

1991.12.20 SPDES permit DRA file

New York State Department of Environmental Conservation



Thomas C. Jorling
Commissioner

2176 Guilderland Ave
Schenectady, N.Y. 12306
Office (518) 382-0680
Fax Number (518) 382-1065

December 20, 1991

Donald W. Faul
Senior Vice-President
American NuKem Corporation
1200 MacArthur Blvd.
Mahwah, N.J. 07430

RE: DEC #4-0103-16/20-0
Norlite Facility
SPDES Permit Modification
SPDES #NY0004880
Cohoes-C, Albany Co.

Dear Mr. Faul,

With American NuKem's acceptance of the draft permit modifications sent to you with the Notice of Intent to Modify on 12/18/91, this modified permit is issued with this letter. Please note several minor changes made on pages 4 and 5 clarifying the metals limits as concentrations and that any future increases in these concentrations will also trigger a modification application on the SPDES permit. If you have any questions please feel free to contact either Carol Lamb-LaFay of our Division of Water or myself.

Sincerely Yours,

William J. Clarke
Regional Permit Administrator
Region 4

NORLI16P.B02
cc:C.Lamb-LaFay
S.Saraiya
J.Derman

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)**DISCHARGE PERMIT**
Special Conditions (Part I)

Industrial Code: 1422
 Discharge Class (CL): 01
 Toxic Class (TX): T
 Major Drainage Basin: 13
 Sub Drainage Basin: 01
 Water Index Number: H-239
 Compact Area: _____

SPDES Number: NY - 0004880
 DEC Number: 4-0103-16/20-0
 Effective Date (EDP): 04/01/87
 Expiration Date (ExDP): 04/01/92
 Modification Date(s): _____
 Attachment(s): General Conditions (Part II) Date: /

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.)(hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESSAttention: Jay Derman, Executive VP

Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes

State: NY Zip Code: 12047

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESSName: Norlite CorporationLocation (C,T,V): Cohoes (C) County: AlbanyFacility Address: 628 South Saratoga StreetCity: Cohoes State: NY Zip Code: 12047NYTM - E: _____ NYTM - N: 4From Outfall No.: 001 at Latitude: 42° 45' 14" & Longitude: 73° 40' 20"into receiving waters known as: Salt Kill Creek Class: D

and; (list other Outfalls, Receiving Waters & Water Classifications)

003	Salt Kill Creek	D
004	Salt Kill Creek	D
005	Salt Kill Creek	D

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESSMailing Name: Norlite CorporationStreet: 628 South Saratoga StreetCity: Cohoes State: NY Zip Code: 12047Responsible Official or Agent: Jay Derman Phone: (518) 235-0401

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: Carol Lamb - Region 4
 R. Hannaford - Room 318
 Mark Wykes - ACHD
 DRA

Permit Administrator: <u>William Clarke</u>	
Address: <u>2176 Guilderland Avenue</u> <u>Schenectady, New York 12306</u>	
Signature: <u>William J. Clarke</u>	Date: <u>12/20/91</u>

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

MODIFICATION DATE: _____

During the period beginning EDPand lasting until EDP + 5 YEARS

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Non-Contact Cooling Water, Boiler Blowdown, Scrubber water from Kiln #1 and Storm Water Lagoon Overflow</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	0.5	1.0	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		5/Month	Grab
PCB Aroclor 1221	ND	ND ²		5/Month	Grab
PCB Aroclor 1232	ND	ND ²		5/Month	Grab
PCB Aroclor 1242	ND	ND ²		5/Month	Grab
PCB Aroclor 1248	ND	ND ²		5/Month	Grab
PCB Aroclor 1254	ND	ND ²		5/Month	Grab
PCB Aroclor 1260	ND	ND ²		5/Month	Grab
<u>Outfall 003 - Quarry Water</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Instantaneous
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Measurement Frequency	Sample Type
	Daily Ave.	Daily Max.			

Outfall 004 - Shale Fines Leachate

Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Barium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Beryllium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	NA	1.7	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		5/Month	Grab
PCB Aroclor 1221	ND	ND ²		5/Month	Grab
PCB Aroclor 1232	ND	ND ²		5/Month	Grab
PCB Aroclor 1242	ND	ND ²		5/Month	Grab
PCB Aroclor 1248	ND	ND ²		5/Month	Grab
PCB Aroclor 1254	ND	ND ²		5/Month	Grab
PCB Aroclor 1260	ND	ND ²		5/Month	Grab

Outfall 005 - Air Pollution Control Saline Water

Flow	Monitor	Monitor	GPD	Daily ¹	Grab
Solids, Total Suspended	25	45	mg/l	Daily ¹	Grab
Solids, Settleable	NA	0.3	ml/l	Daily ¹	Grab
Arsenic, Total	Monitor	Monitor	mg/l	Daily ¹	Grab
Cadmium, Total	NA	0.004	mg/l	Daily ¹	Grab
Chromium, Total	NA	1.7	mg/l	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	mg/l	Daily ¹	Grab
Copper, Total	NA	0.018	mg/l	Daily ¹	Grab
Lead, Total	NA	0.08	mg/l	Daily ¹	Grab
Mercury, Total	NA	0.0002	mg/l	Daily ¹	Grab
Nickel, Total	NA	1.8	mg/l	Daily ¹	Grab
Zinc, Total	NA	0.3	mg/l	Daily ¹	Grab

FOOTNOTES

- 1 = Samples shall be taken each day a discharge occurs.
- 2 = Each individual Aroclor shall be non-detectable by USEPA Method 608 with a MDL of 0.065ppb. See the Compliance Criteria for PCB's below.
- 3 = Representative composite consisting of a minimum of three samples (one at the beginning, middle, and end of the discharge period).
- 4= The permittee must make application prior to any increase in allowable metals concentration of the Waste Fuel Oil (LGF) which would ensure compliance with the effluent limits set forth in this permit.

Compliance Criteria for PCB's in SPDES permits

1. If one or more of the five samples are found to have a PCB concentration at or above the MDL, the permittee will be in non-compliance with the permit for the one month when the samples were taken.
2. If only one sample out of the five has a concentration greater than or equal to the MDL and less than the Practical Quantitation Limit (PQL = 4 x Approved MDL) the permittee may elect to analyze three additional samples collected and extracted earlier during the same one month period.
3. If all of the additional three samples are found to be less than the MDL, the permittee will be in compliance with the permit for the month.
4. If one or more of the additional three samples are found to exceed the MDL, the permittee shall be in non-compliance with the permit for the month.

Additional Special Conditions

1. The Permittee shall comply with DEC Consent Order (R4-0768-90-01), dated June 12, 1990 and approved plans dated June 12, 1990 to comply with dust control requirements.
2. The metals feed rate concentrations in the hazardous waste fuel (LGF) for Copper, Mercury, Nickel, Selenium, and Zinc shall remain at the previously permitted levels described below until such time as all applicable pre-increase requirements contained in the hazardous waste/air control permits and Consent Order(R4-0768-89-08) have been complied with and;

A Department approved wastewater treatment system has been installed and operating to the satisfaction of the Department; or,

The Department determines, based upon additional information submitted by the permittee, the acceptability of alternate control measures on an interim basis; or,

The Department determines, based on additional information submitted by the permittee the acceptability of a demonstration that effluent limitations set forth in this permit will not be exceeded by implementation of the proposed higher feed rate concentrations prior to the completion of construction and operation of the new wastewater treatment system required by this SPDES permit.

