

PERMIT TO ALTER A BODY OF WATER

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **FEBRUARY 22, 2023**

File No: **526, 534-12**
Permit No: **ALT12945-2023**

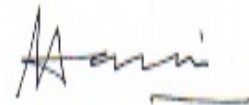
Permit Holder: **Marathon Gold Corporation**
7 Queensway
Grand Falls-Windsor
NL A2B 1K9
sfinlay@marathon-gold.com

Attention: **Scott Finlay**

Re: **Valentine Gold Project - Construction of Eight Sedimentation Ponds**

Permission is hereby given for : **the construction of eight (8) sedimentation ponds (LP-SP-01A, LP-SP-01B, LP-SP-03C, LP-SP-05, MA-SP-01AB, MA-SP-04, MA-SP-05, and PP-SP-01), associated dams, and their outfall channels as part of the Valentine Gold Project, with reference to the application dated November 15, 2022.**

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Environment and Climate Change under Section 49 of the *Water Resources Act*.



(for) MINISTER

APPENDIX A
Terms and Conditions for Permit

Storm Drainage Works

1. Removal of streambank vegetation or trees is not permitted. Overhanging brush that collects snow and blocks ice movement may be pruned and cut back to allow free flow of water.
2. Outside the scope of work outlined in this Permit, a minimum 15 metre wide vegetated buffer zone must be maintained along the edge of all waterbodies in order to provide bank stability, maintain local aesthetics and to help protect water quality.
3. Outfalls must be inspected regularly so that immediate action can be taken to clear blockages caused by ice or debris or to undertake repairs as required.
4. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the Permit Holder sample, analyse, and submit results of water quality tests, for the purpose of ensuring that the water quality is maintained within acceptable guidelines. All analyses must be undertaken by a CALA accredited laboratory.
5. Adequate erosion protection must be provided in the area where storm/sewer outfall discharges as per detail #560 of the *Municipal Water, Sewer and Roads Specifications*.
6. To prevent erosion and to control sedimentation in drainage ditches with steep gradients, rock check dams must be installed at an interval such that the crest of each dam is level with the base of the one immediately above. The center of each dam must be lower than the sides.

General Alterations

7. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
8. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
9. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.
10. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
11. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.
12. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
13. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.

14. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
15. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.
16. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.
17. All waste materials resulting from this project must be disposed of at a site approved by the Department of Digital Government and Service NL.
18. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
19. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
20. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
21. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.
22. The attached Completion Report (Appendix C) for Permit No. 12945 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
23. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated. The following terms are valid for the life cycle of the dam structures: 29, 35 and 60.
24. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
25. All work must be carried out within the Permit Holder's legal property boundaries.

Dam/Reservoir Design

26. Reservoirs must be provided with a spillway of adequate capacity to safely discharge design flows at non-erosive velocities without causing flooding of the reservoir or damage to the spillway or section downstream channel.
27. The dam and associated works must be designed and constructed under the direct supervision of an engineer eligible for membership with the Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization) who is able to demonstrate competence in the design, construction, and surveillance of dams.
28. The dam and associated works shall be designed according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

Dam Safety

29. The eight sedimentation ponds and associated dams have been conditionally classified in the LOW Consequence category based on the 2007 Canadian Dam Association (CDA) guidelines. A Dam Safety Review is not required for low-consequence dams. However, the consequences of failure should be reviewed periodically, since they may change with downstream development. If the classification increases, a Dam Safety Review is required at that time.

