geese are migratory and are protected by Federal migratory regulations and she believes it is important for the applicant to have a good understanding of the Department's costs to manage the program as well as the costs to the contractors. She said that good management should include paying up-front for the services, as the application process still incurs costs to the DNR. She did not opine on who should pay the fees (applicant vs. contractor).

Chauncey Moran commented on a proposal for road development in northern Marquette County – Woodland Road or also known as South Haul Road. The primary purpose intended for this road is to haul Aggregate from proposed mining areas in northern Marquette County as well as service vehicles use by employees, contractors and suppliers to the proposed mining area. He reviewed his concerns with this proposal and recommended a thorough review of the impacts of this road being constructed.

Dale Shelbrown commented on his concerns of Michigan deer hunters in Zone 2, specifically Bourret Township in Gladwin County. He believes this past deer hunting season was the worst in 35 years and believes DNR seasons and bag limits allow for the harvest of too many bucks prior to the rut. He proposed the following seasons:
• Youth Hunt: Last weekend in September (Firearm-Age 13 only, Archery-Ages 11-12)
• Archery Season: October 1-November 7; December 1-January 1 (1 buck, antlerless by permit only)
• Firearm Season: November 15-November 30
• Muzzleloading: December 7-December 14 (1 buck, antlerless by permit only)

Mr. Sheltrown said it makes no sense for firearm hunters applying for and requirements to purchase antlerless permits while archery hunters receive them automatically free when they purchase their license.

He also noted that the ban on baiting and feeding has caused an increased winter kill and pits neighbor against neighbor. He recommended baiting should be allowed to start September 25.

Chairman Charters noted that discussions will ensue on these issues.

PARTNERS IN CONSERVATION AWARDS PRESENTATION

Director Humphries presented the Partners in Conservation Award to the members of the Citizens Committee for Michigan State Parks (CCMSP). The CCMSP was established in October, 2004 under Public Act 392 of 2004, and has met regularly since early 2005. The CCMSP, with great dedication and commitment, has addressed various issues facing our treasured state parks and recreation system and has assisted the DNR in achieving the following, significant accomplishments:

• Provided a voice for key parks and recreation citizens and stakeholders;
• Reviewed and recommended to the Director adoption of the DNR Parks and Recreation Division’s “Sustaining 90 Years of Excellence – 2009-2019 Strategic Plan” for Michigan state parks and recreation areas;
• Reviewed and endorsed thirteen (13) state park and recreation area General Management Plans;
• Analyzed and recommended to the Director a market-based approach to fee adjustments for state park camping;
• Reviewed and supported the new Urban Outreach program to get youth involved in the outdoors and into the state parks; and
• Supported and participated in the statewide celebration of the 90th Anniversary of the Michigan State Parks system in July 2009.

The most notable accomplishment of the Citizens Committee for Michigan State Parks is the development and recommendation of a long-term sustainable funding plan, known as the “Recreation Passport,” to address critical needs for Michigan state parks and recreation areas, state forest recreation and local parks.

The CCMSP has served a crucial role in the past five years, in assisting and supporting the DNR parks and recreation system by maintaining its operation in very challenging times. Director Humphries thanked members of the CCMSP for their personal investment and significant partnership with the DNR over the past five years and presented each of the members with a white pine plaque. The plaque expressed appreciation for their dedication and advocacy to enhance and sustain the DNR’s parks
and recreation system for current and future generations. Following are the members and recipients of the plaques:

- **Murdock Jemerson**, Chair of this Committee and Director of the Lansing Parks and Recreation Department;
- **Tom Ferguson**, Vice Chair, and Executive Director of Sunrise Side Tourism Association;
- **MSU Associate Professor Dr. Charles Nelson**, Chair, CCMSP, Finance Subcommittee;
- **Erin McDonough**, Executive Director of the Michigan United Conservation Clubs, on behalf of the late Sam Washington;
- **James Bradley**, President of the Friends of the Porcupine Mountains Wilderness State Park organization;
- **Betsy Clark**, DNR retiree and huge state park supporter;
- **Reverend Hurley Coleman, Jr.**, Natural Resources Commissioner and Pastor of The Greater Coleman Temple in Saginaw;
- **Mike Foote**, President of the Michigan Horse Council’s Executive Board of Directors;
- **Christopher Graham**, President of the Michigan Environmental Council;
- **Jim Hendricks**, Executive Director of the Sault Ste. Marie Economic Development Corporation;
- **Robert Hoffmeyer**, Member of the Michigan Field Trial Dog Association;
- **Kathy Lewand**, Chairman of the Mackinac Island Community Foundation;
- **Michael McDonald**, former DNR employee and a member of the Ingham County Parks and Recreation Commission and Michigan Recreation and Park Association;
- **Mary Pitcher**, former Benzie County Commissioner and Coordinator for the Alliance for Economic Success;
- **Bill Rose**, Executive Director of the Kalamazoo Nature Center;
- **Todd Scott**, Detroit Trails Coordinator for the Michigan Trails and Greenways Alliance;
- **Marne Smiley**, Executive Director of the Michigan Mountain Biking Association;
- **Mary Brown**, Ex-Officio Member and Natural Resources Commissioner;
- **Sandra Clark**, History, Arts and Libraries and DNR;
- **Duncan Wyeth**, Executive Director of the Commission on Disability Concerns, Department of Energy, Labor and Economic Growth.

**Mr. Jemerson** thanked the CCMSP members, Parks and Recreation Division staff and others for their hard work and for a good job done. He hopes the CCMSP can continue their work once the Passport Bill succeeds, and he stressed the need to educate the public.

**Kirk Melhaff, Gooseworks**, said he is not opposed to the fees, but believes some landowners may not participate. He supports lower site and contractor fees as proposed in Option 4. If not Option 4, then he would support Option 2 which is no landowner/site fee and contractor fee as proposed. He urged the DNR to keep the Waterford pens open or offer them to the contractors for lease. **Commissioner Madigan** believes collectors have to collect a fee, but said he struggles with the fees issue. He does realize that the DNR needs revenue for this program, however, and that is what is
driving the fees issue. Mr. Melhaff said he does not believe that landowners would balk at paying a fee and that $100 to $200 is reasonable for permit fees if the holding pens remain open. If the pens were not kept open, fees should be lowered. He said most of his clients are commercial.

