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6/5/1972

- DEPOSITION OF GENERAL WILLIAM WHIPPLE, JR.

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THE ALLAN-DEANE CORPORATION,
A DELAWARE CORPORATION
QUALIFIED TO DO BUSINESS IN
THE STATE OF NEW JERSEY,

Plaintiff,

vs.

THE TOWNSHIP OF BEDMINSTER,
A MUNICIPAL CORPORATION OF
THE STATE OF NEW JERSEY AND THE
TOWNSHIP OF BEDMINSTER PLANNING
BOARD,

Defendants.

:
:
:
DEPOSITION UPON
ORAL EXAMINATION

: OF

: GENERAL WILLIAM
WHIPPLE, JR.

TRANSCRIPT of the deposition of GENERAL

WILLIAM WHIPPLE, JR., Witness, called for Oral Examina-
tion in the above-entitled matter, said deposition being
taken pursuant to Superior Court Rules of Civil Practice
and Procedure by and before QUENTIN D. LUCARELLO, a

Public and Certified Shorthand Reporter of the
New Jersey, at the Offices of WILLIAM W. LANIGAN,
ESQ., 39 S. Finley Avenue, Basking Ridge, New Jersey,
on Monday, June 5, 1972, commencing at ten o'clock in
the morning.

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A P P E A R A N C E S :

WILLIAM W. LANIGAN, ESQ.,
Attorney for Plaintiff,

MC CARTER & ENGLISH, ESQS.,
By NICHOLAS CONOVER ENGLISH, ESQ.,
Attorneys for Defendants.



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INDEX TO WITNESSES

<u>NAME</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>
General William Whipple, Jr.	4	--	--	--



1 WILLIAM WHIPPLE, JR.,

2 having been sworn according to law by the

3 Officer, testified as follows:

4 DIRECT EXAMINATION BY MR. LANIGAN:

5 Q General, for the record, would you state
6 your full name and home address.

7 A William Whipple, Jr., 305 Mercer Road, Princeton,
8 New Jersey.

9 Q And by whom are you employed and in what
10 capacity? A Rutgers University as

11 Director of Water Resources Research Institute.

12 Q Do you work in New Brunswick?

13 A Yes, mainly.

14 Q Do you have an office address in New Brunswick?

15 A Yes, Box 231, Water Research Institute, Box 231,
16 Rutgers University.

17 Q Fine. And how long have you been employed
18 in that capacity? A About -- almost

19 seven years.

20 Q Are you paid in any part by the Federal
21 Government? A Well, the money comes

22 from the Federal Government but I'm actually paid entirely
23 by the University.

24 Q So that you're an employee of the State of
25 New Jersey? A This is correct.

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MR. ENGLISH: Well, is it the

State of New Jersey or Rutgers University?

THE WITNESS: An agency of the State.

MR. ENGLISH: In part.

Q Your actual paycheck comes from Rutgers?

A Rutgers University.

Q Okay. General, I'd like to explore your involvement in this case beginning, first of all, when you were first contacted by the Defendants in this action.

A I don't remember. It was sometime during the Winter.

Q And by whom?

A By Mr. English.

Q And in what capacity?

A He asked me to -- he asked about my research relationships and experience and then he asked me if I would be prepared to testify in this case and give expert testimony regarding the scope of my research in matters considered might be related to the case.

Q Are you being engaged on a private consulting basis?

A I'm not quite sure how to answer that question.

Q Well, you are employed by Rutgers?

A That is correct.

Q Is that a full-time job?

1 A Yes.

2 Q Now, how are you being utilized, then, as
3 an expert in this case, as an independent consultant or
4 as someone who is on the Rutgers University staff?

5 A There's really no distinction there so far as I'm
6 concerned. I'm a full-time employee but it's with the
7 understanding that I can take occasional consulting assign-
8 ments if I wish. The testimony in this case, in any event,
9 -- I have the authority of the University, the approval
10 of the University authorities to participate in this
11 but strictly speaking that wouldn't be necessary. [REDACTED]
12 any Rutgers member of the faculty is entitled to express
13 his opinion and to give testimony. Now, it has been
14 suggested that I would be given a consultant's fee on this
15 and I have said that I will not accept anything personally
16 and that if they wish to make a donation to the Institute
17 for water resources purposes, this would be acceptable
18 to me, but I don't regard this as a consulting matter
19 [REDACTED] giving testimony on matters that are concerning
20 [REDACTED] case which that I have carried out on water resources matters
21 in which I have a legitimate interest.

