

## TABLES

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Table E-1  
**SUMMARY OF DESIGN CHANGES AND MITIGATIONS**  
Meadow View Surface Mine  
Waterloo, New York

Description of Design Change or Mitigation	Design (D) change or Mitigation (M)	Section
6-foot-tall vegetated screening berm along Burgess Road, Powderly Road, and North Road.	M	Section 2.1.1.3
Use of an engineered stormwater management system to stabilize soil surfaces and prevent or reduce soil migration/losses.	M	Section 2.1.3.3
Dust control will be provided by a combination of measures incorporating a paved entrance road, enforced access road speed limits, road watering, and periodic cleaning of paved areas by a street sweeper.	M	Section 2.1.3.3
Pond outlet control structures that prevent peak storm events from enhancing downstream flooding	M	Section 2.2.3.2
Site design that avoids wetland areas and jurisdictional waterways.	M	Section 2.2.3.3
Increased property line setbacks from regulatory minimums.	D	Section 2.3.2.3
The haul road segment west of Burgess Road will be depressed below existing grade by several feet to maximize the shielding of truck noise.	D	Section 2.3.2.3
All equipment will be properly maintained and will include appropriate exhaust mufflers in accordance with applicable mining and vehicle regulations.	M	Section 2.3.2.3
Minimized mine footprint	D	Section 2.3.2.3
Engineered 4-way intersection along Burgess Road	M	Section 2.4.3
Landscape plantings adjacent to most proximate residences	D / M	Section 2.5.3
Phasing that maintains existing vegetative screening for a greater period of time	D / M	Section 2.5.3
Property Value Protection Plan	M	Section 2.6.1.3
Reclamation plan that allows for use as a passive recreational area	M	Section 2.6.3.1.3
Locating the mine close to its primary user to allow for reduced traffic on local roads.	M	Section 2.6.3.3
Road alignments revised to maximize distance from adjacent residences	D	Section 3.4
Community Benefits Agreement	M	Section 2.6.3.1.3
Limited operating hours	M	Section 1.4.8
Overall reduction to greenhouse gas emissions as a result of the project	M	Section 2.3.1.2.1

Table 1-1  
**EXCAVATION SUMMARY BY PHASE**  
Meadow View Surface Mine  
Waterloo, New York

Phase	Disturbed Mine Area (acres) <sup>(6)</sup>	Soil Staging/Active Stockpile Area (acres)	Total Disturbed Area (acres) <sup>(7)</sup>	Total Excavated Soil (Bank cu.yds.)	Required Peak Operating Months	Estimated Peak Operating Days <sup>(2)</sup>	Total Soil (Swelled cy)	Avg. Daily Soil (Swelled cy during peak months) <sup>(3)</sup>	Estimated Daily Vehicle Deliveries (during peak months) <sup>(1)(2)</sup>	Estimated Yearly Vehicle Deliveries <sup>(8)</sup>	Avg. Haul Dist. In Mine (lineal feet) <sup>(4)</sup>	Avg. Haul Dist. In Landfill (lineal feet) <sup>(5)</sup>	Total Haul Dist. (lineal feet)
I	37.7	16.7	54.4	842,642	17	421	969,038	2,300	105	15,832	4,700	3,700	8,400
II	21.5	1.8	23.3	898,026	18	449	1,032,730	2,300	105	15,832	4,000	3,700	7,700
III	20.7	5.7	26.4	743,815	15	372	855,387	2,300	105	15,832	3,200	3,700	6,900
IV	21.7	1.4	23.1	880,796	17	440	1,012,915	2,300	105	15,832	2,400	3,700	6,100
				3,365,279	66		3,870,071			15,832			

Mine Life = 11 years  
Total Peak Operating Months (based on 6 months per year) = 66 months  
1 Peak Monthly Bank cy to be moved (based on 6 months per year) = 50,989.1 cy  
Swell Factor = 15 percent

- Notes:
- 1) Peak operating months assumed to be 6 months out of year and it is assumed for purposes of this estimate that an entire years worth of soil is moved in the 6 month period
  - 2) Operating days assumed to be 306 per year or 25.5 per month
  - 3) Swelled volume (cy) based on 1.15 swell factor applied to total bank cubic yards for a given phase
  - 4) "Average haul distance in mine" based on longest haul for a particular stage from the center of the mined area to the Southwest Corner of the landfill expansion
  - 5) "Average haul distance in landfill" based on a haul from Southwest Corner of the landfill expansion to the center of the EX-2 expansion area. Haul length will vary depending upon the landfill area being worked
  - 6) Disturbed Mine Area is an estimated maximum for each phase and includes excavation areas, roads, and berms that are constructed during the particular phase
  - 7) The equipment/staging area is not included in the disturbed areas. It is assumed to be stripped with a granular cover installed in a short time period that would not result in an impact to total disturbed area
  - 8) Assumes even distribution of soil removed from mines (Total Excavated amount divided by 11 years and 30 tons per vehicle)