Chris Compton, Goose Busters, expressed concern with the proposed 8:00 p.m. delivery deadline for geese. He said initially, he may lose 15 to 30 percent of his business, but believes that business will return in time. He noted that a previous comment that there was a 25 goose collection minimum is not accurate, and that holding pens were necessary for goose collection in southeast Michigan. Commissioner Madigan asked how many of Mr. Compton’s clients were commercial? He responded that 40 percent were commercial and 60 percent were private. Commissioner Madigan asked what Mr. Compton believed was a reasonable fee for a site permit? Mr. Compton replied $100 would be reasonable.

Mark Melchoir, Wildlife Control Training Club, recommended the Commissioners participate in a goose roundup process and visit the holding pens. He would support $200 to $250 for permit fees and suggested that all contractors are charged an equal fee.

Tim Cosper thanked the NRC for establishing the current crossbow regulations. He has no concern with bear guides being regulated, but requested that the designated amount of allowable bait be for each hunter versus each guide.

* * *

The NRC Public Appearances portion of the meeting adjourned at 6:35 p.m. and the Regular Meeting of the NRC convened immediately thereafter.

* * *

APPROVAL OF MINUTES – DECEMBER 3, 2009 NATURAL RESOURCES COMMISSION MEETING

Commissioner Nichols made a motion, supported by Commissioner Coleman, for approval. Motion unanimously carried.

RESIDENT CANADA GOOSE MANAGEMENT, WILDLIFE CONSERVATION ORDER AMENDMENT NO. 1 OF 2010

Commissioner Madigan made a motion, supported by Commissioner Nichols, for approval.
Commissioner Madigan made a motion, supported by Commissioner Nichols, to amend Wildlife Conservation Order Amendment No. 1 of 2010, as proposed, as follows: Commercial property owner fees: $200; and single family owner fees: $100. Discussion: Commissioner Wheatlake said he would support a $300 contractor fee rather than the $500 as proposed. Commissioner Madigan said he has a problem with the proposed fees structure. However, with the current budget problems, the fees are necessary. Motion carried 4-2. Voting Yes: Commissioners Brown, Madigan, Nichols and Richardson. Voting No: Commissioners Coleman and Wheatlake.

The motion to approve Wildlife Conservation Order Amendment No. 1 of 2010, as amended, carried 4-2. Voting Yes: Commissioners Brown, Madigan, Nichols and Richardson. Voting No: Commissioners Coleman and Wheatlake.

TRACKING LEGALLY SHOT GAME ANIMALS, WILDLIFE CONSERVATION ORDER AMENDMENT NO. 2 OF 2010, WAS WITHDRAWN.

HUNT DRAWING SUCCESS NOTIFICATIONS AND TURKEY LICENSE, WILDLIFE CONSERVATION ORDER AMENDMENT NO. 3 OF 2010

Commissioner Madigan made a motion, supported by Commissioner Wheatlake, for approval. Motion unanimously carried.

GIFT OF LAND-STATE FOREST TRAIL, Ionia to Lowell Railroad Corridor Phase II – Ionia and Kent Counties, Land Transaction Case #20080192

Commissioner Brown made a motion, supported by Commissioner Nichols, for approval. Motion unanimously carried.

DIRECTOR’S ACTION ITEMS

Director Humphries stated her intent to approve all Director’s Action Items on the Agenda.

RESOLUTION IN SUPPORT OF REBECCA A. HUMPHRIES AS DIRECTOR OF THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

Commissioner Brown made a motion, supported by Commissioner Madigan, to adopt the following resolution:

Whereas, Rebecca A. Humphries has served extremely competently and with vision as Director of the Michigan Department of Natural Resources since 2004, and

Whereas, the Natural Resources Commission has had the opportunity to see Director Humphries’ leadership first hand and appreciates her service to the State of Michigan; and

Whereas, during her tenure, the Michigan Department of Natural Resources has become known as an outstanding national leader in management and protection of natural resources; and
Whereas, the Department of Natural Resources will no longer exist after January 17, 2010, as it will be reunited with the Department of Environmental Quality and become the Department of Natural Resources and Environment.

Therefore Be It Resolved, that the Natural Resources Commission recommended that Rebecca A. Humphries become the Director of the new Department of Natural Resources and Environment; and,

Further Be It Resolved, that this recommendation be communicated to Governor Jennifer Granholm, and also express the Natural Resources Commissioners’ recognition of changing roles and responsibilities as the Commissioners work cooperatively to implement the vision of the new Department of Natural Resources and Environment.

The NRC unanimously adopted this resolution and asked that this resolution be sent immediately to the Governor with sincerity.

NRC POLICY COMMITTEE – REPORTS

See Attached Policy Committee meeting minutes.

The Regular Meeting of the Natural Resources Commission adjourned at 7:03 p.m.
MINUTES

NRC Policy Committee on Wildlife and Fisheries

Lansing Center
333 E. Michigan Avenue
Lansing, MI

Meeting convened at 10:20 a.m.

Inland Consent Decree Update

Fisheries Division (Nick Popoff)

- 2009 Harvest (Walleye, Steelhead, and Salmon)
  - Walleye Lake Systems – 374 permits issued and 373 walleye harvested
  - Bays de Noc Walleye – 88 permits and 309 walleye harvested
  - Little Manistee Weir Salmon – 36 permits and 7 fish harvested
  - Protected Steelhead Streams – 33 permits and 5 fish harvested
  - Other – 72 Chinook, 12 bass, 9 pike, and 7 steelhead; Nets – 2 permits issued, 1 bullhead harvested
- Notification Protocol for certain fishing activities
  - On-line permitting system created
  - RAP room monitors server and notifies local LED Districts of the Tribal activity daily
  - Email is sent to FD staff on Friday and Monday with spreadsheet of updated permits
- Consultation and Collaboration
  - Walleye – working on population estimates and regression model
  - Research is underway for muskellunge in the Antrim Chain and walleye in the Inland Waterway
  - General communication has been excellent

Wildlife Division (Pat Lederle)

- Elk – authorize number of licenses equal to 10% of State license quota.
  - In the 2009 season: 1st hunt period (Sept.) – 4 any sex, 8 antlerless; 2nd hunt period (Oct.) – 4 any sex, 8 antlerless; 3rd hunt period (Dec.) – 6 any sex, 11 antlerless.
  - Hunting success – 14 antlerless sex tags issued and 7 harvested; 27 antlerless tags issued and 18 harvested.
- Bear – allocate 10% of available harvest/BMU. Tribes use similar techniques to calculate number of licenses and distribute harvest.
  - Gwinn BMU – 27 allocated, 2 harvested
  - Newberry BMU – 45 allocated, 7 harvested
  - Drummond – 1 allocated, 1 harvested
  - Red Oak – 32 allocated, 18 harvested
  - Gladwin – 2 allocated, 1 harvested
  - Baldwin – 3 allocated, 1 harvested
- Wildlife continues to collaborate with the Tribes and met last year in April, June and December to discuss work plans, harvest/effort reports and data and condition of resource reports.
2009 Michigan Elk Season Results (Brent Rudolph, Wildlife Division)