Feed Rate Concentrations (LGF)

PPM

<u>PARAMETER</u>	<u>CURRENT CONCENTRATIONS</u>	<u>PROPOSED CONCENTRATIONS</u>
Copper	200	1000
Mercury	4.5	45
Nickel	440	600
Selenium	0.36	25
Zinc	100	1000

Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).

Outfall 005 - Air Pollution Control Saline Water

Barium, Total	0.40	MG/L	Weekly	Grab
Beryllium, Total	0.010	MG/L	Weekly	Grab
Selenium, Total	0.30	MG/L	Weekly	Grab

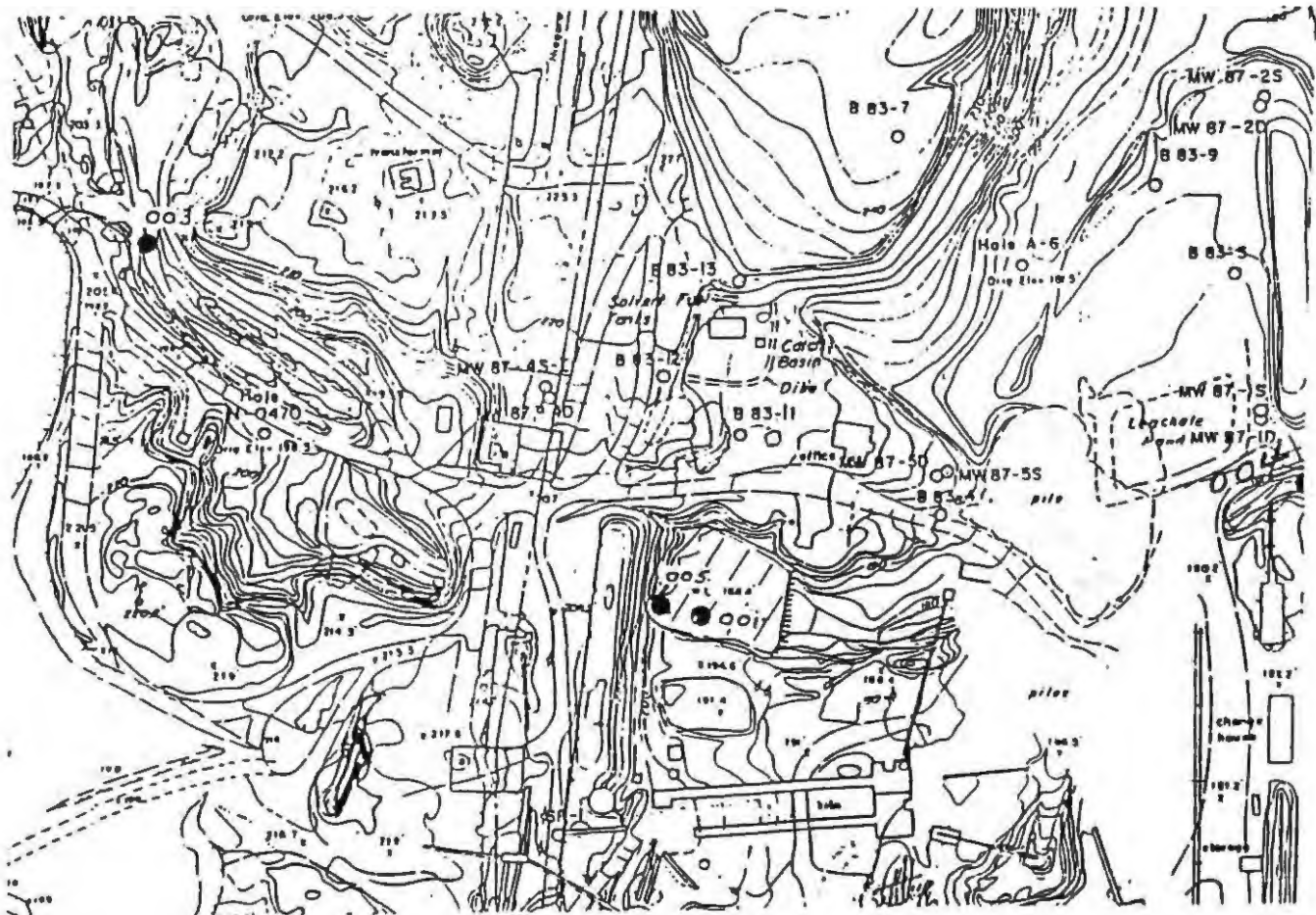
Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).



SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

Action Code	Outfall Number(s)	Compliance Action	Due Date
001 004 005		<p>The permittee shall submit an approvable Engineering Report which provides a final and comprehensive description of the wastewater problem(s) and proposed solution(s) including applicable design criteria. The Engineering Report shall contain the basic elements as described in the Bureau of Wastewater Facilities Design's <u>Industrial Wastewater Treatment Facilities</u> (see attached). The wastewater shall be characterized for Dioxins using USEPA Method 613, in addition to permit parameters (metals, PCB Individual Aroclors). The wastewater characterization shall adequately reflect the spectrum of operating conditions. Consideration should be given to account for contribution from both kilns once the additional air pollution control system is installed and low grade fuels are allowed. If the proposed solution is other than direct discharge to waters of the state, a letter of intent for approval from the appropriate authority must be included in the report for it to be considered approvable.</p>	EDP + 3 mos.
		<p>The permittee shall submit revised Best Management Plan (BMP) which incorporates comments as attached.</p>	EDP + 3 mos.

- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the General Conditions (Part II), Section 5. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. A description or any factors which tend to explain or mitigate the non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

Action Code	Outfall Number(s)	Compliance Action	Due Date																				
001 004 005		Submit an approveable Work Plan to conduct a Method Detection Limit (MDL) Study in accordance with 40 CFR 136, Appendix B utilizing the following analytical methods:	EDP + 1 mo.																				
		<table border="0"> <thead> <tr> <th><u>Parameter</u></th> <th><u>USEPA Method</u></th> </tr> </thead> <tbody> <tr> <td>Cadmium, Total</td> <td>213.2</td> </tr> <tr> <td>Chromium, Hexavalent</td> <td>220.2</td> </tr> <tr> <td>Mercury, Total</td> <td>245.1 or 245.2</td> </tr> <tr> <td>PCB Aroclor 1026</td> <td>608</td> </tr> <tr> <td>" 1221</td> <td>608</td> </tr> <tr> <td>" 1232</td> <td>"</td> </tr> <tr> <td>" 1242</td> <td>"</td> </tr> <tr> <td>" 1248</td> <td>"</td> </tr> <tr> <td>" 1254</td> <td>"</td> </tr> </tbody> </table>	<u>Parameter</u>	<u>USEPA Method</u>	Cadmium, Total	213.2	Chromium, Hexavalent	220.2	Mercury, Total	245.1 or 245.2	PCB Aroclor 1026	608	" 1221	608	" 1232	"	" 1242	"	" 1248	"	" 1254	"	
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" 1232	"																						
" 1242	"																						
" 1248	"																						
" 1254	"																						
		The permittee shall submit approvable plans and specifications for construction of the wastewater treatment plant as approved in the Engineering Report	EDP + 6mos.																				
		Begin Construction of the wastewater treatment plant	EDP + 8 mos.																				
		Complete Construction of the wastewater treatment plant	EDP + 20 mos.																				
		Achieve Operational level of the wastewater treatment	EDP + 21 mos.																				
		Submit an approvable final report outlining the results of the MDL study.	EDP + 24 mos.																				

- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the General Conditions (Part II), Section 5. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. A description of any factors which tend to explain or mitigate the non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also;
- [X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the original (top sheet) of each DMR page to:

Department of Environmental Conservation
 Division of Water
 Bureau of Wastewater Facilities Operations
 50 Wolf Road
 Albany, New York 12233-3506
 Phone: (518) 457-3790

Albany County Health Department
 Division of Environmental Health
 South Ferry & Green Streets
 Albany, NY 12201

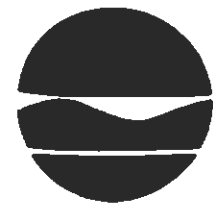
Send the first copy (second sheet) of each DMR page to:

Department of Environmental Conservation
 Regional Water Engineer
 2176 Guilderland Avenue
 Schenectady, NY 12306

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [] Regional Water Engineer and/or [] County Health Department or Environmental Control Agency listed above.
- d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.
- g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller State Plaza, Albany, New York 12201

DRA File

New York State Department of Environmental Conservation
2176 Guilderland Avenue, Schenectady, New York 12306
Office (518) 382-0680
Fax Number (518) 382-1065



December 18, 1991

Thomas C. Jorling
Commissioner

Mr. Jay D. Derman
Executive Vice-President
Norlite Corporation
P.O. Box 694
628 Saratoga Street
Cohoes, New York 12047

RE: DEC #4-0103-16/20-0
SPDES MOD,REN
Cohoes-C, Albany Co.

Dear Mr. Derman:

After review of the submittals made by Norlite regarding effluent discharges at the Cohoes facility including the treatability study and evaluation of alternatives, the Department has revised the SPDES permit (which was modified on 1/23/91 and again on 6/7/91) and is issuing this Notice of Intent to Modify this permit with this letter. A "Fact Sheet" prepared by Carol Lamb LaFay of our Division of Water which discusses the rationale for the limits and responds to the requests made by Norlite is enclosed along with a guidance document on the permittee's preparation and the Department's approval of wastewater treatment facilities. Pursuant to 6NYCRR621 you have 15 days to object and/or request a hearing with the modification to be issued after January 4, 1992 if we do not hear from you before then or no objection requesting a hearing is made.

It should be remembered that Norlite is still bound by Consent Order #R4-0768-90-1 which required abatement of effluent discharge limitation violations and that Norlite continues to violate its permit. It is, therefore, extremely important and necessary that Norlite commence compliance with the conditions in this modified permit and adhere to the compliance schedule in it.

Regarding the pending SPDES renewal, we are proceeding to public notice on a renewal permit. Assuming there are no public comments which would cause us to consider changes or a public hearing then, we would intend to issue the enclosed permit for 5 years after the close of the public comment period. Please make arrangements for publication of the enclosed notice in the Albany Times Union at least once in the first week of publication.

My hope is that this action will resolve this matter and move us forward to abating these effluent discharge exceedances. If you have any questions or need further clarification, please feel free to contact either Carol Lamb-LaFay or myself.

Sincerely Yours,



William J. Clarke
Regional Permit Administrator
Region 4

NORLI20P.B01
cc:C.Lamb-LaFay
D.Faul

FACT SHEET

PCB MONITORING FREQUENCY

The monitoring frequency for PCB's at Outfalls 001 and 004 has been increased from "Monthly" to "5/Month" with a footnote discussing compliance criteria for PCB analyses. This reflects the Division of Water's current policy and avoids excessive violations of the permit due to false positive results.

LANDFILL LEACHATE

The draft limits for Arsenic, Barium, Beryllium and Selenium have been replaced with "Monitoring Only". The original draft limits were technology based limits from Outfall 001. The technology based limit was applied either in the absence of a standard for these parameters or where the proposed technology limit was more stringent than the standard. The derivation of the technology based limits in the existing permit is unknown. Since Outfall 004 is a new outfall, it is not restricted by the anti-backsliding rule and imposing effluent limits is not appropriate until additional information is available.

OUTFALL 005 - AIR POLLUTION CONTROL SALINE WATER

The results of the short term monitoring reported in the Engineering Report submitted in May 1991 were reviewed and compared to water quality based effluent limits. Effluent limits, equal to the water quality standards for class D streams, were applied for Cadmium, Chromium (Hexavalent & Total), Copper, Lead, Mercury, Nickel, and Zinc because the short term monitoring indicated their presence in the effluent at significant levels. Action levels were applied to Barium, Beryllium and Selenium because they were present at levels below treatability and water quality. Since the short term monitoring did not include PCB's, they will not be added to the effluent limits for this outfall at this time. However, sampling and testing for PCB's will be required as part of the compliance schedule.

NEW COMPLIANCE SCHEDULE

1] Since Norlite has raised objections to effluent limits

based on the argument that matrix interferences in the waste streams elevate detection limits to above the permit limits, a Method Detection Limit (MDL) Study has been included for Cadmium, Chromium, Mercury, and PCB's. The limits for all parameters were compared to the MDL and PQL listed in the DOW's Analytical Detectability and Quantitation Guidelines. The limits for these parameters fell between the MDL and PQL and may be questionable. The permittee is required to submit the work plan within 1 month of permit issuance. The study should be performed on a representative effluent. Since treatment is clearly indicated, the results of the study are to be submitted 3 months after the treatment plant has stabilized.

- 2] The compliance schedule allows 20 months for construction of a treatment plant. Results of the high intensity monitoring and treatability study indicates that the waste streams will require extensive treatment to meet the permit limits. If the permittee wishes to pursue other means of disposal, a letter of intent must be included in the Engineering Report for it to be considered approvable. This language is included in the compliance schedule such that Norlite is aware that if a report is submitted without the letter of intent from the proper authority, or a detailed design of a treatment system, it will be in violation of the SPDES permit.
- 3] The compliance schedule requires wastewater characterization in the form of short-term monitoring. While the Engineering Report submitted in May 1991, has results for metals analyses, the wastewater needs to be further characterized for PCBs and Dioxins. Dioxins are impurities of PCB oils and incomplete combustion by-products. Since Norlite burns low grade fuels with PCBs, it is possible that Dioxins are present in the waste streams. The wastewater characterization should be sufficient to reflect the spectrum of operating conditions such that a treatment system can be designed to handle variations due to the type of fuel burned. Consideration should be given to account for the contribution of contaminants from Kiln #1 once the air pollution Control System is installed. Consideration should also be given to account for the contribution of additional metals concentrations as a result of higher metals concentrations in the waste fuel as requested in the air permit application. Since metals tend to concentrate in the wastestreams discharged under SPDES, increased metals concentrations of the waste fuel cannot be allowed until a treatment system, capable of handling the increased loadings

is operational.