Table 2-1  
**IMPACTS TO NATURAL COMMUNITY HABITATS**

Meadow View Surface Mine  
 Waterloo, New York

<b>Habitat Type</b>	<b>Existing Habitat Within Affected Area (acres)</b>	<b>Proposed Habitat Upon Project Completion (acres)</b>
Successional Old Field	79.2	45.4
Farm Pond/Artificial Pond	8.7	70.3
Crop Fields/Row Crops	19.1	0
Hedge Row	7.7	4.2
Shallow Emergent Marsh	2.8	0
Developed	2.7	0.3
<b>Total Acreage</b>	<b>120.2 acres</b>	<b>120.2 acres</b>

Notes:

- 1) Existing Developed area includes roads, buildings and unvegetated stockpile within the affected area.
- 2) Developed area upon Project completion consists of remaining access roads

Table 2-2  
**WELL DATA TABLE**  
Meadow View Surface Mine  
Waterloo, New York

Well Number	Landowner	Approximate Distance to Mine (ft)	Depth of Well (ft.)	Land Surface Elevation (ft.)	Local Aquifer	National Aquifer
1	Thomas J. and Marion O'Connor	1870	75	480	Onondaga Limestone	Carbonate
2	Shervin P. and Mary Kate Martin	580	39.6*	500	Glacial Delta Deposits	Sand and Gravel
2A	Shervin P. and Mary Kate Martin	500	27.4*	500	Glacial Delta Deposits**	N/A
2B	Shervin P. and Mary Kate Martin	580	73.0*	500	Bedrock**	N/A
3	Dixie D Lemmon	375	168	500	Onondaga Limestone	Carbonate
4	Seneca Meadows, Inc.	770	88	490	Onondaga Limestone	Carbonate
5	Seneca Meadows, Inc.	10	68	495	Onondaga Limestone	Carbonate
6	John T. and Patricia Panek	3390	75	480	Salina Formation	Carbonate
7	John T. and Patricia Panek	3520	132	480	Salina Formation	Carbonate
8	Seneca Meadows, Inc.	5800	85	480	Salina Formation	Carbonate
9	Seneca Meadows, Inc.	5520	158	480	Salina Formation	Carbonate
10	N/A	4350	100	N/A	N/A	N/A
11	N/A	1850	75	480	Onondaga Limestone	Carbonate
12	N/A	3400	75	470	Onondaga Limestone	Carbonate
13	N/A	3550	206	460	Akron-Coblesville-Bertie	Carbonate
14	N/A	3570	75	460	Onondaga Limestone	Carbonate
15	N/A	3510	82	470	Onondaga Limestone	Carbonate
16	Bill and Barb Guthrie	870	70.7*	490	Bedrock**	N/A

Notes: See Figure 2-6 for approximate location of wells

\* - Confirmed on 3/9/11

\*\* - Assumed based on depth of well

N/A = Not available

Data obtained from personal communication with Barb Guthrie, and USGS and NYSDEC well databases

Table 2-3  
**STORMWATER SAMPLING SUMMARY MATRIX**  
Meadow View Surface Mine  
Waterloo, New York