- Objective – harvest 300 elk, reduce population to 800-900 animals
  - 275 elk were taken during 3 Hunt Periods
  - Field staff recommended no January hunt
  - Next elk survey scheduled to begin January 11, 2010.
- Hunt Period 1 – Dates: September 1-4 and 11-15; Objective: to target outside primary elk range before the breeding season; quota was 110; harvest was 105 state hunters took 75 elk; 12 Tribal hunters took 4 elk.
- Hunt Period 2 – Dates: October 13 – 21; Objective: increase harvest of elk while still in agricultural areas; avoid hunter crowding during other periods; Quota was 110; Harvest 105 state hunters took 61 elk; 12 Tribal hunters took 4 elk.
- Hunt Period 3 – Dates: December 8 – 15; Objective: focus harvest in Units A, B, and D; maintain elk numbers in Units C and E; Quota was 160; Harvest was 153 state hunters took 121 elk; preliminary tribal harvest results of 9 elk.

Elk Management Plan Process (Brent Rudolph, Wildlife Division)

- Critical that updates are provided throughout the planning process to the DNR Director and Natural Resources Commission
- DNR also working government-to-government with Tribes from the 1836 Treaty area
- Issue scoping meetings will be occurring on January 13 in Gaylord and January 20 in Atlanta. These are public meetings where the DNR will gather public comments on elk.
- An Elk Management Advisory Team will be created to help identify important values for consideration in elk management and to make strategic recommendations that guide the management plan.
- Once a draft management plan is written, there will be a public review process as well.
- Timeline for the plan: Issue Scoping Meetings in January 2010; Elk Management Advisory Team meet in March and April 2010; Advisory Team report due in June 2010; Draft Management Plan available in summer 2010; Public Open Houses in fall 2010; and finalize plan in winter 2011.

Tracking Legally Shot Game Animals (Mike Bailey, Wildlife Division)

This item will be held another month for action. There have been additional changes that needed to be added or worked out such as adding artificial lights on a person; RAP to be the DNR contact point; requiring shotgun/unconcealed pistol is unloaded except at point of kill during non-hunting hours; and tracker carrying pistol/shotgun during all hours, not just outside legal hunting times.

Resident Canada Goose Management (Barbara Avers, Wildlife Division)

Although this item is up for action, more information was needed and additional options have been added for the fee structure.
- Barb explained Public Act 451 of 1994 related to the DNR’s authority to manage wildlife and issue permits.
The DNR direction of the Resident Canada Goose Program is:
- Reduce/reimburse hunter dollars spent on human/goose conflicts
- Decrease Wildlife Division time expenditures on human-goose conflicts
- Reduce number geese rounded up
- Maintain recreation opportunities
- Increase tolerance for geese
- Maintain relationship with partners
- Maintain management authority

DNR is investigating the possibility of a contractor running the Waterford holding pens.

Projected cost of 2010 program is $87,000 for hours and wages and $7,000 for contaminant testing.

Projected revenue with proposed fees (from last month's NRC meeting) is $50,000 with contractor and permit fees (about 53% of DNR costs).

Proposed fee structure is to cover some DNR costs, encourage tolerance of geese, encourage individuals to use other measures to address conflicts, and use DNR staff and resources efficiently.

4 fees options were presented (pros and cons were stated for each option):
1. Fees as proposed last month – fee for both contractor and landowner/site fee
2. No landowner/site fee but contractor fee as proposed
3. Contractors pay both contractor and site fees
4. Reduce landowner/site fees but keep contractor fees

Commissioner Madigan stated that he is not in favor of landowner fees. He believes they shouldn’t have to pay the cost of transporting geese that is going to benefit hunters. Commissioner Nichols felt that most individuals who have geese problems live in areas where geese prefer and should be dealing with it. Commissioner Richardson felt that this was not an issue for single families but golf courses and corporations.

QDMA and Wildlife Division MOA (Russ Mason, Wildlife Division)

Quality Deer Management Association and the DNR Wildlife Division are entering into a Memorandum of Agreement. The agreement states that when beneficial for both groups, they will work together on deer research and management. The agreement also states that the Division will follow the deer management plan once it is completed and approved. The DNR is also working on an agreement with United Sportsmen Alliance with very similar language. The DNR hopes to unite more deer groups and is open to discussing agreements with all groups that are interested.
The meeting convened at 12:30 p.m.

Present:
Commissioner J. R. Richardson, Chair
Commissioner Keith Charters
Commissioner Mary Brown
Commissioner Frank Wheatlake
Commissioner Hurley Coleman
Director Rebecca Humphries
Resource Management Deputy Mindy Koch
Stacy Welling, UP Field Deputy, DNR
Don Beagle
Ted Beals, Waterloo Twp.
Cara Boucher, DNR, FMFM
Lynne Boyd, DNR, FMFM
Kelly Carter, DNR, Wildlife
Rob Corbett, DNR, OLAF
Jerry Crandall, MIRS
Jim DeClerck, Saginaw Field & Stream Club
Mary Dettloff, DNR, Public Information Officer
Dave Freed, DNR, OLAF
Alex Han, Aggregate Industries
Pat Harlow, DNR, OLAF
Tom Hoane, DNR, FMFM
Bill Krepps, MUCC
Martin Landes, Aggregate Industries
Jon Mayes, DNR, OLAF
Ed Meadows, DNR, Land and Facilities
Gary Melow, Michigan Biomass
Dean Molnar, DNR, LED
Frank Mortl, Michigan Oil and Gas Assoc.
Alan Radner, Clear Lake Property Owner’s Assoc.
Doug Reeves, DNR, Wildlife
Mike Sadler, Waterloo Twp. Supervisor
Cindy Salmon, DNR, OLAF
Merle Shepard, SCI
Kelley Smith, DNR, Fisheries
Amy Spray, MUCC
Bill Sterrett, DNR, FMFM
Ken Stock, DNR, OLAF
Rodney Stokes, Chief of Staff, DNR
Tom Wellman, DNR, FMFM
Paul Yauk, DNR, Parks and Recreation
Chris Zona, DTE Gas Storage

Chairman Richardson called the meeting to order at 12:30 p.m.
1. **Potash Lease and Nonmetallic Procedures**

**Mindy Koch** introduced **Tom Wellman and Tom Hoane, Forest, Mineral and Fire Management Division**, for this presentation.