Sedimentation Ponds

30. The sedimentation pond and associated dams must have the following minimum dimensions:

Name	Crest Elevation (m) / Maximum Dam Height (m)	Spillway Elevation (m)	Maximum Water Elevation (m)	Normal Operation Elevation (m)	Minimum Freeboard (m)
LP-SP-01A	378.8 / 6.0	378.0	378.4	376.7	0.4
LP-SP01B	385.3 / 6.0	384.5	384.9	382.2	0.4
LP-SP-03C	347.0 / 6.0	346.2	346.6	342.7	0.4
LP-SP-05	386.3 / 4.0	385.5	385.9	384.2	0.4
MA-SP-01AB	343.5 / 6.0	342.7	343.1	340.8	0.4
MA-SP-04	317.5 / 4.0	316.7	317.1	314.8	0.4
MA-SP-05	328.8 / 6.0	328.0	328.4	326.1	0.4
PP-SP-01	380.0 / 2.0	379.2	379.6	378.2	0.4

31. The sedimentation ponds and associated dams must be constructed at the following coordinates:

Name	Datum	Northing (m)	Easting (m)	Zone
LP-SP-01A	NAD83	5356495.2965	488664.6426	21N
LA-SP-01B	NAD83	5356489.5782	488118.4679	21N
LP-SP-03C	NAD83	5355217.3544	486681.9845	21N
LP-SP-05	NAD83	5355672.9955	486200.4908	21N
MA-SP-01AB	NAD83	5359843.1151	491322.9982	21N
MA-SP-04	NAD83	5361406.5126	493193.5602	21N
MA-SP-05	NAD83	5360925.4075	493069.8612	21N
PP-SP-01	NAD83	5357023.6010	489795.036	21N

32. The sedimentation pond(s) design criteria should consider soil type and the required time it will take for particle settlement.

33. The sedimentation pond(s) must be designed in that the sediment-laden runoff is captured and detained allowing the suspended sediment to settle from the water.

34. The sedimentation pond(s) must provide enough storage for the captured sediment.

Dam Maintenance

35. The dam and associated works shall be maintained according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

Geoliners

36. The geomembrane installer should be a member of the International Association of Geosynthetic Installers, Approved Installation Contractor Program. Installation will be carried out in accordance with the International Association of Geosynthetics Installers' industry standards.

37. Selection of geomembrane should consider stresses during construction, field survivability, and workability.

38. The geomembrane shall be protected from mud, dirt, dust, puncture, cutting or any other damaging or deleterious conditions. Rolls shall be stored away from high traffic areas. Rolls should be stored on pallets off the ground. If extremely hot or cold temperatures are present, keep the panels inside at a moderate temperature. Continuously and uniformly support rolls on a smooth, level prepared surface.
39. Materials should be transported by the most direct method to site to minimize handling. Materials delivered to site should be off-loaded in a location where minimum handling steps will be required.
40. Geomembranes should remain in UV protected wrap until the day that the panels are to be installed.
41. Geomembrane should not be installed in the presence of standing water, mud, vegetation, snow, frozen subgrade, excessive moisture, while precipitation is occurring, during excessive winds, or when material temperatures are outside 0-75 degrees Celsius.
42. Subgrade surfaces should be free of loose rock fragments (>10 mm), sticks, sharp objects, or debris of any kind. The surface should provide a smooth, flat, firm, unyielding foundation for the geomembrane with no sudden, sharp or abrupt changes or break in grade that can tear or damage the geomembrane.
43. If coarse grained material is encountered in the subgrade, appropriate bedding should be used to protect the geomembrane. This bedding should consist of compacted finer material with a depth of 150 mm minimum. Where bedding sand is not available, a non-woven cushion geotextile may be used if it is designed for puncture protection.
44. The subgrade surface needs to be sufficiently compacted before installation of geomembrane.
45. The geomembrane shall not be allowed to bridge over voids or low areas in the subgrade. The geomembrane shall rest in intimate contact with the subgrade.
46. In general, seams shall be oriented parallel to the line of the maximum slope. In corners and odd shaped geometric locations, the total length of field seams shall be minimized. Seams shall not be located at low points in the subgrade unless geometry requires seaming at such locations.
47. Care should be taken when covering the geomembrane to prevent any damage. At no time will construction equipment be allowed to operate or drive directly on the geomembranes. No vehicular traffic shall travel on the geomembrane other than an approved low ground pressure vehicle or equivalent.
48. Sandbags or equivalent ballast shall be used as necessary to temporarily hold the geomembrane material in position under the foreseeable and reasonably expected wind conditions. Sand bag material shall be sufficiently close-knit to prevent soil fines from working through the bags and discharging on the geomembrane.
49. All seaming, patching, other welding operations, and testing shall be performed by qualified technicians employed by the geomembrane installer that are a member of the International Association of Geosynthetic Installers? Certified Welding Technician Program.
50. The panels shall be overlapped prior to seaming to whatever extent is necessary to affect a good weld and allow for proper testing, generally 300mm or more in the case of high flow. In no case shall this overlap be less than 75 mm.
51. Once the geomembrane is properly placed, the material should be seamed as soon as practical. Only material that is to be welded during that work-day should be deployed.
52. The cover material shall be placed as soon as practical, in conjunction with or upon completion of the geomembrane installation or as the installation progresses to minimize traffic on the geomembrane and damage. Only geomembrane that can be covered during that work-day should be placed.