<b>Stormwater Sampling</b>				
<b>Multi-Sector General Permit (GP-0-06-002) Requirements - SECTOR J</b>				
<b>SAMPLING POINT</b>	<b>Quarterly Visual Monitoring (Once Per Quarter or as Noted)</b>	<b>Annual Dry Weather Flow Monitoring (Once Per Year)</b>	<b>Benchmark Monitoring (Once Per Year)</b>	<b>Numeric Effluent Limitations (Once Per Year)</b>
MVMSW-01	Complete the Quarterly Visual Monitoring Form (Appendix I) during a qualifying storm event. This form must be retained on-site with the SWPPP. If a qualifying storm event has not occurred during a quarter, provide documentation for the MSGP logbook. For sampling	Annual Dry Weather Flow Monitoring must be completed after three consecutive days of no precipitation. A copy of the report <sup>(2)</sup> must be retained on-site with the SWPPP.	The Benchmark Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook. No sampling required once drainage area for North Pond is fully reclaimed and no mining or associated activity takes place in the drainage area	The Numeric Effluent Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook. No sampling required once drainage area for North Pond is fully reclaimed and no mining or associated activity takes place in the drainage area.
MVMSW-02	No sampling required - similar to MVMSW-01	Annual Dry Weather Flow Monitoring must be completed after three consecutive days of no precipitation. A copy of the report <sup>(2)</sup> must be retained on-site with the SWPPP.	No sampling required - similar to MVMSW-01	The Numeric Effluent Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook.
MVMSW-03	Complete the Quarterly Visual Monitoring Form (Appendix I) during a qualifying storm event. This form must be retained on-site with the SWPPP. If a qualifying storm event has not occurred during a quarter, provide documentation for the MSGP logbook.	Annual Dry Weather Flow Monitoring must be completed after three consecutive days of no precipitation. A copy of the report <sup>(2)</sup> must be retained on-site with the SWPPP.	The Benchmark Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook.	The Numeric Effluent Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook.
MVMSW-04	No sampling required - similar to MVMSW-03	Annual Dry Weather Flow Monitoring must be completed after three consecutive days of no precipitation. A copy of the report <sup>(2)</sup> must be retained on-site with the SWPPP.	No sampling required - similar to MVMSW-03	The Numeric Effluent Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook.
MVMSW-05	No sampling required - similar to MVMSW-03	Annual Dry Weather Flow Monitoring must be completed after three consecutive days of no precipitation. A copy of the report <sup>(2)</sup> must be retained on-site with the SWPPP.	No sampling required - similar to MVMSW-03	The Numeric Effluent Sampling Parameters and Limits are located in the MLUP. Samples shall be collected during a qualifying storm event. If a qualifying storm event has not occurred during the year, provide documentation for the MSGP logbook.

**NOTES:**

- 1) All samples must be collected from the discharges resulting from a 'qualifying' storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (>0.1 inch rainfall) storm event.
- 2) The report must include the outfall locations, the inspection date and time, inspection personnel, description of discharges identified, the source of any discharges and actions taken to address any newly identified allowable non-stormwater discharges or elimination of non-authorized discharges.
- 3) Quarters: (January to March), (April to June), (July to September), and (October to December)

Table 2-4  
**MEASURED COMMUNITY BACKGROUND NOISE LEVELS - AVERAGE Leq (dBA)**  
Meadow View Surface Mine  
Waterloo, New York

Location	Tue 10/20		Thur 10/22		Thur 10/22		Sat 10/24		Sat 10/24		Sun 10/25		Sun 10/25	
	Leq	Time	Leq	Time	Leq	Time	Leq	Time	Leq	Time	Leq	Time	Leq	Time
1	58.5	1649-1659	56.8	831- 857	57.1	1403-1424	58.8	1316-1336	58.5	1704-1724	55.0	1214-1229	57.9	1547-1603
2	52.6	1632-1642	55.2	904- 924	52.3	1429-1449	57.0	1253-1313	57.5	1641-1701	51.4	1156-1212	53.9	1526-1541
3	45.2	1613-1625	48.3	936-1001	48.7	1603-1623	47.2	1224-1244	44.4	1612-1632	51.6	1133-1149	48.2	1505-1520
4	51.5	1555-1605	50.2	1009-1031	49.4	1632-1653	49.7	1153-1213	47.7	1540-1602	50.3	1104-1119	49.0	1440-1455
5	52.2	1540-1550	48.7	1036-1104	52.4	1658-1718	59.4 <sup>1</sup>	1107-1127	58.2	1451-1511	53.4	1024-1041	54.0	1422-1437
6	52.6	1527-1538	51.4	1108-1133	51.2	1720-1740	60.8 <sup>1</sup>	1129-1149	50.3	1513-1535	49.1	1043-1058	45.0	1405-1420
7	-	-	60.5	1243-1303	61.4	1745-1806	67.3 <sup>1</sup>	1044-1104	60.8	1429-1449	59.4	1006-1021	60.8	1346-1401
8	-	-	61.3	1214-1234	65.2 <sup>1</sup>	1809-1829	67.4 <sup>1</sup>	1022-1042	61.2	1405-1425	60.0	0948-1003	61.6	1325-1341
9	-	-	64.3	1149-1210	64.2 <sup>1</sup>	1833-1853	69.9 <sup>1</sup>	0955-1016	65.1	1342-1402	64.4	0929-0944	66.5	1307-1323

Note: <sup>1</sup> Rain events included.