Tom discussed the review process. Potash is potassium rich salt used in manufacture of fertilizers and glass. The DNR received successful bids in 2009 for leases for potash development on 31,362 acres. This resulted in $442,090 for the Michigan Natural Resources Trust Fund (MNRTF). The existing non-metallic salt lease that the DNR was using was out of date and did not provide for potash production.

The procedures were 20 years old, so a group of interested parties was brought together to update the review process and leasing procedures. This was needed to comply with the Forest Certification requirements. The draft lease language was submitted to the Attorney General's office for review in November.

The four main potash recommendations were to establish a $300 fee per 640 acre lease nomination; identify potash as a mine able mineral; establish a five percent royalty rate for potash; and require a separate surface use lease prior to establishing a production facility.

Those involved in developing these recommendations were representatives of aggregate and salt mining industries, county road commissions, the conservation community, and DNR staff.

2. **Gas Storage Lease and Procedures**

**Tom Wellman, Forest, Mineral and Fire Management Division**, continued discussion on the underground storage of natural gas. Michigan leads the nation in underground storage of natural gas with a trillion cubic feet of storage capacity. This takes place by injection into depleted oil and gas fields, and takes place during the warmer months when the demand is low.

Currently, the DNR has 32,940 acres of state land currently under lease through 76 leases. In the last couple years there has been increased interest for this by a number of different parties which caused us to look procedures and fees.

Gas storage is different than other mineral programs. It does not have a royalty rate. The rental rate currently is $5 per acre, and the revenue that accrues from that does not go to the MNRTF, it goes to the General Fund because it is not a mineral product. It is regarded as a right of the surface owner.

Leasing was on hold in 2009 pending review.

The DNR has updated the procedures to have the same review as other mineral programs. It also complies with forest certification. It was submitted to the AG’s office for review in November.
The recommendations are to simplify application fee to $2,000 per field and $2.00 per acre; it excludes oil and gas fields already involved in secondary recovery operations from underground natural gas storage; and set a two-year time limit for applications without submission of a detailed development plan.

We also recommended an increase in the base rental rate from $5.00 to $7.50 per acre (this was based on what the federal government and other states charge for natural gas storage); increase the frequency of adjusting the base rental rate from seven years to every five years. We also recommend requiring a separate surface use lease to establish a production facility.

Commissioner Wheatlake and Commissioner Charters asked if the industry is in agreement with this rental rate. Mr. Wellman confirmed that those involved with developing these recommendations were reps from gas storage and oil and gas industries, the conservation community, Department of Labor and Economic Growth, the DEQ, and the DNR. He said the field size is the size of the existing reservoir.

Mr. Wellman said the DNR manages resources to the benefit of the citizens. Commissioner Coleman said his goal is to manage this resource for Michigan’s public in order to lower their gas costs.

Mindy Koch noted that gas storage is an opportunity that Michigan has that most other states don’t have, because of its geological formations. There are direct stakeholders involved. These two issues are the agenda as Director’s information items, so they will be back before action is taken. Chris Zona from DTE Gas Storage said Michigan has been blessed with our geo formations that are perfect for gas storage. Developing these facilities will bring jobs to Michigan.

3. Phase 3 Land Consolidation Update

Mindy Koch introduced Dave Freed, Office of Land and Facilities, and noted that the land consolidation process began in 2003 when the NRC asked the Department to review all its lands. Staff was asked how much land the DNR currently owned that should be in other types of ownership. Staff was not able to answer that question. The review process ended in 2008, where staff determined all the parcels that fell outside our management boundaries, and we are currently in the middle of Phase 3, which is to dispose of those surplus lands.

The DNR cleaned up land records tremendously through this review. The first offer went to local units of government and alternate conservation owners (ACO) to see if they would like to maintain the land in its natural state. If not, staff identified the marketable properties and offered them for exchange, auction, or direct sale. Most of the properties involved in this process were attained through tax reversion.

Class 2 properties are to sell or exchange with restrictions. Class 3 properties are to sell or exchange with no restrictions.
Surplus property in 50 of the 83 Michigan counties has been offered for sale or exchange to local units of governments or ACOs. There were 35 transactions with 21 governmental units, and 11 transactions with six alternate conservation organizations. The DNR contracts for appraisals to establish minimum bids. Other restrictions, such as minerals or timber, are considered in the appraisal.

Properties are listed for auction on the DNR website at: [www.mi.gov/landforsale](http://www.mi.gov/landforsale)

Adjacent land owners, as many parcels are landlocked and only adjacent owners would have legal access.

The web-based Land Sales System was developed to be user friendly and searchable; An automatic web update from DNR’s Land Ownership Tracking System is available with the ability to have instant posting/removal of auctions. It contains a professional, standard real estate format and the ability to access maps and driving directions for every parcel.

**Status of Phase 3:** The DNR has held auctions for all the properties in 41 of the 83 counties in Michigan. There have been 176 parcels sold totaling 2,070 acres; generating over $5.4 million in revenue. In land exchanges, the DNR has disposed of 1,103 acres and acquired 3,024 acres.

A spring auction is scheduled for Alcona, Antrim, Cheboygan, Crawford, Kalkaska, Montmorency, Oscoda, Otsego, and Presque Isle Counties; and a fall auction will include Delta, Mackinac, Menominee, and Schoolcraft Counties.

In 2010 staff plans to identify saleable properties, enhance the website, boost auction marketing, remarket unsold properties, document what has been learned, and continue process improvement.

**Committee Chairman Richardson** asked how the order of counties is chosen. **Pat Harlow, Office of Land and Facilities,** replied by marketability, and by offering counties with numerous hunting properties in the fall and counties with recreation area properties in the spring.

**Director Humphries** stated that every new legislator gets a packet of information.

4. **Land Appraisal Review**

**Ken Stock, appraiser for the Office of Land and Facilities,** said his primary function is to review appraisals. In the fall of 2009, the DNR sponsored a meeting with individuals from 20 other states which included the topic “Land Conservation in Uncertain Markets.” A full day was devoted to this topic. It is a challenge to find recent comparable sales. Recreational property is not affected in the same way as housing in the current market. The DNR buys specialized properties that tend to be in holdings to our state land.
The appraisal provides a reasonable indicator of value. The DNR contracts with appraisers who are experts in the area like rail corridors or bottomlands. The DNR also has an internal appraisal committee that reviews each case. They are licensed appraisers and attend yearly training. The appraisal provides objective guidance that the DNR uses, but staff also applies its own expertise and do not rely solely on appraisals. Staff also tests the market by going to auctions, attends tax sales and sell land to determine what sellers and buyers are thinking.