53. Cover material shall consist of 25 mm minus particles, clean rounded soils or gravels free of sharp edges, sticks, metal, rubbish, and debris or foreign materials. If suitable cover material is not available, a protection geotextile layer may be installed between the geomembrane and the cover materials.
54. Cover material should be dumped and leveled over the geomembrane and not pushed from one end to the other to minimize rolling and wrinkling of the geomembrane beneath the material. Cover material should always be placed from the bottom to the top of slopes to avoid stressing the geomembrane and slope stability problems.
55. Cover material should be placed in lifts of a maximum of 150mm and be sufficiently compacted.
56. For critical structures, if the geosynthetic is damaged, the damaged section should be removed entirely and replaced. For lower risk structures, new geosynthetic can be placed over the damaged area with an overlap equal to the minimum overlap required for adjacent rolls.
57. The geomembrane shall be secured/anchored to the bedrock foundation, concrete plinth, toe of embankment with riprap, or by other sufficient means to form a hydraulic barrier.
58. The geomembrane shall be anchored in a trench, or by other sufficient means, at the dam crest to form a hydraulic barrier.

Dam Construction

59. Fill material must be obtained from an approved quarry site. It must not be taken from beaches or streams, and must not be dredged from a body of water.
60. Any work that entails substantial upgrades or repairs to any dam component that: changes the structure or design of the dam, affects dam safety or the physical stability of the dam, poses a risk of potential dam failure, or is deemed of high risk or significant in scope by this Department shall require a separate approval.
61. The transportation of labour and materials to the site must be along existing access roads.
62. The dams and spillways must be inspected regularly to identify any indications of structural failure, leaking, erosion or other problem so that immediate action can be taken to rectify the problem.
63. The work must meet the requirements of the Environmental Protection Plan (latest approved version) for the project.
64. An experienced geosynthetic installer will install the geomembrance liner and non-woven geotextile associated with this project. Installation will be carried out in accordance with the International Association of Geosynthetics Installers and Geosynthetics Research Institute industry standards.
65. The spillways shall be constructed with a geotextile layer and a protective rip-rap barrier to prevent erosion of the structure when overtopping occurs. The spillway outlet channel shall be lined with rip-rap of D50 = 200 mm to a depth of 1.0 m.

APPENDIX B

Special Terms and Conditions for Permit

1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit, as determined by this Department, the Minister may, without notice, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