- 4.] The compliance schedule requires a revised Best Management Plan to be submitted within 3 months of issuance of the permit. While the Management Plan submitted on July 31, 1991, appears adequate regarding the total runoff from the site, it does not satisfy the intent of the Consent Order (R4-0768-90-01). The Order specifically requires that, in addition to total site runoff, the BMP evaluate the potential for release of significant amounts of kiln dust, silt, and shale fines from operations and disturbance via fugitive dust emissions control, waste handling, and disposal, drainage from raw material storage (this would include coal storage), process operations, quarrying, and all other portions of the facility. The BMP should be a comprehensive document which evaluates all activities of the entire site.

The Plan also fails to review all facility components or operations (as defined in paragraph b of the Consent Order) to evaluate the potential for the release of significant amounts of pollutants to waters of the State.

Although the document submitted to the Department states that the review entailed all process and production components including material storage areas; transfer, process and material handling areas; loading and unloading operations; process operations, and waste storage and disposal areas, the BMP only discusses total site runoff.

The BMP should be revised such that the requirements of the Consent Order are satisfied. The Compliance Schedule allows for 3 months for the BMP to be revised.

The draft permit cannot be revised for the following items which were requested by Norlite:

MONITORING FREQUENCY

The results of the high intensity monitoring submitted under the Engineering Report of May 1991, indicate a wide variation in contaminant concentrations from day to day. Monitoring frequency may be reduced once a treatment plant is on line since the wastestream will be of a more consistent nature.

HARDNESS BASED EFFLUENT LIMITS

The draft permit contains water quality based effluent which were calculated using 100 mg/l which is the measured

hardness of the Hudson River. In situations where stream specific data is not available, a 100 mg/l hardness is used to calculate the in stream standard. Norlite has requested that water quality based effluent limits be recalculated using a hardness value representative of the Salt Kill. The limits could be changed if Norlite submits in-stream hardness data for the Salt Kill. The data submitted by Norlite was inappropriate as discussed in our comments, dated August 7, 1991 regarding the Engineering Report. The permit will not be modified until appropriate data is submitted.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
 Special Conditions (Part I)



Industrial Code: 1422
 Discharge Class (CL): 01
 Toxic Class (TX): T
 Major Drainage Basin: 13
 Sub Drainage Basin: 01
 Water Index Number: H-239
 Compact Area: _____

SPDES Number: NY-0004880
 DEC Number: 4-0103-16/20-0
 Effective Date (EDP): 04/01/87
 Expiration Date (ExDP): 04/01/92
 Modification Date(s): _____
 Attachment(s): General Conditions (Part II) Date: / /

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.) (hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Attention: Jay Derman, Executive VP

Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Norlite Corporation
 Location (C,T,V): Cohoes (C) County: Albany
 Facility Address: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 NYTM - E: _____ NYTM - N: 4
 From Outfall No.: 001 at Latitude: 42° 45' 14" & Longitude: 73° 40' 20"
 into receiving waters known as: Salt Kill Creek Class: D

and: (list other Outfalls, Receiving Waters & Water Classifications)

- | | | |
|-----|-----------------|---|
| 003 | Salt Kill Creek | D |
| 004 | Salt Kill Creek | D |
| 005 | Salt Kill Creek | D |

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 Responsible Official or Agent: Jay Derman Phone: (518)235-0401

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: Carol Lamb - Region 4
R. Hannaford - Room 318
Mark Wykes - ACHD
DRA

Permit Administrator: <u>William Clarke</u>	
Address: <u>2176 Guilderland Avenue</u> <u>Schenectady, New York 12306</u>	
Signature: _____	Date: <u>/ /</u>

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

MODIFICATION DATE: _____

During the period beginning EDPand lasting until EDP + 5 YEARS

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Non-Contact Cooling Water, Boiler Blowdown, Scrubber water from Kiln #1 and Storm Water Lagoon Overflow</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	0.5	1.0	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		5/Month	Grab
PCB Aroclor 1221	ND	ND ²		5/Month	Grab
PCB Aroclor 1232	ND	ND ²		5/Month	Grab
PCB Aroclor 1242	ND	ND ²		5/Month	Grab
PCB Aroclor 1248	ND	ND ²		5/Month	Grab
PCB Aroclor 1254	ND	ND ²		5/Month	Grab
PCB Aroclor 1260	ND	ND ²		5/Month	Grab

Outfall 003 - Quarry Water

Flow	Monitor	Monitor	GPD	Daily ¹	Instantaneous
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab

Outfall Number & Effluent Parameter	Discharge Limitations			Measurement Frequency	Sample Type
	Daily Ave.	Daily Max.	Units		

Outfall 004 - Shale Fines Leachate

Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Barium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Beryllium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	NA	1.7	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	Monitor	Monitor	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		5/Month	Grab
PCB Aroclor 1221	ND	ND ²		5/Month	Grab
PCB Aroclor 1232	ND	ND ²		5/Month	Grab
PCB Aroclor 1242	ND	ND ²		5/Month	Grab
PCB Aroclor 1248	ND	ND ²		5/Month	Grab
PCB Aroclor 1254	ND	ND ²		5/Month	Grab
PCB Aroclor 1260	ND	ND ²		5/Month	Grab

Outfall 005 - Air Pollution Control Saline Water

Flow	Monitor	Monitor	GPD	Daily ¹	Grab
Solids, Total Suspended	25	45	mg/l	Daily ¹	Grab
Solids, Settleable	NA	0.3	ml/l	Daily ¹	Grab
Arsenic, Total	Monitor	Monitor	mg/l	Daily ¹	Grab
Cadmium, Total	NA	0.004	mg/l	Daily ¹	Grab
Chromium, Total	NA	1.7	mg/l	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	mg/l	Daily ¹	Grab
Copper, Total	NA	0.018	mg/l	Daily ¹	Grab
Lead, Total	NA	0.08	mg/l	Daily ¹	Grab
Mercury, Total	NA	0.0002	mg/l	Daily ¹	Grab
Nickel, Total	NA	1.8	mg/l	Daily ¹	Grab
Zinc, Total	NA	0.3	mg/l	Daily ¹	Grab

FOOTNOTES

- 1 = Samples shall be taken each day a discharge occurs.
- 2 = Each individual Aroclor shall be non-detectable by USEPA Method 608 with a MDL of 0.065ppb. See the Compliance Criteria for PCB's below.
- 3 = Representative composite consisting of a minimum of three samples (one at the beginning, middle, and end of the discharge period).

Compliance Criteria for PCB's in SPDES permits

1. If one or more of the five samples are found to have a PCB concentration at or above the MDL, the permittee will be in non-compliance with the permit for the one month when the samples were taken.
2. If only one sample out of the five has a concentration greater than or equal to the MDL and less than the Practical Quantitation Limit (PQL = 4 x Approved MDL) the permittee may elect to analyze three additional samples collected and extracted earlier during the same one month period.
3. If all of the additional three samples are found to be less than the MDL, the permittee will be in compliance with the permit for the month.
4. If one or more of the additional three samples are found to exceed the MDL, the permittee shall be in non-compliance with the permit for the month.