A challenge is that there is public discussion of land priorities so this tends to inflate the sellers expectations in price.

**Commissioner Wheatlake** said in 2008, a significant decrease in valuations occurred. It is imperative to evaluate the value of everything in today’s market, not what was paid five years ago.

**Chairman Richardson** asked if there was a way to grade on how much the DNR is saving. **Ken Stock** said he keeps all appraisals for the past five years and he always reviews these. The trophy properties are not decreasing in value – people are hanging on to them for the high dollar.

5. **Aggregate Industries Land Gift/Lease**

**Mindy Koch** introduced **Paul Yauk, Parks and Recreation Division**

Mindy said this is a great news story.

This case, in the Waterloo Recreation Area, was initiated in 2005. Parks worked closely with FMFM and the Real Estate Section on this. It includes a 324 acre gift; it will be reclaimed and restored to DNR specifications, and the DNR will also receive $7 to $9 million in revenue to the trust fund from the 10-year leased area.

This facility is 12 miles long. The Waterloo-Pinckney Recreation Area is the largest public hunting area in southern Michigan containing 20,000 acres. Support has been given from the horsemen’s group, the Legacy Land Conservancy of Jackson and Washtenaw Counties, and the State Park citizen’s committee, for this gift/lease. A presentation will be given at the Waterloo Township meeting on January 19, 2010.

Key components of the lease include market rate; primary term of 10 years, lease will be considered for extension by negotiation, and the mining royalties will go into the MNRTF.

6. **Timber Sales Minimum Bid Update**

**Cara Boucher, Forest, Mineral and Fire Management Division**, said the Commission, as well as the timber industry, challenged the DNR to look at issues and come up with something all could live with. An eleven member work group was developed including loggers, members of the forest industry, and department staff. This group was facilitated by Georgia Peterson.
Healthy, sustainable and productive forests are some of the shared values and objectives and collectively all stakeholders are dependent on a viable timber industry. One of the objectives was to have a transparent process that complies with the DNR’s legal obligations.

Bidders and the State need certain information such as species, volume, acres, quality map, access, roads, and size. The state also needs to account for pest/disease, recreation sites, and seasonal restrictions.

There are currently up to nine price adjustment factors. The average reduction is minus 25 percent of the base price.

It has been recommended that three to four factors are utilized that will provide a plus or minus 30-35 percent reduction. The factors to consider are access/roads; sale size/volume/type of timber; type of harvest; and sale conditions. The work group is going to incorporate these factors into a draft that will be discussed at a future meeting to be held in February.

Bid/no bid species on timber sales was also discussed. Currently the system only uses the value, and all species are bid that are greater than 10 percent of the sale value. The recommendation is to use value and volume. The recommendation would bid 80 percent of the sale value and bid 75 percent of the sale volume, and any species/product that is greater than 10 percent of the sale volume. The industry is looking at streamlining and/or combining species/products.

Chairman Richardson asked if the industry is happy with these recommendations and Lynne Boyd responded yes. She noted the meeting with the groups was very productive.

Chairman Richardson adjourned the meeting at 2:00 p.m.
Minutes

NRC Policy Committee on Technology, Information, Marketing and Education

Lansing Center
333 E. Michigan Avenue
Lansing, MI

Meeting convened at 2:00 p.m.

Commissioners Present: Mary Brown, Keith Charters, Chair, Hurley Coleman, J.R. Richardson, and Tim Nichols

Presentations:

Private Funds and How They Support DNR Priorities

Amy Henderson, Office of Financial Services, provided a brief overview of private contributions and how they are used to support DNR priorities. Private contributions fluctuate greatly from year to year; in 2006 and 2007 DNR received almost $4.5 million due to contributions from the Kellogg Foundation. The DNR receives contributions in several ways and at most locations across the State where we come into contact with its customers.

The majority of contributions come in through the field locations or by mail to the DNR cashier’s office in Lansing; approximately $2,000 in contributions were received through the E-Store in the past couple of years (most of which has been received recently since a “pick list” drop down was added allowing selection of a specific park to contribute; contributions received through the Retail Sales System are for the Sportsmen’s Against Hunger program; and those received through the Secretary of State are for the Nongame Fish and Wildlife Fund.

Amy mentioned that contributions can be designated for specific purposes such as, programs or locations; or they can be made for more general purpose, like fish and wildlife, parks and recreation, or the department in general. Contributions are acknowledge by the DNR (unless anonymous) and are deposited into restricted accounts which have the authority to carry over from year to year until spent, and do not lapse to the General Fund.

Contributions have been received from several types of donors including foundations, organizations, companies, groups of customers, and individuals such as: The Kellogg Foundation (Access to Recreation); Friends of the White Pine Trail/Meijer Foundation; Friends of the Gaylord to Mackinaw Trail; DTE Energy; E. Silkstone; and memorial contributions.
Partnerships: Making a Difference

Mary Emmons discussed how the DNR invests little and achieves big results and how partnerships can make the program accessible and achievable.

Partnerships have funded several areas with National Archery in the Schools Program (NASP), salary and wages, school equipment, tournament awards, team travel stipends, the archery academy, and partners also volunteer time. Not only do the partnerships fund a full time coordinator (only three other states have full-time coordinators; Arizona, Nevada, and Arkansas), but have also outfitted more than 100 schools with equipment, tournament trophies and plaques provided by National Wild Turkey Federation (NWTF), enabled teams to travel to national and world tournaments, appointed and trained seven regional archery coordinators, and unlimited hours of volunteer’s time donated.

The DNR has spent less than $200,000 of the total program cost over the last five year period and there are currently nearly 100 partners. The contributions made prior to 2006 are not accounted for but were all partner dollars. Currently, we have 360 schools in 63 counties with over 100,000 students participating. Michigan ranked second in the world for this program and in 2009. Michigan had a national and world champion winner.

Range development is another partnership. The John and Marnie Demmer Shooting Sports, Education and Training Center on the campus of Michigan State University is a partnership between DNR and MSU. Through the Natural Resources Trust Fund, the DNR was able to contribute $500,000 toward the shooting and training center.

With the Bob and Becky Humphries Archery Park, Michigan was the first state to build an outdoor archery park. The Archery Park was funded solely by the Archery Trade Association (ATA) through a $500,000 donation. The Archery Park is designed as a destination for family attendance.

Mary mentioned Explore Bowhunting – a new program to be launched in the spring of 2010 that is a partnership with ATA. This is an educational program designed to help instructors, program leaders and education teach students ages 11-17 the basic skills of bow hunting, and it is not a replacement for international bow hunter education program. It can be used for in-school and after school programs, recreation programs, outdoors education centers, and community program such as 4-H and scouts. Michigan has piloted the program in five locations.