- cc: Ms. Deneen Spracklin, P.Eng.
Manager, Drinking Water and Wastewater Section
Water Resources Management Division
Department of Environment and Climate Change
P.O. Box 8700
4th Floor, West Block, Confederation Building
St. John's, NL A1B 4J6
dspracklin@gov.nl.ca
- cc: Ms. Paula Dawe, P.Eng.
Manager, Water Rights, Investigations and Modelling Section
Water Resources Management Division
Department of Environment and Climate Change
P.O. Box 8700
4th Floor, West Block, Confederation Building
St. John's, NL A1B 4J6
pauladawe@gov.nl.ca
- cc: Jeremy Keeping (Western)
Land Management Specialist
Crown Lands Administration
Department of Fisheries, Forestry and Agriculture
jeremykeeping@gov.nl.ca
- cc: Western Regional Lands Office
Crown Lands
Fisheries and Lands Resources
WesternRegionLands@gov.nl.ca
- cc: Mr. Alex Smith, P. Eng.
Director, Mineral Development Division
Department of Natural Resources
50 Elizabeth Avenue, P.O. Box 8700
St. John's, NL A1B 4J6
asmith@gov.nl.ca
- cc: Fisheries Protection Division
Ecosystem Management Branch
Fisheries and Oceans Canada
P.O. Box 5667
St. John's, NL A1C 5X1
FPP-NL@dfm-mpo.gc.ca



Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **FEBRUARY 22, 2023**

File No: **526, 534-12**
Permit No: **ALT12945-2023**

Permit Holder: **Marathon Gold Corporation**
7 Queensway
Grand Falls-Windsor
NL A2B 1K9
sfinlay@marathon-gold.com

Attention: **Scott Finlay**

Re: **Valentine Gold Project - Construction of Eight Sedimentation Ponds**

Permission was given for : **the construction of eight (8) sedimentation ponds (LP-SP-01A, LP-SP-01B, LP-SP-03C, LP-SP-05, MA-SP-01AB, MA-SP-04, MA-SP-05, and PP-SP-01), associated dams, and their outfall channels as part of the Valentine Gold Project, with reference to the application dated November 15, 2022.**

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Environment and Climate Change and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