22 Q Has the Defendant or the Defendants indicated
23 that they will make such a donation after your testimony
24 has been completed? A There's no
25 definite engagement to do that.

1 I see. We have a copy of your background and
2 your experience and your educational background which I'll
3 retain and ask to the extent that there are any great
4 variances from it, at the time you do testify, I ask you to
5 so inform me prior to the time you take the stand.

6 General, what's your actual job for Rutgers
7 University? What does it entail?

8 A Director of the Water Resources Research Institute,
9 which is my entire appointment. I'm responsible for the
10 administration of certain funds, research funds, which
11 includes the supervision of progress on research ~~_____~~
12 by some 25 different research projects within the institute's
13 scope. On several of these projects I, myself, am a
14 principal investigator or project director as the case may
15 be, so that my personal participation takes up, in research,
16 takes something in the neighborhood of 30% of my time.

17 In addition to that, I teach a course on Water and Water
18 Quality Management, which is taught in the Economics

19 ~~_____~~ t, and it's understood to be part of my position.

20 ~~_____~~ also represent the interests of water resources at

21 the University in numerous conferences, in research, consortia
22 with other universities and participation with certain
23 national water resources organizations which I carry out
24 various functions, advisory committee memberships and
25 so on.

1 you worked closely with the Department of
2 Environmental Protection with the State of New Jersey?

3 A Yes, I do.

4 In what capacity?

5 A The Department of Environmental Protection with
6 Mr. Pike of that Department, he's a member of our Water
7 Resources Research Council of which I also am a member,
8 which directs the policy and chooses the projects which the
9 Institute is engaged. We also have on occasion received
10 funds from this Department, matching funds for carrying
11 our research. We are in receipt of certain funds
12 every year and this year we do have funds from this Depart-
13 ment.

14 Q Does that Department utilize your services
15 on a continuing basis? A Not to a great
16 extent, no.

17 Q General, are you familiar with the Township
18 of Bedminster? A Very little. No,
[redacted] really familiar with it.

19 Q In your testimony, related to the quality in
20 any way of the Raritan river?

21 A Yes.

22 Q And without any familiarity with the
23 Township of Bedminster, what is the nature of your testimony
24 with respect to the Raritan river in this case?
25

direct

3 We studied the water and pollution relationships
4 of several rivers in New Jersey in connection with the
5 research projects and one of these was the Raritan River.

6 Now, it was not -- we didn't study that on a Township basis.
7 We got all the records of pollution in the upper Raritan
8 River above its mouth in Millstone and also of the Millstone
9 River from its mouth and also of the upper Passaic River,
10 above Little Falls, and we studied the relationships between
11 the quality and timing and flow, slopes of the river, the
12 amount of pollution that was in the river and its mouth and
13 the pollution that was placed in the river according to all
14 the records from the various pollution sources and we
15 got these from State sources. They were never segregated
16 into Townships or areas, and, in fact, for certain analytical
17 purposes we combined these three things together because
18 we were looking for general characteristics and this gave
19 us more appropriate statistics.

20 Q Did you make any independent investigation as
21 to sources of pollution either at the mouth or further on
22 down the river?

23 MR. ENGLISH: You mean upper river?

24 MR. WENIGER: Upper river, yes.

25 A Yes, I was saying that I did. In the Raritan River,
26 near its confluence with Millstone and all the information
27 that we could obtain on the tributaries of the Raritan and o

1 sources, the sources of pollution in the Raritan, of the
2 known sources, those recorded by the State of New Jersey,
3 which, under law, is required to issue permits for waste
4 treatment, waste discharges into streams both for industry
5 and for municipalities, and these records are presumably
6 all of the sources of pollution that enter into the river.

7 Q Then, you have a list of all the known
8 pollution that enters the Raritan?

9 A I had it five years ago. It's presumably somewhere
10 in the papers of one of my files.

11 Q This formed the basis of your research, however,
12 did it not? A Yes, this raw materials
13 for the research.

14 Q And was that updated, ever?

15 A No, it wasn't. The latest information that I had,
16 that research was terminated several years ago, and the
17 latest information I had was for the year 1967.

