

CHAPTER 7: SOURCES OF POLLUTION

E. MINED LANDS

SUMMARY

Mining has the potential to impact water quality as stream or lake sedimentation when soil enters waterbodies from land erosion. Fortunately, under the New York State Environmental Conservation Law, on site storage and/or runoff detention is required to minimize negative impacts from mining. There were 36 NYSDEC mined land and reclamation permits listed in the Seneca Lake watershed. Schuyler County had the most permitted mines with 21, Yates County had 13 permitted mines and Seneca County had 2 permitted mines. There were no permitted mines listed in the Ontario County portion of the watershed. Materials extracted are primarily sand and gravel with some mining for clay, glacial till and shale. By law, most of the active mines today are bonded, which will provide dollars for reclamation of the mining site once extraction of the mined material stops. Mines worked prior to 1975 that are abandoned are not subject to reclamation laws. It is these abandoned sites that typically still require reclamation and can

INTRODUCTION

Minerals in New York State, when extracted and processed, are valued at more than \$1 billion annually and provide tax revenue to local communities. Each of us uses fifty pounds of mineral products per day for building roads, sidewalks, houses and other buildings - almost ten tons per person per year. In the Seneca Lake watershed the permitted mines extract unconsolidated minerals, primarily sand and gravel.

Mined lands have the potential to impact water quality primarily by the increase in erosion and sedimentation that could run off the disturbed area to nearby tributaries or depressions. Sediment increases water turbidity, which can affect breeding grounds for natural fish hatcheries. In addition, uncontrolled erosion can run onto adjacent property. Depending on the mining method, mines can impact adjacent wells when they draw upon large quantities of water from the same aquifer. Under New York State Environmental Conservation Law, impoundments must be installed on site to store or detain surface runoff and reduce the potential for flooding, erosion, siltation and pollution of nearby streams or streambeds. The mining plan must be designed to minimize the impact on the quality of both surface and ground water. Furthermore, the New York State Department of Environmental Conservation (NYSDEC) mining permits contain general, and special conditions which are designed to restrict and control off-site erosion and sedimentation.

BACKGROUND-PERMITTED LAND MINES

NYSDEC maintains a mined land reclamation database of mining activities that are subject to state regulation. 1997 data indicate that the NYSDEC regulates more than 2,500 mines throughout New York State, affecting over 40,000 acres of land that need to be reclaimed. Mined land reclamation information for the Seneca Lake watershed was provided by the Region 8 Office of the NYSDEC; the information below contains the status of all permits for the 36 mines within the Seneca Lake watershed.

New York State legislation covering mined land reclamation permitting can be found in the Environmental Conservation Law, Article 23, Title 27, and Environmental Conservation Regulations, 6NYCRR Subsection D, Parts 420-426. Under these laws drainage is subject to NYSDEC standards for purity and quality. Rules and regulations are also explained for mining minerals from New York State lands.

A mined land and reclamation permit is required for any person who mines or proposes to mine more than 1,000 tons or 750 cubic yards of a mineral from a site, whichever is less, or mines or proposes to mine over 100 cubic yards of minerals from or adjacent to any body of water not subject to the jurisdiction of Article 15.¹ Applications for permits may be submitted for annual terms not to exceed five years. A mining permit application having five or more acres is classified as a major project and is subject to a municipal and public review period of thirty days.

Major changes to the mined land reclamation law were enacted in August of 1991. The new provisions of the law specify the role of local governments in reviewing or regulating mining activity. Local governments may enact and enforce laws of general applicability, except they cannot regulate mining and/or reclamation activities regulated by state statute.

Primarily, it is a town's responsibility to determine areas, or zones, where mining is permissible, and areas where it is not. If mining is permissible, the NYSDEC is responsible for reviewing and permitting the mine. Local governments may enact and enforce local zoning laws that determine permissible land uses in zoning districts. When mining is designated as a permissible land use in a zoning district, conditions placed on special/conditional use permits are limited to the following:

- Entrance to and exit from the mine on roads controlled by the local government.
- Identification and approval of haul roads controlled by the local government.
- Enforcement of reclamation requirements and special conditions listed on a DEC mining permit concerning setbacks, public thoroughfare right-of-way, natural or manmade barriers to restrict access, dust control, and hours of operation.
- Enacting or enforcing local laws or ordinances regulating mining or the reclamation of mines with stricter standards than the Mined Land Reclamation Law.

¹ Article 15 refers to the protection of water quality and habitat of designated trout spawning tributaries from mined lands under Environmental Conservation Law, Article 15, title 5, 1994.