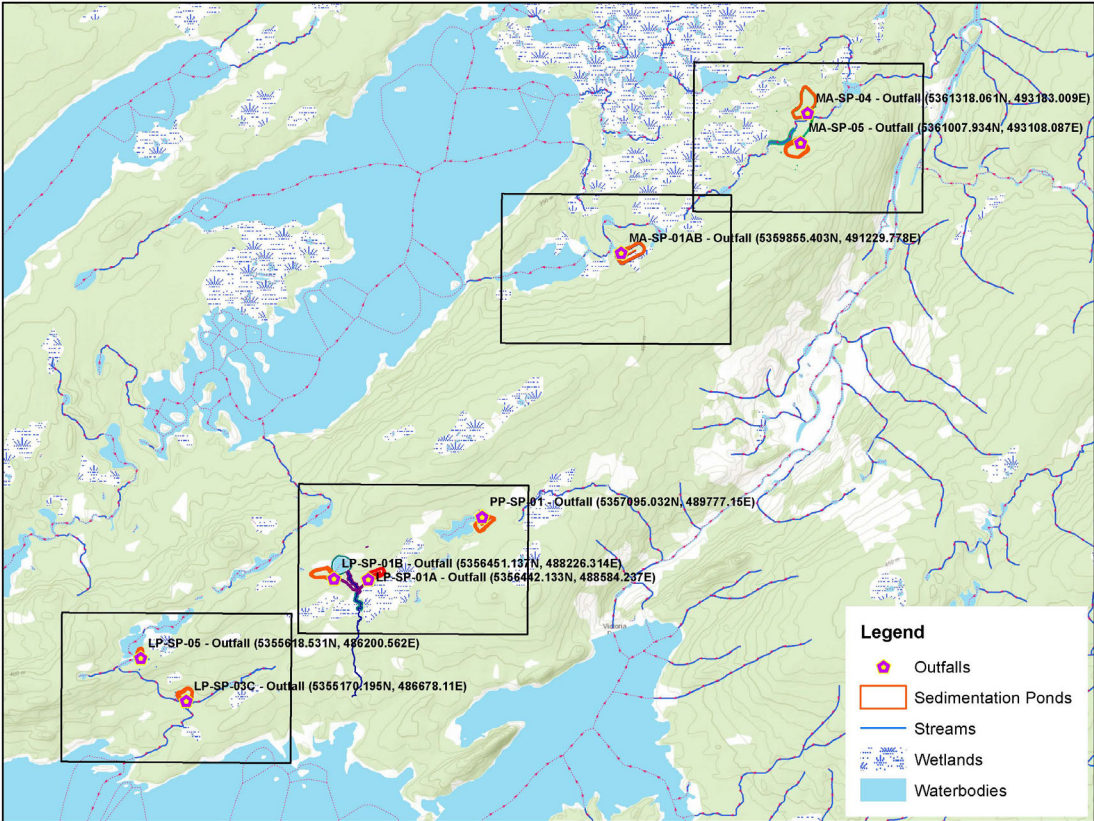
Date: _____ Signature: _____

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Environment and Climate Change
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6

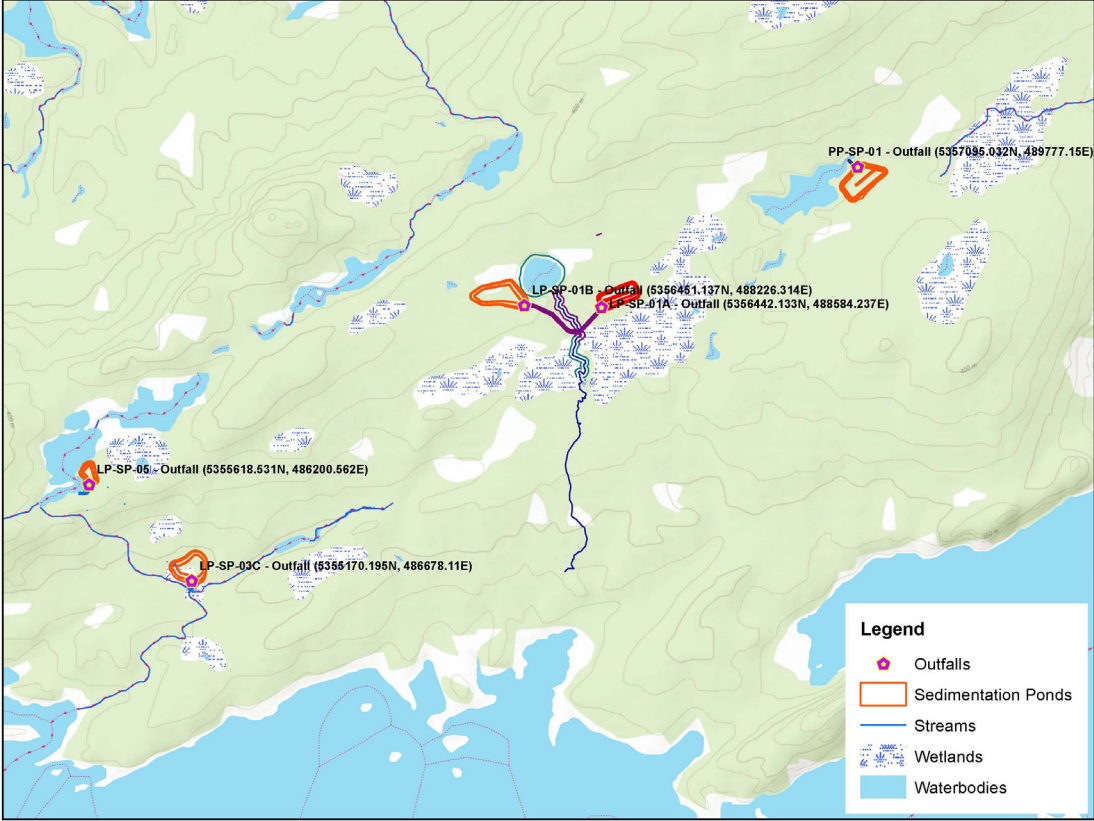
APPENDIX D
Location Map for Permit

Location map for eight (8) sedimentation ponds



Second Attached Image File

Location map for five (5) sedimentation ponds



Third Attached Image File

Location map for three (3) sedimentation ponds