18 Q Is that research going to form the basis of
19 your testimony? A Part of it, yes.

20 Q In what respect?

21 A It will be used to indicate the relationships that
22 exist between growth of population between the extent of
23 manufacturing activities and the growth of pollution in
24 the rivers, for the Raritan River and also for the two
25 adjacent rivers.

1 Can you recall any pollution sources above
2 the confluence of the Millstone on the Meritan River?

3 A I wouldn't like to recall this from memory. You're
4 asking me to go back five years and I would prefer not to
5 do that. I have some information that presumably I can get
6 out but I don't -- I'd rather not try to recall this.
7 There were various municipal waste treatment plants. For
8 example, there was one in Bernardsville. I can't recall
9 the figures I worked with five years ago.

10 Q All right. Could you, at my request, get out
11 that data or that sheet? Is it compiled in one

12 A I don't know. I mean, these are master
13 As I say, I worked with them five years ago and I don't
14 know where this raw material is. I haven't looked at it
15 for several years and I don't recall in what form it is
16 or was because now I have the reports which summarize
17 all of these things but whether they actually -- the
18 report very likely listed these things but I'm not sure

19 [REDACTED] d.

20 Q Could you get that report out and send it to
21 me if you're going to rely upon it as part of your testi-
22 mony?

23 A I have a file copy. I'll have
24 to photostat it.

25 That will be acceptable to me.

MR. ENGLISH: At your expense,

1 Mr. Lanigan?

2 MR. LANIGAN: Yes.

3 A: It's a sizeable report. Of course, we do have
4 duplicating facilities.

5 Q: If you're going to rely upon it and if it
6 forms the basis of your research I'd like to see a copy
7 of it.

8 A: All right. I have my file
9 copy of this thing here.

10 Q: May I see it.

11 MR. LANIGAN: I believe Counsel
12 already has a copy of this?

13 MR. ENGLISH: No, I don't.

14 THE WITNESS: Nor has he seen it.

15 Q: General, it looks like it's been printed.
16 It's got a very colorful cover. You mean there are no
17 other copies in existence?

18 A: No, I don't mean that. I mean they have all been
19 distributed. These things get popular and most of our
20 reports go out to print within a year because people
21 write in for copies, we make an initial distribution and
22 we give them away except for file copies and when there
23 are no more left there are no more left.

24 Q: I wonder if you can make a copy right now
25 while we're talking, unless you're going to rely upon it.

A: I have no objection.

1 MR. ENGLISH: Will you make one for
2 me while you're at it?

3 MR. FANIGAN: Sure.

4 General, with respect to the research which
5 you performed on the Maritan River, do you have an
6 opinion as to its existing state? Is it polluted?

7 A Somewhat polluted, yes.

8 Q In what respect?

9 A In particular studies measured by bio-chemical
10 oxygen demand, and it's always the case that there are
11 other forms of pollutants that usually come along
12 with this, this is the usual index of pollution and with
13 this river is not such that you certainly are grossly
14 polluted, at the same time it does have a considerable
15 amount of pollution in it which builds up rapidly as it
16 gets to its mouth.

17 Q Is it polluted at any particular location
18 rather than others?

A Yes. The lower
portion below its juncture with the Millstone really is
a highly polluted river.

21 Q That's at Bound Brook, New Brunswick, and
22 further on down?

A Yes. It's
23 highly polluted and not only in terms of bio-chemical
24 oxygen demand but extended pollutant and it's been the
25 source of infectious hepatitis outbreaks in the past so it

1 obviously; some pathogenic organisms in it to a very high
2 extent and it's very highly polluted and a very difficult
3 pollution problem in the lower portion of the Meritt
4 River.

5 Q. What is it polluted from, specifically?

6 A. Yes, I know
7 what's polluted from.

8 Q. What? A. These are matters
9 of record. It's polluted from a variety of industrial
10 and municipal sources and it's also polluted, to a great
11 extent, by unrecorded sources of pollution that
12 all large centers of population, and there are
13 large centers of population in this area and correspondingly
14 there are tremendous sources of pollution. Now, I told
15 you in this report that we have not updated these par-
16 ticular figures, however, we have been working on, ever
17 since then, on the relationship between pollution and
18 industrial and economics and population growth.