Upon receipt of a complete application for a property not previously permitted, a notice must be sent by the NYSDEC to the chief administrative officer of the local government. The town or local government may make comments on the application with regard to: setbacks, barriers to restrict access, dust, hours of operation, and whether mining is prohibited at the site. The town has thirty days to review the application with recommendations accompanied by supporting documentation justifying any determinations. The NYSDEC must review the recommendations, and either incorporate those conditions or notify the local government as to why the conditions they specified will not be incorporated in the permit. It is also the responsibility of the NYSDEC to review each mine application and make a determination of potential environmental impact. For the purposes of environmental impacts, the NYSDEC classifies mines over ten acres as Type I Actions which require a more detailed environmental review. Smaller mines with potential impacts on surrounding sensitive lands (such as designated open space or Critical Environmental Areas) are also Type I Actions. Because of NYSDEC's technical capabilities, NYSDEC usually requests Lead Agency status if there is more than one agency involved in permitting or funding the project. Other proposals are generally classified as Unlisted Actions.

There are 36 NYSDEC mined land reclamation permits listed within the Seneca Lake watershed. There are no permitted mines in Ontario or Chemung counties within the watershed. Mines are primarily located in Yates and Schuyler Counties with two mines identified in Seneca County. The specific number of mined land reclamation permit listings, along with their respective sub-watershed, are listed in Table 7E.1.

Table 7E-1. NYSDEC Mined Land Reclamation Permits by County and Sub-Watershed and Direct Drainage

County	Sub-Watershed/DD	NYS DEC Permits
Seneca	Indian Creek Mill Creek	2
Schuyler	Catharine Creek Reading DD Hector Falls Creek Glen Eldridge Sawmill/Bullhorn Creek Valois DD	21
Yates	Benton DD Kashong Creek Keuka Lake Outlet Long Point DD Plum Point Creek Starkey DD Big Stream	13

The NYSDEC mines in the Seneca Lake Watershed are in varying stages of excavation. Of the 36 permits in the watershed, seven are inactive, fifteen are active permitted mines, and thirteen are reclaimed mines. Sand and gravel mines are the most common type of permitted mine in the watershed. Other types of permitted mines include shale, clay, glacial till, and salt. Each permitted mine in the Seneca Lake watershed is listed in Table 7E.2. through 7E.4 and is shown in Figure 7E.1. Table 7E.5. explains the category headings in these tables.

CONCLUSION

It is important to note that the mining in the Seneca Lake watershed is primarily sand and gravel. Although this form of mining creates a few surficial depressions, it also results in many pits in the hillside and even in the sides of deep gullies. Depending upon the proximity to the lake or tributary, erosion potential will vary.

Only in the last twenty years has the NYSDEC required permits for mining operations and reclamation. New York holds over \$60 million in financial security to make sure that mined land is reclaimed to a beneficial use. Reclamation bonds serve as a guarantee that funds will be available to reclaim affected land. Many gravel pits in the watersheds were worked and abandoned before the Mining Law was activated in 1975. The mines abandoned prior to 1975 are not subject to the Mining Law and the reclamation requirements. All other mines that have continued to operate, have been re-activated since 1975, or have been newly permitted, are subject to reclamation requirements. A reclamation bond cannot be canceled or released unless the Department authorizes its termination.

Table 7E.2. Mined Land Reclamation Permits by Sub-Watershed and DD for Yates County

#File	Facility	Owner	Address	Type	Cont	AFF	REC	BB	LOM	Recl
0229	Hansen Pit	City Hill Construction, Inc.	2199 RTE. 14	Industry	250	3	0	3	11	B
0609	Eskildsen Pit	SLC Consultants / Contractors	295 Mill Street	Industry	330	15	2	13	17	A
0205		Perry, David	4324 County RD#27	Industry	50	3	0	3	20	B
0560	Washburn Pit	Washburn, Stephen R.	5290 Pre-Emption	Industry	16	2	0	2	16	B
0200	Benton Pit	Town of Benton HWY Department	996 RTE 14A Benton Center	Town	70	15	0	15	18	B
0085		Town of Barrington	RD # 2	Town	0	0	0	0	0	
0084	Smith Pit	Smith, Peter	PO Box 156	Industry	23	17	0	17	23	B
0016		Morton Salt	110 N. Wacker Drive	Industry	0	50	50	0	0	
0535	NYS Electric & Gas	Mark L. Buzel	P.O. Box 5224	Industry	117	18	0	18	18	B
0425	SLC Contractors	L. Dale Bigham	295 Mill Street	Industry	24	8	0	8	24	B
0319	Hall & Stearns	Ronald Hall	P.O. Box 592	Industry	0	6	6	0	0	A
0361	RC Billings Inc	Vern Billings	320 E Washington Street	Industry	0	2	2	0	0	
0313	Chemung Contracting Corp.		P.O. Box 284	Industry	0	1	1	0	0	B