The program has a workbook with 22 activities, DVD’s, power points and an audio CD that can either be taught from start to finish to teach the basics of bow hunting or be used as an activity guide to teach individual activities and concepts. An educational trunk is provided with program which includes; camouflage clothing, a range finder, scent eliminator and animal calls, Quality Deer Management Association (QDMA) Cyber Deer CD-ROM – shot placement, and Deer Ecology board game. There is also an Explore Bow Hunting trunk that includes equipment to give participants an idea of what is involved with bow hunting.

There is no cost to the DNR for the trunks and Mary is still trying to determine how they will be distributed. Mary shared a two minute video of the program.
Outdoor Recreation: Agency Industry Roundtable

Director Rebecca Humphries mentioned that some of the existing DNR partnerships grew out of interaction with individuals through participating with the Agency Industry Roundtable at the national level. At the national level the state and federal agencies meet with the industry representatives and trade organizations which meet on a quarterly basis and set up a series of sub-commission meetings. At these meetings they are looking for areas of shared interest; ways to retain outdoor participation; how to expand their markets; and how to share valuable information.

Director Humphries asked the NRC if they would support this type of a workgroup - focusing on outdoor recreation that would be compiled of agencies, stakeholders, and industry.

Commissioners present supported the work group and will brainstorm the list of agencies, industries, and stakeholders that Director Humphries will provide to them. Commissioners will add any additional industries, stakeholder, etc., that the workgroup should interact with.

Governor’s Environmental Justice Work Group Update

Pat Spitzley provided an update on the Governor’s Environmental Justice Work Group. Executive Directive 2007-23 required the Director of the Michigan Department for Environmental Quality to establish an environmental justice working group of state officials and members of the public to develop and implement a state environmental justice plan.

The Governor’s Executive order defines environmental justice as the fair non-discriminatory treatment and meaningful involvement of Michigan residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state.

The workgroup membership was represented by state departments (DNR, DEQ, MDOT, Civil Rights, and Community Health); local units of government; Saginaw Health Department; City of Detroit; Southeast Michigan Council of Governments; industries; Michigan Manufacturers Association, Detroit Chamber of Commerce, Dow Chemical, DTE Energy; the environmental community; DWE, Ecology Center, and Sierra Club.

Ms. Spitzley mentioned the goal of the state plan is to:

- Identify and address discriminatory public health or environmental effects of state laws, regulations, policies and activities;
- include measures to prevent discriminatory or negative public health or environmental effects;
- to provide policies and procedures for state departments to ensure that environmental justice principals are incorporated into departmental decision making and practices;
- include recommendations for other departments and agencies whose functions and responsibilities impact environmental justice;
recommend mechanisms for members of the public, communities, and groups to assert adverse or disproportionate social, economic, or environmental impacts upon a community and request responsive state action;

- ensure consistency with federal environmental justice programs and recommends mechanisms for monitoring and measuring the effects of implementing the plan;

- assure implementation in a manner that maximizes the promotion of environmental justice while minimizing or eliminating potential adverse or disproportionate social, economic, or environmental impacts.

Key components of the plan are public participation, integration into DEQ activities, disparate impact assessment, interdepartmental integration, and petition process.

The petition process was required for the development of a mechanism by which minority and low income communities assert that there are disparate impacts in their community and request a responsive state action. The process must be supported at the highest level of state government; more than the resources of a single department is needed for success; and everyone involved in the process must be clear about what the process can and cannot do. Since there is no specific format set, a letter stating concerns is sufficient.

The plan is out for public review and comment until March 2, 2010 or you may view the “draft” plan at www.michigan.gov/deq.

The meeting adjourned at 3:08 p.m.

Next meeting: March 4, 2010
AGENDA

1. Call to Order
2. Pledge of Allegiance
3. Public Comments
4. Consent Agenda
   a. Minutes from December 15, 2009 Meeting
   b. Treasurer’s Report
   c. Building and Zoning
   d. Police Report
   e. SAESA
5. Correspondence
6. Old Business
   a. Zoning Ordinance
   b. Presentation from the DNR on Aggregate Industries gifted property and the Waterloo Recreation Area Management Plan
7. New Business
   a. Land Division: Don Hannewald
   b. Land Combination: Dault property
   c. Planning Commission
   d. Insurance bids for Waterloo Township
8. Any Other Business That Comes to the Board
9. Payment of Bills
10. Public Comments
11. Adjournment
Waterloo Township Board Meeting
11120 Musbach Road
Munith, MI 49259
19 January 2010

Call to order at 7:35 p.m.

Pledge

Present- Mike Sadler, Doug Lance, Bill Richardson, Janice Kitley, Arlene Walz
Residents: 19, Police Chief Cottrell, Officer Dan Walsh, Inspectors Charlie Barnum and
Coleman Deconick, Aggregate: 8, Chelsea Standard, The Sun Times, Jackson Citizen Patriot, 10
representatives from DNR.

Public Comment
Charles Stockton read a letter regarding Aggregate Industry issues.

Consent Agenda
Kitley motioned with support from Richardson to accept the consent agenda as presented.
Yes/all; No/none. Motion carried.

Correspondence

Old Business
Richardson stated that the Planning Commission approved the amended Zoning Ordinance at
their January 12, 2010 meeting and asked to have it sent to Region 2 Planning Commission in
Jackson for approval. The DNR gave their presentation regarding the plans for the gifted land
(324 acres) from Aggregate Industries as well as answering the many concerns from Waterloo
citizens to the best of their ability. Another letter voicing concern was read from Sharon Radka,
Clear Lake Property Owners Association. Sadler spoke of a committee to see what we have and
what we need to do. More discussion will take place at the February 16 meeting since there are
a lot more items to have in place. The Township will govern operations during lease terms. No
mining can take place until transaction is finalized with DNR. Short break from 8:55 to 9:00 to
allow residents to ask more questions of DNR representatives.