19 Q. What do you consider a large population

20 center? A. Well, really, that's
21 a question to which there is no appropriate answer.

22 Well, you speak of it being populated
23 by large population centers. What does that term,
24 what do you mean by "large population center"?

25 I'm referring to population centers of New

1 Trenton, Highland Park, and so on.

2 Q I see. You're not referring to population
3 **centers**, for example, as Bedminster?

4 A Well, I wasn't at the time referring to that but I
5 will certainly say that I'm sure that this matter of pollu-
6 tion is coming from the Township of Bedminster as well.

7 Q How do you know that?

8 A Because of the nature of things. Every -- there is
9 pollution coming off of every square acre of ground in
10 New Jersey, to some extent, and we have systematically
11 gone through and investigated this matter to qualify
12 amount of pollutants that you can expect from natural woods
13 and rock, from raw crops, from single family housing and
14 then from more concentrated populated centers.

15 Q This is in a general way?

16 A It's in a general way but also some of it is
17 very specific because we're looking at individual cases,
18 trying to outline relationships of a more general nature
19 **which** are the objectives of our research.

20 Q Well, can we eliminate Bedminster, because
21 you made no study of Bedminster?

22 A Bedminster is a community -- this is the Township?

23 Q The Township.

24 A I don't think we have made any particular studies
25 of Bedminster, no.

1 Q Okay. Now, let's take generally. You say
2 there is pollution from every acre in New Jersey. What
3 is the pollution, and let's go down a list. For example,
4 farm lands, an acre of farm land.

5 A I wouldn't put it in terms of towns. I'll say
6 that the run off from farm lands, characteristically,
7 that we have studied, has about three milligrams per
8 liter of bio-chemical oxygen demand in normal times and
9 after sizeable rains it approximately doubles.

10 Q Is that an alarming figure?

11 A No, not in itself. If all the run off
12 river was of this character the river would be
13 polluted and you wouldn't have any trouble from it.

14 Q Let's take an acre of woodland.

15 A About the same thing.

16 Q And an acre, for example, where there's
17 a residential dwelling. A As long
18 as there are -- the individual residential dwellings,
19 what we had measured, run a little bit higher,
20 they may be 20, 25% higher. They're still very
21 moderate.

22 Q That would be a dwelling unit on an acre.
23 We're talking about an acre of ground, now.

24 A Well, I can't qualify that to that extent, because
25 I think the housing that we have looked at, it didn't have

1 an acre of ground. I think they were probably smaller
2 lots of ground than this.

3 Q Half an acre?

4 A Perhaps, something, because -- no, I don't -- I'm
5 sure they're not acre lots. They're smaller than that.

6 Q These didn't produce any more than about
7 25% more than farm land? A Something

8 like that. I can give a somewhat more precise figure
9 by consulting my notes.

10 Q Okay.

A In fact, I'll have

11 somewhat more precise -- well, no, it's going to
12 month before we get the final figures on this because
13 is research that we're in the middle of studying and we
14 have some preliminary results but we still don't have the
15 final analysis of this thing.

16 Q Your best estimate now is about 25%?

17 A Yes.

18 Q Increase?

A That is right.

19 Q What other types of situations would produce
20 pollution? We have an acre of farm land, now, an acre
21 of woodland, an acre or something less with a residential
22 dwelling on it and, now, let's say an office facility,
23 what would that produce?

24 A Well, we haven't gotten down to qualify the individual
25 types of high producers. What we have done, we have taken --

1 we took an area in New Brunswick that is about 50, 000
2 housing and about 5 to 10% industrial-commercial developments,
3 but it's primarily housing, but in this case it's housing
4 that is much closer together, and there are a good many
5 stores and there are a few industrial and commercial
6 activities which, however, did not include any authorized
7 nor recorded source of pollution. Now, in this particular
8 case, instead of getting results that go, say, from three to
9 six, we'd get results that run from about 12 to 30.

10 Q To what do you attribute that?

11 MR. ENGLISH: Excuse me. Just for

12 the record "12 to 30", you mean milligrams
13 per liter?