Table 7E.2. (continued.) Mined land reclamation permits by Sub-Watersheds and DD for Yates County

#File	Subwatershed	Commodity	Municipality	Status	Term	Init Date	PI Date	Exp Date	Bonded Amount
0229	Long Point	Sand and gravel	Milo	A	T	**/**/**	04/14/86	11/05/88	5000.00
0609	Long Point	Clay	Torrey	A	5	06/03/91	06/28/94	06/28/99	26000.00
0205	Starkey	Sand and gravel	Starkey	A	5	**/**/**	06/15/93	06/15/98	5000.00
0560	Starkey	Sand and Gravel	Starkey	A	3	**/**/**	04/01/93	04/01/96	4000.00
0200	Kashong Creek	Sand and Gravel	Milo	A	3	**/**/**	12/07/93	12/07/96	0
0085	Starkey	Sand and Gravel	Milo	I		**/**/**	**/**/**	**/**/**	0
0084	Big Stream	Sand and Gravel	Starkey	A	5	**/**/**	10/07/96	10/07/2001	34000.00
0016	Plum Point	Salt	Milo	R		**/**/**	**/**/**	**/**/**	0
0535	Keuka Lake Outlet	Clay	Torrey	A	5	**/**/**	01/30/95	01/30/2000	35000.00
0425	Long Point	Glacial Till	Torrey	A	5	**/**/**	06/27/97	06/27/2002	16000.00
0319	Benton	Sand and Gravel	Benton	R	A	**/**/**	**/**/**	04/23/82	0
0361	Big Stream	Glacial Till	Starkey	R	A	**/**/**	**/**/**	05/25/84	0
0313	Keuka Lake Outlet	Glacial Till	Torrey	R	A	**/**/**	**/**/**	01/21/82	0

Table 7E.3. Mined land reclamation permits by Sub-watersheds and DD for Seneca County

#File	Facility	Owner	Address	Type	-----Acres-----					
					Cont	AFF	REC	BB	LOM	Recl
0303	Town of Lodi	Tracey Everett	P.O. Box 185	Town	0	0	0	0	0	-
0682	Stan Payne Const.	Mike Reilly	415 Beach Road	Industry	2	2	2	0	2	B

Table 7E-3. (continued.) Mined land reclamation permits by subwatersheds for Seneca County

#File	Subwatershed	Commodity	Municipality	Status	Term	Init Date	PI Date	Exp Date	Bonded Amount
0303	Mill Creek	Shale	Lodi	I	T	**/**/**	**/**/**	07/16/83	0
0682	Indian Creek	Shale	Varick	R	1	05/19/94	05/19/94	05/19/95	4000.00

Table 7E.4. Mined land reclamation permits by subwatersheds for Schuylers County

#File	Facility	Owner	Address	Type	Acres					
					Cont	AFF	REC	BB	LOM	Recl
0610	Scgamel Mine	Scgamel Bros. Contractors	P.O. Box 81	Industry	12	3	0	3	3	B
0053	Wickham Pit	Annella Widkham	2300 Texas Hollow Rd	Industry	190	16	0	16	21	B
0195	Barber Pit	Town of Hector	5097 NYS Route 227	Town	5	5	0	5	5	B
0222	Burdett Pit GP4	B.R. Dewitt, Inc.	6895 ellicott Street	Industry	113	98	0	98	102	A
0224	No Name	Schuylers Co. Hwy.	S. Decatur Street	County	11	8	8	0	11	A
0244	Padua Pit	R.L. Perry Const. Co.	2419 Jennings Road	Industry	8	8	0	8	8	B
0342	No Name	Silverline Const. Inc.	Newton Road	Industry	10	10	0	10	10	A
0446	States Pit	A. L. Blades & Sons, Inc.	P.O. Box 190	Industry	0	2	2	0	0	-
0345	No Name	R. C. Billings, Inc.	320 E. Washington Street	Industry	0	1	1	0	0	B
0392	No Name	Nickanthony Construct. Corp.	P.O. Box 1045	Industry	0	2	2	0	0	-
0447	Hazlitt Pit	Town of Hector	5097 NYS route 227	Town	3	3	0	3	3	B
0474	No Name	Schuylers Co. Landfill	303 N. Franklin Street	County	0	20	20	0	0	-
0534	Blanchard Pit	Schamel Bros. Contrac., Inc.	P.O. Box 81	Industry	144	0	0	0	8	B
0223	No Name	Schuylers Co. Hwy	Box 108	County	0	14	14	0	0	-
0225	No Name	Town of Dix	None Listed	Town	0	6	6	0	0	-
0245	No Name	Dalrymple Gravel & Const.	1209 S. Broadway	Industry	2	2	2	0	2	-
0040	No Name	D&T Fragzese Brothers Inc.	Box 111	Industry	0	0	0	0	0	-
0134	No Name	Schuylers Co. Hwy	Box 108	County	0	0	0	0	0	0
0136	No Name	Schuylers Co. Hwy	Box 108	County	0	0	0	0	0	0
0167	No Name	Town of Reading	Rd 1	Town	0	0	0	0	0	0
0478	No Name	Dale A. Reynolds Excavation	Box 47	Industry	0	0	0	0	0	0