New Business
Sadler motioned with support from Lance to approve the following land splits for Don
Hannewald’s property on Huttenlocher Road: Parent parcel #: 000-05-20-100-004-01/New split
parcel # (Remainder) 000-05-20-100-004-03; Parent parcel #000-05-20-100-004-01; New split
parcel # (1) 000-05-20-100-004-04; Parent parcel #: 000-05-20-100-004-01/New split parcel #:
(G) 000-05-20-100-004-05; Parent parcel #: 000-05-20-100-004-01/New split parcel # (B) 000-
05-20-100-004-06. Roll call vote: Yes/Lance, Kitley, Sadler, Walz, Richardson. No/none.
Motion carried. Sadler motioned with support from Walz to approve the land
combinations/boundary adjustment of the Dault property. Parcel A#: 000-10-12-401-003-01;
Parcel B#: 000-10-12-426-001-06. New combined parcel # 000-10-12-401-003-04. Roll call
vote: Yes/Kitley, Sadler, Walz, Richardson, Lance. No/none. Motion carried. Sadler motioned
with support from Lance to approve the boundary adjustment of: Parcel A#: 000-10-12-401-
003-01; Parcel B#: 000-10-12-426-001-06; New combined parcel #: 000-10-12-401-003-03.
Roll call vote: Yes/Sadler, Walz, Richardson, Lance, Kitley. No/none. Motion carried. Richardson
gave a synopsis of the Planning Commission meeting held January 12. Ted Beals
showed a map of areas affected by the flood plain. The survey to residents will include cell
phone and high speed internet access questions.

Any Other Business That Comes Before the Board

Payment of Bills
Kitley motioned with support from Walz to approve payment of payroll in the amount of $17,790.49, post audit checks in the amount of $3,910.73 and checks for approval in the amount of $13,411.87. Roll call vote: Yes/Walz, Richardson, Lance, Kitley, Sadler. No/none. Motion carried.

**Public Comment**
Comments were heard from Ted Beals, Peggy Beals and Monica English regarding the DNR proposals and responsibilities.

**Adjournment**
Motion by Walz with support by Lance to adjourn at 10:10 p.m. Yes/all; No/none. Motion carried.
Submitted by: Janice Kitley, Waterloo Township Clerk
APPENDIX L
Dear Waterloo Recreation Area Neighbor:

The Michigan Department of Natural Resources and Environment, Recreation Division invites you to attend a public information meeting for neighbors of Aggregate Industries’ Clear Lake aggregate mine. The purpose of meeting is to provide information about the Aggregate Industries gift to the State of 324 acres of land and a pending 10 year mineral lease of 72 acres of state land to Aggregate Industries.

Following the meeting you are invited to join a walking tour of the state land to be leased to Aggregate Industries. Please dress appropriately for hiking and the weather.

The presentation will be made by Ray Fahlsing, Stewardship Program Manager and Paul Yauk, Lands Program Manager.

Feel free to send or forward this on to anyone interested. If you have any questions, please contact me via e-mail at yaukp@michigan.gov or by phone at 517-335-4824.

Sincerely,

Paul Yauk,
Lands Program Manager

cc: Ron Olson, DNRE
    Susan Lothrop, DNRE
    Gary Jones, DNRE
    Thomas Hoane, DNRE
    Rob Corbett, DNRE
    Ray Fahlsing, DNRE
    Mike Sadler, Waterloo Township Supervisor
DNR gives public tour of gravel pit

Wednesday, March 24, 2010
By Crystal Hayduk, Special Writer

The Michigan Department of Natural Resources and Environment hosted a meeting on March 13 at the Gerald Eddy Discovery Center in Chelsea to clarify information regarding the details of the land agreement between the state and Aggregate Industries.

As a result of receiving numerous questions, Ray Fahlsing, stewardship program manager, suggested inviting neighbors of the gravel pit's properties to an informational meeting and tour of the land that will be leased from the state.

"We had lots of spirited questions from the 49 people who attended the meeting," DNRE representative Paul Yauk said. "Ray reviewed the stewardship plans of the 324-acre gift to the state by Al and the 72.44-acre land that the state will lease back to Al, with the planting plan. He also showed pictures of other sites that had been restored through similar arrangements with the state."

Geologist Tom Hoane of Grand Rapids discussed the unique geological formation of the area, which is part of a band that ranges from northern Ohio to Lake Huron.

Ted Beals of the Waterloo Township Planning Commission agreed that the site is special from a geological perspective.

"That specific parcel sits right on the edge of two major watersheds in Michigan," he said. "To the east, the water flows into the Huron River system into Lake Erie, and to the north and west it flows into the Grand River system ending in Lake Michigan, and just a little south the water flows into the Raisin River."

Yauk said that the state is pleased to obtain the private land within the Waterloo Recreation Area, and that there will be no net loss of land available for recreational use as the gravel pit continues operations for the next 10 years or more.

As Al finishes mining specific portions of land, reclamation of the land will commence, according to Yauk. Under the new contract, both the state and the township would require performance bonds to ensure that funds to complete the reclamation will be available.

Residents' questions focused on the impact of gravel operations extending toward their Clear Lake properties. Other questions related to Clear Lake water levels, the effect on private well water quality, travel on Green Road, the removal of forested hills on the lease land, and the location of some trails that will be moved.

Representatives of the DNRE plan to research the answers to the questions and disseminate future information in writing.

No further meetings are planned; however, the DNRE will answer questions. Questions can be e-mailed to Paul Yauk at YAUUK@MICHIGAN.GOV or by calling 1-517-335-4824.

Following the meeting, 24 residents went with state representatives on a walking tour of the area. Yauk said that the elevations are relatively high in that area, and residents were concerned about loss of elevation. Yauk replied that although some hills will be removed, the highest elevations would be maintained.

Despite Yauk's description of what the area will look like following reclamation, Beals said that he thinks it will become more of a "contoured valley."

http://www.legacy.com/articles/2010/03/24/chelsea_standard/news/doc4baa5b7a1f2c00593192... 08/27/2010
Mike Sadler, township supervisor, believes the grade will become more pronounced, with a lower valley and the same elevation.

"From my understanding, they are not mining the peak," he said.

Crystal Hayduk is a freelance reporter for Heritage Newspapers.
Public Meeting to Review Plans to Increase Acreage at Waterloo Recreation Area is scheduled for Monday, Sept 27

The Department of Natural Resources and Environment (DNRE) will host a public meeting to provide information on a proposal to accept a gift of 324 acres of land to Waterloo Recreation Area, and enter into a ten year lease agreement to allow mining of sand and gravel on 72.44 acres in the recreation area in Jackson County.

Recreation Division and DNRE staff will present an overview of the plan to lease 72.44 acres of Waterloo Recreation Area to Aggregate Industries in exchange for 324 acres of land.

This meeting will allow the public to discuss the following:
- Vision for this area
- Site restoration and stewardship plan for the 324 acres (a former gravel pit)
- Required Federal 6(f)3 conversion process
- Project time frame
- Next steps in this review process

The meeting will be held on Monday, September 27, from 4 p.m. to 7 p.m. at the Gerald E. Eddy Discovery Center, 17030 Bush Road, near Chelsea, Michigan. If you are unable to attend, you may send your comments to Paul Yauk, Land Programs Manager, Recreation Division, P.O. Box 30257, Lansing, Michigan 48909 or by e-mail at yaukp@michigan.gov.