Additional Special Conditions

1. The Permittee shall comply with DEC Consent Order (R4-0768-90-01), dated June 12, 1990 and approved plans dated June 12, 1990 to comply with dust control requirements.
2. The metals feed rate concentrations in the hazardous waste fuel (LGF) for Copper, Mercury, Nickel, Selenium, and Zinc shall remain at the previously permitted levels described below until such time as all applicable pre-increase requirements contained in this permit and Consent Order (R4-0768-89-08) have been complied with and;
HAZARDOUS WASTE/AIR POLLUTION CONTROL

A Department approved wastewater treatment system has been installed and operating to the satisfaction of the Department; or,

The Department determines, based upon additional information submitted by the permittee, the acceptability of alternate control measures on an interim basis; or,

* A Demonstration that effluent limitations set forth in this permit will not be exceeded by implementation of these higher feed rate concentrations prior to the completion of construction and operation of the new wastewater treatment system required by the ~~1989~~ permit.
15

Feed Rate Concentrations (LGF)

<u>PARAMETER</u>	<u>PPM</u> <u>CURRENT LIMIT</u>	<u>NEW LIMIT</u>
Copper	200	1000
Mercury	4.5	45
Nickel	440	600
Selenium	0.36	25
Zinc	100	1000

* THE DEPARTMENT DETERMINES, BASED UPON ADDITIONAL INFORMATION SUBMITTED BY THE PERMITTEE THE ACCEPTABILITY OF

Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below:
(Show locations of outfalls with sketch or flow diagram as appropriate).

Outfall 005 - Air Pollution Control Saline Water

Barium, Total	0.40	MG/L	Weekly	Grab
Beryllium, Total	0.010	MG/L	Weekly	Grab
Selenium, Total	0.30	MG/L	Weekly	Grab

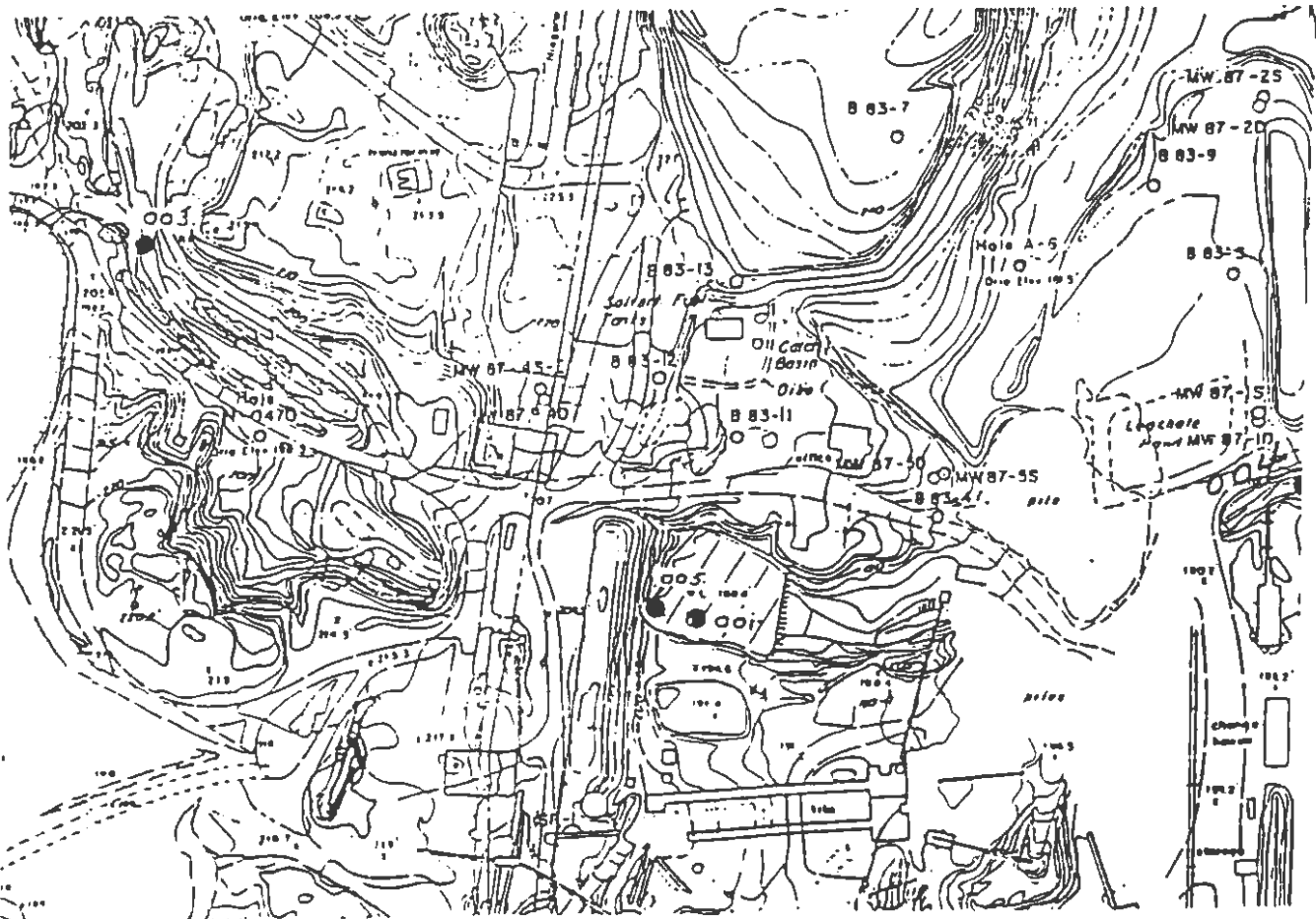
Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).



SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

Action Code	Outfall Number(s)	Compliance Action	Due Date
	001 004 005	<p>The permittee shall submit an approvable Engineering Report which provides a final and comprehensive description of the wastewater problem(s) and proposed solution(s) including applicable design criteria. The Engineering Report shall contain the basic elements as described in the Bureau of Wastewater Facilities Design's, <u>Industrial Wastewater Treatment Facilities</u> (see attached). The wastewater shall be characterized for Dioxins using USEPA Method 613, in addition to permit parameters (metals, PCB Individual Aroclors). The wastewater characterization shall adequately reflect the spectrum of operating conditions. Consideration should be given to account for contribution from both kilns once the additional air pollution control system is installed and low grade fuels are allowed. If the proposed solution is other than direct discharge to waters of the state, a letter of intent for approval from the appropriate authority must be included in the report for it to be considered approvable.</p> <p>The permittee shall submit revised Best Management Plan (BMP) which incorporates comments as attached.</p>	<p>EDP + 3 mos.</p> <p>EDP + 3 mos.</p>

- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the General Conditions (Part II), Section 5. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. A description or any factors which tend to explain or mitigate the non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