Table 2-5  
**MODELED COMMUNITY NOISE LEVELS - DAYTIME AVERAGE Leq (dBA)**

Meadow View Surface Mine  
 Waterloo, New York

Loc	Modeled Background			Road, Berm, Drain Construction	Phase I			Phase II			Phase III			Phase IV		
	7:00 AM	7:00 PM	6:00 AM	Initial	Initial	Mid	Late	Initial	Mid	Late	Initial	Mid	Late	Initial	Mid	Late
1	55.6	55.2	52.7	3.8	1.9	1.9	2.0	0.8	0.9	0.8	0.2	0.2	0.2	0.2	1.2	0.9
2	59.3	59.0	56.3	5.1	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.6	3.6
3	48.2	48.4	46.7	4.4	2.4	2.7	2.8	2.8	2.9	2.8	2.6	2.5	2.5	2.5	2.2	2.2
4	51.7	53.5	49.2	4.8	0.7	0.7	0.8	0.7	0.7	0.9	0.7	0.6	0.7	0.7	0.5	0.5
5	51.0	50.2	48.3	4.8	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.5	1.5	1.4	1.2
6	51.7	50.6	49.1	2.8	1.2	1.2	1.6	1.2	1.5	1.4	1.5	1.4	1.7	1.7	1.5	1.0
7	60.1	61.0	59.1	3.5	0.0	0.1	0.4	0.1	0.1	0.1	-0.1	0.1	0.0	0.0	0.0	0.0
8	60.0	62.3	56.7	3.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9	59.9	62.2	56.5	3.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10	44.4	44.4	42.3	13.5	5.0	5.1	5.3	5.3	5.3	5.4	5.0	4.4	4.7	4.7	4.0	3.9
11	47.5	48.3	44.9	7.4	2.0	2.0	2.1	2.1	2.1	2.5	2.0	1.6	1.8	1.8	1.4	1.3
12	49.1	48.6	46.8	6.7	11.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.5	11.5	11.5	11.5
13	45.7	45.2	44.3	7.5	13.7	13.9	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.7	13.7
14	41.8	41.4	39.7	7.0	14.8	14.9	14.8	14.8	14.7	14.6	14.5	14.5	14.3	14.3	14.4	14.4
15	50.2	49.6	48.5	4.3	5.4	5.7	5.7	5.6	5.6	5.5	5.6	5.6	5.5	5.5	5.4	5.4
16	45.5	44.4	43.5	5.8	10.1	10.8	10.5	10.5	10.5	10.3	10.5	10.5	10.4	10.4	10.3	10.3
17	42.6	42.1	40.5	8.0	17.0	19.3	19.2	19.1	19.2	18.7	19.1	19.1	19.1	198.1	19.1	19.1
18	58.0	57.6	55.0	4.3	1.5	1.6	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.9	1.7
19	57.6	57.3	54.7	3.9	1.5	1.6	1.7	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.8	1.6
20	57.9	57.7	57.8	3.2	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
21	57.9	57.7	57.8	3.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3

Table 2-6  
**LOCAL TRAFFIC COUNTS**  
Meadow View Surface Mine  
Waterloo, New York

<b>Count Location</b>	<b>Avg. Daily Traffic (veh/day)</b>	<b>AM Peak Hour Volume (vehicles/hour)</b>	<b>PM Peak Hour Volume (vehicles/hour)</b>
Gassner Road	270	29	28
Powderly Road	326	24	29
Burgess Road	1,493	97	146
Virginia Street	3,851	189	319
North Street (W of Virginia Street)	6,309	474	602
North Street (E of Virginia Street)	8,412	509	824

Table 3-1

**ALTERNATIVE SITES CONTROLLED BY SENECA MEADOWS**

Meadow View Surface Mine  
 Waterloo, Seneca County, New York

<b>Alternative</b>	<b>Total Size* (acres)</b>	<b>Distance from Landfill (miles)</b>	<b>Limitations</b>	<b>Potential Area for Mining (acres)</b>
<b>Proposed Site</b>	<i>120.2</i>	<i>0.0</i>	<i>N/A</i>	<i>120.2</i>
A1	137	0.0	Site has approval for Industrial Park Development, bisected by utility, clay mining not a permissible use per Section 103-55 of Seneca Falls Town Code	0
A2	8	0.0	Potential wetlands, limited size, proximity to residential areas	0
A3	12	1.8	Flood plain encroachment, conservation easement, adjacent to wetlands, bisected by utility line, clay mining not a permissible use per Section 103-55 of Seneca Falls Town Code	0
A4	19	1.4	Flood plain encroachment, conservation easement, adjacent to wetlands, clay mining not a permissible use per Section 103-55 of Seneca Falls Town Code	0
A5	81	5.1	Flood plain encroachment, adjacent to wetlands, bisected by utility line, no access from public roads, significant haul distance, clay mining not a permissible use per Section 103-55 of Seneca Falls Town Code	0

\* Total size is the site area that is not infringed upon by delineated wetlands, flood plain, or conservation easement.