Waterloo State Recreation Area provides approximately 21,000 acres of public recreational property between the cities of Ann Arbor and Jackson. The area contains 16 lakes, two major campgrounds, a day use area at Big Portage Lake, and an extensive trail system for foot, bicycle, and equestrian use. The Recreation Area contains significant natural and cultural resources and is also open to fishing, hunting, trapping and bird watching.
For more information about this open house, the proposed process, or persons needing accommodations to attend this open house, contact Paul Yauk, DNRE Land Program Manager, at 517-335-4824 (TTY/TDD711 Michigan Relay Center for the hearing impaired) at least five business days before the open house.

Beginning Oct. 1, the $10 Recreation Passport replaces the state park sticker for access into all state parks, recreation areas and boat launches. To get the Recreation Passport, Michigan residents can check "YES" on their license plate renewal forms. The Recreation Passport also helps preserve forest campgrounds and trails, historic and cultural sites in state parks, and local parks.

Where can $10 take you? Visit www.michigan.gov/recreationpassport for more information.

"The Department of Natural Resources and Environment is committed to the conservation, protection, management, and accessible use and enjoyment of the state’s environment, natural resources, and related economic interests for current and future generations."

###
September 21, 2010

Mr. Mike Sadler
Waterloo Township Supervisor
P.O. Box 130
Munith, MI 49259

SUBJECT: Aggregate Industries Open House
September 27, 2010

Dear Mr. Sadler:

Thank you for your letter on the upcoming Public Open House and information meeting on the Aggregate Industries 324 acre gift proposal, and 10-year lease to mine sand and gravel at the Waterloo Recreation Area. Citizens who can not attend will have the opportunity send comments in writing or by e-mail to the Department.

The upcoming meeting on September 27, 2010 will be formatted as a three hour "Public Open House" from 4:00 p.m. to 7:00 p.m. The Department of Natural Resources and Environment (DNRE), Recreation Division, will have five tables set up with staff to address specific issues regarding this proposal. We believe this three hour format will allow residents to focus their specific questions to a staff person who can best address their concern. This time was set up later in the day to accommodate people after work or who have busy weekends planned.

Please note that on Tuesday, January 19, 2010, DNRE staff were in attendance at the 7:00 p.m. Waterloo Township meeting and gave a presentation on this proposal followed by a question and answer period, and again on Saturday, March 13, 2010, when the DNRE Recreation Division held a weekend public information meeting in the morning at the Gerald E. Eddy Discovery Center followed by an afternoon site tour. Fifty people took advantage of attending this meeting and stayed afterwards, and approximately twenty people walked the site.

It is our intention to keep Waterloo Township staff and citizens up to date as new information becomes available to us.

Sincerely,

Paul Yauk
Lands Program Manager
DNRE Recreation Division
P. O. Box 30257
Lansing, MI 48909
517-335-4824
yaukp@michigan.gov
GOAL OF THE MEETING: Provide the public with current information, and present an update on the Department of Natural Resources and Environment’s (DNRE) process of complying with the National Park Service conversion requirements, as they relate to a 324 acre gift of land, and a ten year lease to mine sand and gravel 72.44 acres of State-owned land and receive written public comment.

THANK YOU for attending this Public Open House. We encourage all written comments, and have provided comment cards and a suggestion box for all written comments. We will also have charts posted at each table for additional comments. Citizens who can not attend can send comments in writing or by e-mail to the Department. All written comments will be recorded and become part of the record.

MEETING FORMAT: This is a 3 hour “Public Open House”. The Department of Natural Resources and Environment will have five tables set up with DNRE staff to address specific issues regarding this proposal. This format will allow residents to direct specific issues to staff personnel who can best address their concerns.
INFORMATION TABLES:

1. Vision and Management Planning Process (Paul Curtis and Greg Byce)
   - Standard Management Zones
   - Waterloo Recreation Area Boundary Map

2. Federal Review and Conversion Process (Shamika Askew-Storay and Rob Corbett)
   - Conversion steps
   - FAQ on steps involved and status
   - Contact information for the process

3. Stewardship Plan (Ray Fahlsing)
   - PowerPoint presentation
   - General statement of desired future condition post-reclamation/restoration

4. Aggregate Industries (Alex Hall, Randi Willie, Leon Belden)
   - Project Phasing Drawing
   - Site photos

5. Project Time Frame (Paul Yauk)
   - Frequent Questions and Answers on this proposal
   - Approved NRC Memo
   - Other materials
WATERLOO PUBLIC OPEN HOUSE
Sign in sheet
September 27, 2010

Margaret Morza
Carol Brown
Bill Bullard
Cheryl Dyer
Ed Blissick
Allen Dyer
Dorothy Marlin
Cindy Kleinsmith
Robert Rohrkemper
Ted Beass
Chad Simpson
Laura Lemieux
Jim Cavanaugh
Connie Velin
Bill Richardson
Wendy Woodward
David Siegel
Ronald Beyer
Bruce Pindzia
Ruth & Dean Lidgard
Pat & Theresa Allen
Al & Shaun Rocker
Beverly Galaska
Lewis Kleinsmith
Gregg Matschke
Veryl Tisch
Monti Ponce
Amelia Beyer
Wendy Rutts
Lu Parsons
Lindsay Ross
Charity Steere
M. Saples
Dave Vermeylen
Denise Plansker
Patrick Merkel
Brad Malalak
Marian & Jim Sprague
Curtis & Ann Beck
Al Ricken
Dave Smiths
Bob Hearguarde
Alex Hall
Mike Erwin
Danny & Joey Masseyade
Pat Marlatt
Norman Galpesha
Bill & Wilma Bullard
Ed & Chris Vock
Dennis McGee
Judi Herb Smith
Louise Rohr kemper
Tom Gavarek
Tom Keene
Earl Platte
T. R. Mann
Nancy Siegel
GRADING PLAN

NOTES:
- SEASONALLY WET AREAS
- SHAPES, SIZE AND LOCATION WILL VARY.
- MAINTAIN ENTRANCE ROAD
- MAINTAIN OPEN PAVED PARK ACCESS
- MAINTAIN MAINTENANCE ROAD
- MAINTAIN ABANDONED GREEN ROAD
- MAINTAIN ROAD RELOCATION
- MAINTAIN Burious and Seasonally Wet Areas
- FUTURE MINING TRAIL
- FUTURE CLOSE-UP