Action Code	Outfall Number(s)	Compliance Action	Due Date																				
001 004 005		Submit an approveable Work Plan to conduct a Method Detection Limit (MDL) Study in accordance with 40 CFR 136, Appendix B utilizing the following analytical methods:	EDP + 1 mo.																				
		<table border="0"> <thead> <tr> <th><u>Parameter</u></th> <th><u>USEPA Method</u></th> </tr> </thead> <tbody> <tr> <td>Cadmium, Total</td> <td>213.2</td> </tr> <tr> <td>Chromium, Hexavalent</td> <td>220.2</td> </tr> <tr> <td>Mercury, Total</td> <td>245.1 or 245.2</td> </tr> <tr> <td>PCB Aroclor 1026</td> <td>608</td> </tr> <tr> <td>" 1221</td> <td>608</td> </tr> <tr> <td>" 1232</td> <td>"</td> </tr> <tr> <td>" 1242</td> <td>"</td> </tr> <tr> <td>" 1248</td> <td>"</td> </tr> <tr> <td>" 1254</td> <td>"</td> </tr> </tbody> </table>	<u>Parameter</u>	<u>USEPA Method</u>	Cadmium, Total	213.2	Chromium, Hexavalent	220.2	Mercury, Total	245.1 or 245.2	PCB Aroclor 1026	608	" 1221	608	" 1232	"	" 1242	"	" 1248	"	" 1254	"	
<u>Parameter</u>	<u>USEPA Method</u>																						
Cadmium, Total	213.2																						
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PCB Aroclor 1026	608																						
" 1221	608																						
" 1232	"																						
" 1242	"																						
" 1248	"																						
" 1254	"																						
		The permittee shall submit approvable plans and specifications for construction of the wastewater treatment plant as approved in the Engineering Report	EDP + 6mos.																				
		Begin Construction of the wastewater treatment plant	EDP + 8 mos.																				
		Complete Construction of the wastewater treatment plant	EDP + 20 mos.																				
		Achieve Operational level of the wastewater treatment	EDP + 21 mos.																				
		Submit an approvable final report outlining the results of the MDL study.	EDP + 24 mos.																				

- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the General Conditions (Part II), Section 5. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. A description or any factors which tend to explain or mitigate the non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also;
- [X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the original (top sheet) of each DMR page to:

Department of Environmental Conservation
 Division of Water
 Bureau of Wastewater Facilities Operations
 50 Wolf Road
 Albany, New York 12233-3506
 Phone: (518) 457-3790

Albany County Health Department
 Division of Environmental Health
 South Ferry & Green Streets
 Albany, NY 12201

Send the first copy (second sheet) of each DMR page to:

Department of Environmental Conservation
 Regional Water Engineer
 2176 Guilderland Avenue
 Schenectady, NY 12306

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [] Regional Water Engineer and/or [] County Health Department or Environmental Control Agency listed above.
- d) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.
- g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller State Plaza, Albany, New York 12201

NOTICE OF COMPLETE APPLICATION

Applicant: Norlite Corp.Date: 12/18/91Address: P.O. Box 694, 628 So. Saratoga St.
Cohoes, NY 12047Permits applied for and application numbers SPDES Permit Renewal - DEC #4-0103-16/20-0;
SPDES #NY0004880Project description and location. ~~Town~~ City of Cohoes County of Albany

Application for 5 year renewal of SPDES permit originally effective on 4/1/87, which has been modified with the most recent modification issued on 12/5/91, which requires a schedule for bringing discharges into the Salt Kill into compliance with permit effluent limitations and adds additional discharge limitations and monitoring requirements for substances in the air pollution control saline water discharge. No changes are proposed from this permit.

STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) DETERMINATION: (Check appropriate box)

- SEQR-1 Project is not subject to SEQR because it is an exempt, excluded or a Type II action.
- SEQR-2 Project is a Type I action and will not have a significant effect on the environment. A Negative Declaration is on file and a coordinated review with other agencies performed.
- SEQR-3 Project is an unlisted action and will not have a significant effect on the environment, a Negative Declaration is on file:
 A-coordinated review performed B-no coordinated review performed.
- SEQR-4 A draft environmental impact statement has been prepared on this project and is on file.
- SEQR-5 A final environmental impact statement has been prepared on this project and is on file.
- SEQR-6 Project is an Unlisted Action. Mitigation measure required by the Lead Agency will modify the proposed action so that no significant adverse environmental impacts will result. A Conditioned Negative Declaration is on file.

SEQR LEAD AGENCY _____

STATE HISTORIC PRESERVATION ACT (SHPA) DETERMINATION: (Check appropriate box)

- SHPA-0 The proposed project is not subject to SHPA review.
- SHPA-1 No registered, eligible or inventoried archeological or historic sites were identified at the project location.
- SHPA-2 Based on an assessment, the proposed project will not cause any change to registered, eligible or inventoried archeological or historic sites.
- SHPA-3 A cultural resources survey is on file. No archeological or historic sites were identified at the project location.
- SHPA-4 A cultural resources survey is on file. The NYS Office of Parks, Recreation and Historic Preservation has determined that the proposed activity will have no impact on registered or eligible archeological or historic sites.
- SHPA-5 A cultural resources survey is on file. The NYS Office of Parks, Recreation and Historic Preservation has determined that the proposed activity will have an impact on registered or eligible archeological or historic sites.

AVAILABILITY FOR PUBLIC COMMENT:

The application may be reviewed at the address to the right. Written comments on the project must be submitted to the Contact Person by no later than:

January 24, 1992

CONTACT PERSON:

William J. Clarke
Regional Permit Administrator
NYSDEC, Region 4
2176 Guilderland Avenue
Schenectady, NY 12306
(518) 382-0680

1. THIS IS NOT A PERMIT

2. This is to advise you that your application is complete and a review has commenced. Additional information may be requested from you at a future date, if deemed necessary, in order to reach a decision on your application.
3. Your project is classified MAJOR. Accordingly, a decision will be made within 90 days of the date of this Notice. If a public hearing is necessary, you will be notified within 60 days and the hearing will commence within 90 days of the date of this notice. If a hearing is held, the final decision will be made within 60 days after the hearing is completed.
4. Publication of this Notice in a newspaper is: required not required
If required, please consult the accompanying transmittal letter for further instructions.

Norlite Corporation



P.O. BOX 694 628 SO. SARATOGA ST. COHOES, N. Y. 12047 TEL.: (518) 235-0401

September 17, 1991

Mr. Tim S. Murphy
Permit Compliance Technician
Albany County Sewer District
P.O. Box 4187
Albany, New York 12204

Re: Norlite Corporation

Dear Mr. Murphy:

This letter is in response to your letter to me dated January 14, 1991 relating to Norlite's efforts to discharge to the Albany County Sewer District ("ACSD") process water. The process water is the blowdown discharge from the wet portion of Norlite's air pollution control system and its boiler blowdown. An updated permit application will be submitted in a week.

As you may recall, Norlite has recently upgraded its existing air pollution control system to install the best available control technology. That technology included the installation of a fabric filter for particulate removal coupled with a wet scrubber for acid gas control. The process water addressed in the permit application relates to the blowdown from the wet portion of the air pollution control system.

In your letter, you indicated that you thought that Norlite was directing its efforts to discharge to the ACSD without first investigating other, possibly more economical methods of disposal. You concluded that Norlite should generate more data on its waste stream to develop what type of pretreatment, if any, would be required prior discharge and pursue a direct discharge pursuant to SPDES prior to pursuing a discharge to ACSD. Finally, you have indicated that prior to being allowed to discharge to ACSD, Norlite would be required to construct a holding facility.

Consistent with your suggestions, Norlite applied for and obtained a SPDES permit. The SPDES permit established effluent limits and requires Norlite to meet those limits by November 30, 1991. Pursuant to the requirements in Norlite's SPDES permit, Norlite retained the services of Lawler, Matusky & Skelly Engineers ("LMS") to conduct additional testing on its effluent and to do an analysis of the discharge alternatives and treatment alternatives required to meet the SPDES limitations. In May, 1991, LMS

submitted a report to DEC on the treatment and discharge alternatives for the following three waste streams: scrubber water blowdown, landfill leachate; and boiler blowdown. A copy of that report is enclosed with this letter. That report includes the results of an intensive monitoring program on the boiler blowdown and scrubber water blowdown. For the boiler blowdown, that report recommends that it be discharged to the ACSD because Norlite cannot meet the copper limitation in its SPDES permit. An excerpt from the report containing the results of the intensive monitoring program for the boiler blowdown is attached as Exhibit A.