14 THE WITNESS: Bio-chemical oxygen
15 demand, yes.

16 Q To what do you attribute that?

17 A I attribute that to the run off from the streets
18 and the economic activities going on in this area.

19 Q You say there is industrial use in there.

20 What sort of industrial use is there?

21 A There are -- let's see. There is a big Equibb
22 factory -- not "factory". It is, I guess, a headquarters
23 and a laboratory. There are --

24 Q And does that produce a pollutant?

25 A Yes; supposedly not, theoretically not, but, in

1 fact, it does, and -- I don't remember the names of the
2 others. There are four or five industrial or commercial
3 installations there that supposedly are not producing any
4 pollution but, in point of fact, they do, and also the
5 street run off. We know from investigation that other
6 people have made from other parts of the country that just
7 the run off from the streets, without any industry, BOD's
8 as high as 125 are frequently found in the first run off
9 after a storm, so it doesn't take industry. We know
10 simply that concentration of population, commercial
11 establishments and streets produce a lot of pollution.
12 Now, we have gone further than that. We have made some
13 studies in the Spring, which we're going to follow up this
14 Summer, and we surrounded the town of Morristown, which is
15 quite a clean town, very little industry, you know, and
16 we measured very carefully this time, got complete control
17 of the tributaries above it, and we did this for a complete
18 week, the tributaries above it. The effluent from recorded
19 pollution sources, and, in this case, the records are very
20 good because the Passaic Valley Water Commission is an
21 excellent organization and they watch these things with
22 extreme vigilance, and they have a tough character named
23 De Hoge and he helped us make sure that we had the complete
24 list of effluence. Then we computed with these effluents
25 by the time they reach the lower end of Morristown, became

Whipple - direct

20

1 this bio-chemical oxygen demand reduces as it goes down-
2 stream, we didn't expect to have as much when it gets to
3 the bottom as we had originally and when you make all these
4 computations the pollution at the lower end of Morristown
5 -- now, this is not the effluent from the waste treatment
6 plant. This is simply run off from the City, and that
7 was twice as much for the entire week as you could account
8 for by including the tributaries plus the known pollution
9 sources, so that the excess can be attributed simply to the
10 population concentration of the town the size of Morristown.

11 Q What is that population concentration?

12 A I don't have the latest population of Morristown.
13 That's something I haven't gotten yet; I don't know, I
14 suppose 25, 30,000 people.

15 Q But concentration is the important thing, isn't
16 it?

17 A The concentration, this figure
18 I have in pounds. I don't have it in concentration, and
19 in this case there was a great deal of run off and we
20 computed this in pounds and the unrecorded pollution from
21 this area was between 500 and 1000 pounds of BOD a day.

22 Now, to put this in more graphic terms, this would be the
23 waste, the raw sewage from between 2000 and 4000 people,
24 the 2000 people when it wasn't raining and 4000 people
25 when it was. Now, this is the Springtime result and we
have to investigate it at other times of the year because

1 it may not be the same as other times of the year, but it's
2 a very startling confirmation of what we had already
3 known, showing that from concentration of population and
4 of business, normal business activities of a relatively
5 clean town, we still have material amounts of pollution
6 entering the water.

7 Q You mentioned "raw sewage". You mean to tell
8 me that there are between two and four thousand people
9 putting raw sewage somewhere into Morristown?

10 A No. You have pollution running off the streets,
11 not as sewage but simply pollution from other sources,
12 non-sewage, that has the same bio-chemical oxygen demand
13 as the untreated waste from between 2000 and 4000 people.

14 Q Do you happen to know what the population
15 concentration is in terms of people per square mile?

16 A No. I haven't computed that yet. This is research
17 that's going on. We haven't completed this.

18 Q This would be a very significant factor,
19 [REDACTED] it, in terms of concentration of people, that

20 A Yes, it certainly will be,
21 because apparently it's the concentrations of people and of
22 industrial-commercial activities that appear to be -- to
23 create the worst pollution situations.