Table 7E.4. (continued) Mined Land Reclamation Permits by Subwatersheds for Schuylers County

#File	Subwatershed	Commodity	Municipality	Status	Term	Init Date	PI Date	Exp Date	Bonded Amount
0610	Sawmill/Bullhorn	Sand and Gravel	Hector	A	3	03/31/1992	03/31/1992	03-31/1995	5000.00
0053	Catharine Creek	Sand and Gravel	Catharine	A	5	**/**/**	10/07/1996	10/07/2001	32000.00
0195	Hector Falls Creek	Sand and Gravel	Hector	A	5	**/**/**	05/19/1994	05/19/1999	0
0222	Hector Falls Creek	Sand and Gravel	Hector	A	5	**/**/**	07/23/1996	07/23/2001	19600.00
0224	Catharine Creek	Sand and Gravel	Dix	R	T	**/**/**	09/29/1989	09/29/1992	16000.00
0244	Catharine Creek	Sand and Gravel	Dix	A	3	**/**/**	06/29/1994	06/29/1997	0
0342	Glen Eldridge	Sand and Gravel	Hector	A	T	**/**/**	07/28/1988	05/06/1991	20000.00
0446	Catharine Creek	Sand and Gravel	Catharine	R	A	**/**/**	**/**/**	04/02/1987	0
0345	Reading	Shale	Reading	R	A	**/**/**	**/**/**	05/06/1983	0
0392	Catharine Creek	Glacial Till	Dix	R	A	**/**/**	**/**/**	04/27/1985	0
0447	Valois	Sand and Gravel	Hector	A	3	03/23/1989	04/23/1992	03/24/1995	0
0474	Reading	Clay	Reading	R	A	**/**/**	**/**/**	10/16/1987	0
0534	Catharine Creek	Sand and Gravel	Dix	R	T	04/22/1991	04/22/1991	03/25/1994	8000.00
0223	Catharine Creek	Sand and Gravel	Dix	R	A	**/**/**	**/**/**	**/**/**	0
0225	Catharine Creek	Sand and Gravel	Dix	R	-	**/**/**	**/**/**	**/**/**	0
0245	Catharine Creek	Sand and Gravel	Orange	R	-	**/**/**	**/**/**	**/**/**	0
0134	Catharine Creek	Sand and Gravel	Dix	I	-	**/**/**	**/**/**	**/**/**	0
0136	Valois	Sand and Gravel	Hector	I	-	**/**/**	**/**/**	**/**/**	0
0167	Reading	Sand and Gravel	Reading	I	-	**/**/**	**/**/**	**/**/**	0
0478	Catharine Creek	Sand and Gravel	Catharine	I	-	**/**/**	**/**/**	**/**/**	0

04 - BASALT	26 - PEAT
05 - CEMENT	29 - SALT
06 - CLAY	30 - SAND AND GRAVEL
09 - DIMENSION STONE	31 - SANDSTONE
10 - DOLOSTONE	32 - SHALE
11 - EMERY	35 - STONE
12 - FLAG STONE	37 - TALC
13 - GARNET	38 - TRAP ROCK
15 - GRANITE	40 - WOLLASTONITE
16 - GRAPHITE	41 - ZINC
17 - GYPSUM	42 - INDUSTRIAL SAND
18 - IRON ORE	44 - TOPSOIL
20 - LEAD	46 - GLACIAL TILL
21 - LIMESTONE	

Mine status codes

A - Active
 R - Reclaimed
 E - Expired; not reclaimed
 P - Pending; permit not issued
 T - Transfer of permit to another mine
 N - Never permitted
 Q - Temporary code for other mines not to bill

Permittee type codes

1 - COUNTY
 2 - TOWN
 3 - INDUSTRY
 4 - STATE
 5 - FEDERAL

¹ Mined Land Reclamation Program, Division of Mineral Resources, New York State Department of Environmental Conservation, 8/15/95.

Seneca Lake Watershed Mined Land