For the scrubber blowdown, that report recommended that a treatability study be conducted to determine the effectiveness of various suspended solid removal alternatives to meet the recommended limit for suspended solids in the SPDES permit and to achieve limitations on metals. An excerpt from the report on the scrubber blowdown which includes the results of the intensive monitoring program is included as Exhibit B.

On August 15, LMS issued to the DEC the results of the treatability study in a report entitled: "Report on Treatability of Air Pollution Control Saline Water." A copy of that report is also enclosed. That report concluded that because the Salt Kill offers no dilution of Norlite's scrubber blowdown during critical lowflow conditions, DEC is requiring that the chemical/physical quality of the water by itself, meet stringent steam standards. In order to meet the present SPDES permit limitations, the scrubber blowdown would have to be subject to complex treatment including (1) pH adjustment, (2) possible coagulation, (3) filtration and (4) pH neutralization. The filter backwash would require further treatment. Additionally, the discharge temperature would have to be reduced. Moreover, when the Salt Kill is reclassified to a C stream, the effluent would have to be treated for removal of dissolved solids. LMS concluded that reverse osmosis would not be feasible technique to achieve the dissolved solids removal. The potential treatment alternatives for removal of dissolved solids identified on page 2 of your letter dated January 14, 1991 would not be possible due to the restrictions on such treatment under the New York State Hazardous Waste Regulations. LMS concluded that the only feasible solution is to discharge the scrubber blowdown to the ACSD.

The ACSD is rated at 35 MGD and currently operates at about 20-22 MGD which is approximately 1500 times Norlite's discharge with two operating kilns. The facility discharges to the Hudson River which has a low flow of approximately 2,000 MGD. Accordingly, Norlite's discharge should have no adverse impact on the treatment plant or the Hudson River. The treatability study report indicates that the scrubber blowdown is within the effluent limitations for industrial discharges in ACSD's Sewer Ordinance.

Although the suspended and settleable solid concentrations in the scrubber discharge appear satisfactory for discharges to sewers, LMS recommended that the wastewater be routed through a settling tank to ensure adequate quality in the future and to provide opportunity for sampling prior to discharge. This recommendation is consistent with the recommendation No. 3 in your letter on January 14, 1991.¹

Under its current SPDES permit, Norlite must be in compliance with the effluent standards in its current SPDES permit by November 30, 1991. In addition, Norlite is under an obligation to submit construction plans for its treatment alternative by October 1, 1991. Norlite has followed your recommendations and, at this time, believes its only option is to discharge to the ACSD. I'll be calling you in the near future to establish a meeting to discuss our application.

Sincerely,



Jay Derman

cc: Kevin Young (w/o enclosure)
Carol Lamb (w/o enclosure)
William Clarke (w/o enclosure)
Stuart Bassell (w/o enclosure)
Mark Wyckes (w/o enclosure)

¹ In your letter dated January 14, 1991, you reported that your sample of the scrubber blowdown had a TSS concentration of 19,240 mg/l. This finding was a result of leakage of particulates around a faulty gasket in the new baghouse; the particulates were then captured in the scrubber and discharged with the blowdown into our settling pond. We have completed our shakedown of the baghouse and corrected the situation with the gasket. A sample of the blowdown recently collected by LMS contained 708 mg/l TSS and 2.5 ml/l settleable solids. (See attached treatability study.) The settling tank recommended by LMS will guard against any future blow-by, should this ever occur, and based on the treatability studies, reduce TSS to below 300 mg/l.

Norlite Corporation



P.O. BOX 694 628 SO. SARATOGA ST. COHOES, N. Y. 12047 TEL.: (518) 235-0401

June 14, 1990

New York State Department of
Environmental Conservation
2176 Guilderland Avenue
Schenectady, New York 12306

Attn: Mr. Eldred Rich, P.E.
Regional Engineer



Dear Mr. Rich:

Enclosed please find three (3) copies of the following information being submitted as specified in the proposed Order-on-Consent, R4-0768-90-01, currently under negotiation between the Department and Norlite Corporation.

1. Outfall 001 - (Mid-Pond Discharge)
Engineering Plan and schedule as prepared by Bradley Engineering, P.C.
2. Outfall 003 - (Quarry Discharge)
Engineering Plan and schedule as prepared by Bradley Engineering, P.C.
3. Outfall 004 - (Leachate Collection and Discharge)
Description of the leachate collection system as included in the Part 360 application prepared by Dunn Geoscience Corp.
4. Outfall 005 - (Blowdown from Air Pollution Control System)
Rotary kiln Engineering Flow Diagram and Air Control System Engineering Flow Diagram both prepared by Bradley Engineering, P.C. As shown, the continuous blowdown and overflow from the recycle tank would utilize this outfall.

If you have questions on any of the items included, please feel free to contact me at your convenience.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. Derman".

JAY D. DERMAN
Executive Vice President

Enc.



DUNN
GEOSCIENCE CORP.

12 METRO PARK RD. •
ALBANY, NEW YORK 12205
518/458-1313
FAX 518/458-2472

June 13, 1990

Mr. Jay Derman
Norlite Corporation
628 South Saratoga Street
Cohoes, New York 12047

Dear Jay:

Attached please find six copies of the specification information and prints with respect to the Norlite Shale Fines Disposal Facility's leachate collection system. The specification information was taken from DUNN's specifications for the disposal facility dated April 3, 1986.

If you have any questions please contact me.

Sincerely,

Daniel M. McDermid
Construction Engineer

DMM:mk
Attachment

Norlite Corporation



P.O. BOX 694 628 SO. SARATOGA ST. COHOES, N. Y. 12047 TEL.: (518) 235-0401

February 28, 1990

Department of Health
Albany County
South Ferry and Green Sts.
Albany, NY 12201

Attn: Mr. Stephen S. Lukowski, P.E., Director
Div. of Environmental Health Services

Dear Mr. Lukowski:

As outlined in previous correspondence from Mr. Ganley of the Department of Health as well as a result of our recent meeting with the Albany County Sewer District, enclosed please find a request to modify Norlite's existing SPDES permit, NY-0004880.

By copy of this letter, we are also forwarding a copy of this request to Mr. Don Bell at Region #4, NYSDEC.

Your assistance in this matter is greatly appreciated. If you have any questions, please feel free to contact me at your convenience.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Jay D. Derman".

