SURVEY IN THE VICINITY OF THE NINE MILE POINT AND JAMES A. FITZPATRICK GENERATING STATIONS TO DETERMINE THE PRESENCE OR ABSENCE OF THE ASIATIC CLAM, *CORBICULA* SP.

Prepared for

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and
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1. INTRODUCTION

On 9 May 1981, Ecological Analysts, Inc. conducted a field survey in the vicinity of the Nine Mile Point and James A. Fitzpatrick Generating Stations to determine whether the Asiatic clam, Corbicula sp., is present in accordance with the Nuclear Regulatory Commission's (NRC) 10 April 1981 IE Bulletin 81-03. The results of the survey indicate that Corbicula sp. has not become established in Lake Ontario in the vicinity of the Oswego site.

2. METHODS

Six near field locations and the Nine Mile Point intake screen house were examined by a diver (Attachment A). The sample sites were selected east and west of the plants and in the immediate vicinity of the intake and discharge of both plants. The diver made a visual inspection of and collection of bivalve molluscs on rocky substrate. In addition, sediment was sampled using a mollusc rake with an 0.25-in mesh seive collection basket. A minimum area 40 feet in diameter was examined at each site.

3. RESULTS

The bottom substrate was typically rock with isolated pockets of sand and detritus and little attached vegetation. The intake and discharge areas at the Fitzpatrick plant were uncharacteristically sand with small rocks (Attachment A). The depths at these sites ranged from 10 to 40 feet.

Few bivalves were found at any sites. Those collected were of the family Unionidae Unioninae.

4. CONCLUSIONS

These results indicate that Corbicula sp. does not pose a biofouling problem for the Nine Mile Point and James A. Fitzpatrick generating stations. Furthermore, a recent review of the literature by EA (1980) indicates that Corbicula sp. has not been collected as far north as Lake Ontario.

REFERENCES CITED

Ecological Analysts, Inc. (EA). 1980. Control of Pest Species, in Design Service for a Condenser Water Study for the Virginia Heating and Refrigeration Plant. Kidde Consultants (editor). One Hundred Percent Submission Contract Number GF-035-3777.

ATTACHMENT A

CORBICULA SURVEY AT NINE MILE POINT

Diving Report of Near Field and Plant (NMP.)

Near Field: 6 sites Date: 9 May 1981

1. Control West of Power Plants
   Depth 12-15 feet.
   Substrate: bottom composed of large to small rocks with some very large slabs of stone. Sand and detritus in between rocks where all clams were found. Attached algae on most of rocks.
   Area Covered: A circle 40 feet in diameter was covered with transects across

   At this station we found a total of 7 mussels, we found no Corbicula.

2. Nine Mile Point Intake
   Depth 20-30 feet
   Substrate: bottom composed of small to large rocks with no attached algae. Sand and detritus between rocks was where all clams or mussels were found.
   Area Covered: a circle of about 100 feet was covered.

   At this station we found 4 mussels, we found no Corbicula.

3. Nine Mile Point Discharge
   Depth 10-15 feet
   Substrate: large slab rock, some attached algae.
   Area Covered: a circle about 50 feet in diameter.

   No clams or mussels were found.

4. James A. FitzPatrick Intake
   Depth: 35-25 feet
   Substrate: sand
   Area Covered: A circle 100 feet in diameter was covered. We used a clam rake in this area. Rake had net mesh size of 1/4 in. sq.

   At this station we could find no mussels or clams. There was one large man-made block in the sand and I checked for clams but found nothing.

5. James A. FitzPatrick Discharge
   Depth: 35-40 feet
   Substrate: sand and small to large rocks, no algae.
   Area Covered: a circle 100 feet in diameter was covered. We again used the clam rake in the sand.

   We found one mussel shell in the rocks, nothing was found in the sand.

6. Control East of Power Plants
   ~~Depth: 15-18 feet~~
   Substrate: large slab rock with 10% smaller stones some attached algae.
   Area Covered: a circle 50 feet in diameter was covered.

We found 3 mussels and no clams in the area.

In Plant (Nine Mile Point Intake)

Dive was done in #11 and #13 intake canal between trash racks and screens. The bottom was of silt and sand. I found only one small mussel in #13. There was no other shells or pieces of shell.