24 Q Is there any way to control this?

25 A Well, of course, there are ways of controlling it

1 to a certain extent but here I'm getting into -- I'll
 2 have to theorize. This research is designed to outline
 3 a condition and prove that this condition exists and try
 4 as best we can to evaluate it. There are other people
 5 who are now working on this and are beginning to talk
 6 about this concept. In fact, the State of New Jersey is
 7 beginning to talk about this concept and that's a great
 8 step forward, but we haven't gotten yet to say what the
 9 remedies are. You have to take into account planning and
 10 realize that if you're trying to treat wastes of a certain
 11 stream and achieve certain standards you must consider
 12 the unrecorded wastes as well as the recorded wastes and
 13 that's the primary thrust of this research.

14 Even prior to the research, hasn't it been
 15 obvious and apparent that where you have size, such as
 16 Newark and New Brunswick, the greater population, there is
 17 greater pollution? A It's been obvious
 18 to me and yet the waste treatment planners have not taken
 19 this into account. They have uniformly, almost uniformly
 20 assumed that the waste treatment from the sewage plant
 21 was the only thing you had to take care of, and it's
 22 been a very neglected aspect of this water quality planning,
 23 this very thing, although, as you say, it is obvious.

24 Now, apart from run off from streets, is
 25 there any other source of pollution from these concentrations?

1 Well, there are. There are such things as car
2 wash establishments which generate a tremendous amount of
3 pollution. Every garage that dumps the waste lubricant
4 in back of its establishment to seep off with the next
5 rain or go down to the ground water, those concentrated
6 poultry farms that have three million chickens on a 20
7 acre tract, unless they are very good, they concentrate
8 -- the turkey farm, things like that, they all generate
9 a great deal of pollution, agricultural feed lots are
10 notorious, and, well, I know supermarkets, I know a case
11 of a university that I'm concerned with who has
12 downhill from a place where they put a supermarket
13 it's a perfectly normal supermarket, but the run off after
14 a shower is polluted, but before they built there it was
15 not. It runs much faster but the water that stays in the
16 pool is a milky white appearance with a grease appearance
17 on top and is obviously polluted.

18 Q Would gas stations do the same thing?

19 A Certainly. There is also waster from a gas
20 station. In fact, every highway, as you can see when the
21 snow is scraped off in the fall, in the spring, builds up
22 black from the sides of the roads from the various hydro-
23 carbons and soot that come off of the cars.

24 Q Concentration of vehicles, too?

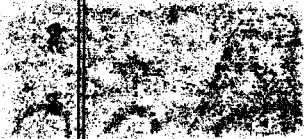
25 A Concentrations of vehicles, yes. Now, we haven't

1 traced these things but, obviously, these are part of where
 2 the unrecorded pollution is coming from.

3 What effect does the treated effluent from
 4 a completed satisfactory package plant, so to speak, have
 5 on the river? A The effluent from a
 6 completed satisfactory package plant of the types that are
 7 normally convertible, if it's properly operated, it will
 8 reduce the bio-chemical oxygen demand, carbonaceous,
 9 by about 10%. It will not touch, it will not reduce the
 10 nitrogenous bio-chemical oxygen demand, at all. It
 11 does -- it stops some of the nutrients coming [redacted]
 12 and it reduces the suspended sediment so that so far as
 13 bio-chemical oxygen demand it leaves an effluent that has
 14 a usually very considerable bio-chemical oxygen demand
 15 which does not show up in the standard tests because
 16 nitrogenous oxygen demand occurs after a lapse of quite
 17 a few days and is not affected by the normal treatment
 18 plant nor does it show up in the normal tests.

19 [redacted] MR. ENGLISH: Could I just interrupt
 20 to ask if the package treatment plant,
 21 the question assumed and the answer is
 22 described as a secondary or tertiary
 23 treatment plant?

24 THE WITNESS: These things are
 25 secondary. Primary plants are no longer



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permitted in the state. When you get into tertiary you have to describe them because they're not commonly in use and there are a million ideas how this should be done. The ordinary treatment plants are secondary with no nitrification included.

Q A tertiary would include that so that you would have complete treatment if you had any disposal of effluent into a stream?

A Not necessarily.

Tertiary treatment is anything beyond secondary and you could have a tertiary treatment plant, for example another step in clarification would be a tertiary treatment plant, but most of the purposes of most tertiary treatment plants would be to remove the nutrients and get down to a low suspended sediment. Some of them also remove the ammonia by nitrification but that has to be specified. The tertiary plant is a classification of a great many things.



MR. ENGLISH: You mean a great many different alternatives?

THE WITNESS: Alternatives, yes.

MR. ENGLISH: All the record.

(See the record discussion.)

Q General, are there other sources of pollution in concentrations of population other than car washes and

1 run off from the streets? A Undoubtedly.

2 [REDACTED] Q What are they? A Well,

3 [REDACTED] when is the illegitimate dumping of sludge back
4 in manholes after dark, one of them is illegitimate discharges
5 from various industries who either don't have any effluence
6 or else they have authorized effluence and then at night
7 they dump something else that they are not supposed to.
8 It's unauthorized or else authorized overflows from sewers
9 that bypass part of the flow by waste treatment plants
10 at times of rain.

11 Q We have that down at the confluence [REDACTED]
12 Millstone, don't we, from time to time?

13 A Yes. In fact, most sewage systems have bypasses
14 that overflow in times of rain.

15 Q They simply open the gates, don't they, and
16 let raw sewage go into the Raritan?

17 A They don't open the gates. What they have is
18 a wheel and when it reaches a certain point it overflows,
19 [REDACTED] that time, they're relying on the fact that there
20 [REDACTED] run off, but they can't do anything differently
21 because the plant has only a given capacity so they bypass
22 it.

23 Q You're talking about a substantially sized
24 plant in that case, aren't you? A Well,
25 I don't know that it's limited in size. I really don't

1 know.

2 Q What other sources of pollution could there
3 [REDACTED] than gas stations, concentrations of vehicles,
4 car washes, run off from streets?

5 A Well, the run off from streets includes everything
6 from what the pigeons and dogs contribute, which is
7 considerable, and things that drop off of grocery trucks
8 and unexpected spills of gasoline, oil and gas spills,
9 which are quite frequent, actually.

10 Q This occurs everywhere, doesn't it, General,
11 this type of pollution, everywhere in the World [REDACTED]

12 A Oh, I don't know. I don't think you have
13 these things in the less settled developing countries
14 where civilization isn't as advanced as ours. They
15 probably don't have car wash establishments.

16 Q But by and large in the State of New Jersey
17 this occurs as a natural phenomenon, doesn't it, in the
18 State of New Jersey?

19 [REDACTED] So far as I know it does, as a natural phenomenon.
20 [REDACTED] phenomenon everywhere in the United States;
21 essentially these same things occur. I'm not suggesting
22 in any way there's anything unique about the Raritan
23 Valley or Bedminster.

24 MR. TANIGAN: I have no other
25 questions.

MR. ENGLISH: I have no questions.

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THE ALLAN-DEAN CORPORATION,
A DELAWARE CORPORATION
QUALIFIED TO DO BUSINESS IN
THE STATE OF NEW JERSEY,

Plaintiff,

vs.

THE TOWNSHIP OF BEDMINSTER,
A MUNICIPAL CORPORATION OF
THE STATE OF NEW JERSEY AND THE
TOWNSHIP OF BEDMINSTER PLANNING
BOARD,

Defendants.

CERTIFICATE OF OFFICER.

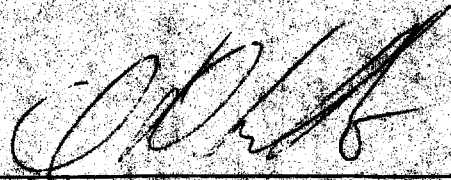
I, QUENTIN D. LUCARELLO, a Notary Public
and Certified Shorthand Reporter of the State of New
Jersey, do hereby certify that prior to the commencement
of the examination the Witness, GENERAL WILLIAM WHIPPLE,
JR. was sworn by me to testify the truth, the whole
and nothing but the truth.

I DO FURTHER CERTIFY that the foregoing is
a true and accurate transcript of the testimony as taken
stenographically by and before me at the time, place, and
on the date hereinbefore set forth.

I DO FURTHER CERTIFY that I am neither a

1 relative or employee or attorney or counsel of either
 2 of the parties to this action, and that I am neither
 3 [REDACTED] or employee of such attorney or counsel,
 4 and that I am not financially interested in the action.

5
 6 My Commission Expires
 December 17, 1974.



A Notary Public of the State
 of New Jersey.

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[REDACTED]

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