Jay D. Derman
Executive Vice President

cc: Mr. Don Bell, P.E., NYSDEC, Reg. 4



APPLICATION FORM "C" FOR A STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) PERMIT INDUSTRIAL OR MINING

1. APPLICANT DATA	
APPLICATION TYPE <input type="checkbox"/> New <input type="checkbox"/> Renewal <input checked="" type="checkbox"/> Modification	IF RENEWAL OR MODIFICATION, GIVE PREVIOUS APPLICATION NO., EFFECTIVE DATE, EXPIRATION DATE No. NY-0004880 Effective Date 4/1/87 Expiration Date 4/1/92
OWNER'S NAME (Corporate, Partnership or Individual) Norlite Corporation	TYPE OF OWNERSHIP <input checked="" type="checkbox"/> Corporate <input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Public
OWNER'S MAILING ADDRESS (Street, City, State, Zip Code) 628 South Saratoga Street Cohoes, NY 12047	
REFER ALL CORRESPONDENCE TO: (Name, Title and Address) J. Derman, Exec. Vice President, 628 S. Saratoga St., Cohoes, NY 12047	
FACILITY NAME Norlite Corporation	FACILITY LOCATION (Street or Road) 628 S. Saratoga St.
COUNTY Albany	TELEPHONE NO. (Include Area Code) 518 235 0401
GIVE EXPLICIT DIRECTIONS TO LOCATION, If Necessary	
NATURE OF BUSINESS OR TYPE OF FACILITY Manufacturer of expanded shale lightweight aggregate	NO. OF EMPLOYEES NO. OF SHIFTS 45 3
2. IF ALL YOUR WASTE IS DISCHARGED TO A PUBLICLY OWNED WASTE TREATMENT FACILITY AND/OR A LICENSED WASTE SCAVENGER AND TO THE BEST OF YOUR KNOWLEDGE YOU ARE NOT REQUIRED TO OBTAIN AN SPDES PERMIT, COMPLETE THIS SECTION ONLY, SIGN APPLICATION AND RETURN.	
AND/OR	
NAME AND ADDRESS OF MUNICIPALITY RESPONSIBLE FOR RECEIVING WASTE	NAME AND ADDRESS OF LICENSED WASTE SCAVENGER
3. PRODUCTION DATA (Use additional forms, if necessary)	
PRINCIPAL TYPES OF PROCESSING DONE AT THIS FACILITY Expanded shale lightweight aggregate manufactured by the Rotary Kiln process. Facility activities include quarrying of shale rock, primary crushing/screening of shale rock; thermal expansion of the shale by the rotary kiln process, and final crushing/sizing, storage and shipment of the lightweight aggregate product.	
PRINCIPAL PRODUCTS AND AMOUNTS PRODUCED PER TIME UNIT	RAW MATERIALS AND AMOUNTS CONSUMED PER TIME UNIT
1. Expanded shale lightweight aggregate 250,000 tons/yr	1. Raw Shale 325,000 tons/yr
2.	2.
3.	3.
4.	4.
5.	5.
4. DOES ANY OF YOUR DISCHARGES CONTAIN OR IS IT POSSIBLE FOR ANY DISCHARGE TO CONTAIN ONE OR MORE OF THE FOLLOWING SUBSTANCES ADDED AS A RESULT OF YOUR OPERATIONS, ACTIVITIES OR PROCESSES?	
<input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Arsenic <input type="checkbox"/> Boron <input checked="" type="checkbox"/> Chromium <input type="checkbox"/> Fluorides <input checked="" type="checkbox"/> Lead <input checked="" type="checkbox"/> Nickel <input checked="" type="checkbox"/> Selenium <input type="checkbox"/> Tin <input type="checkbox"/> Ammonia <input checked="" type="checkbox"/> Barium <input checked="" type="checkbox"/> Cadmium <input checked="" type="checkbox"/> Copper <input type="checkbox"/> Gold <input type="checkbox"/> Manganese <input type="checkbox"/> Oil & Grease <input type="checkbox"/> Silver <input checked="" type="checkbox"/> Zinc <input type="checkbox"/> Antimony <input checked="" type="checkbox"/> Beryllium <input type="checkbox"/> Chlorine <input type="checkbox"/> Cyanide <input type="checkbox"/> Iron <input checked="" type="checkbox"/> Mercury <input type="checkbox"/> Phenols <input type="checkbox"/> Sulfides <input type="checkbox"/> Corrosion control chemicals (specify) _____	
<input checked="" type="checkbox"/> Halogenated organics or halogenated hydrocarbons (e.g. chlorinated, fluorinated or brominated) (specify) <u>Please see explanation attached</u>	
<input type="checkbox"/> Herbicides or pesticides (specify) _____	
<input type="checkbox"/> Radioactivity (specify) _____	
<input type="checkbox"/> Slimeicides, biocides or algacides (specify) _____	
<input checked="" type="checkbox"/> Substituted aromatics (e.g. derivatives of benzene, pyridene, biphenyl, naphthalene, coal or petroleum tar, etc.) (specify) <u>Please see explanation attached</u>	
<input type="checkbox"/> Surfactants (specify) _____	
<input type="checkbox"/> None of the above	
Specify the trade names and manufacturer of any chemicals used at this facility which are not listed above and whose specific constituents are not known to you. <u>Nalco Transport plus 2802 used for boiler water treatment</u>	
Explanation of above: (Attach additional sheets, If necessary) _____	

WASTE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal point?

The residuals from the air pollution control system (N-899: Shale Fines) are utilized at the Town of Colonie Landfill for daily cover and/or other uses.

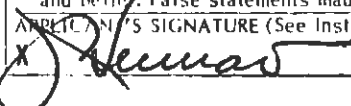
6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO. 001	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input checked="" type="checkbox"/> Expansion	TYPE OF WASTE Non-Contact Cooling Water, Stormwater & Boiler Blowdowns	TYPE OF TREATMENT (If none, so state) None
DESIGN FLOW 21,000 Gal/Day	ACTUAL FLOW Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Batch	IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments	
PERIOD OF DISCHARGE 12 Months per year		As Required Days per week	As Required Hours per day	
SURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of Receiving Waters Salt Kill Creek		Classification D	Waters Index No. H-239
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water		Distance Ft.	SOIL TYPE Depth to Water Table
OUTFALL NO. 003	<input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Quarry Water	TYPE OF TREATMENT (If none, so state) None
DESIGN FLOW 200,000 Gal/Day	ACTUAL FLOW Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Batch	IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments	
PERIOD OF DISCHARGE As Required Months per year		As Required Days per week	As Required Hours per day	
SURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of Receiving Waters Salt Kill Creek		Classification D	Waters Index No. H-239
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water		Distance Ft.	SOIL TYPE Depth to Water Table
OUTFALL NO. 004	<input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Shale Fines Leachate	TYPE OF TREATMENT (If none, so state) None
DESIGN FLOW 6500 Gal/Day	ACTUAL FLOW 3000 Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Batch	IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments	
PERIOD OF DISCHARGE 12 Months per year		As Required Days per week	As Required Hours per day	
SURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of Receiving Waters Salt Kill Creek		Classification D	Waters Index No. H-239
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water		Distance Ft.	SOIL TYPE Depth to Water Table
OUTFALL NO. 005	<input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Air Pollution Control Saline Water	TYPE OF TREATMENT (If none, so state) None
DESIGN FLOW 14400 Gal/Day	ACTUAL FLOW 8640 Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch	IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments	
PERIOD OF DISCHARGE 12 Months per year		7 Days per week	24 Hours per day	
SURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of Receiving Waters Salt Kill Creek		Classification D	Waters Index No. H-239
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water		Distance Ft.	SOIL TYPE Depth to Water Table

7. COMMENTS:

PLEASE SEE COMMENTS ATTACHED

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)  Date 2/28/90 Printed Name JAY DERMAN Title EXEC. VICE PRESIDENT

Q 4 - EXPLANATION

The raw shale rock which is the sole raw material of the process is a naturally occurring non-metallurgical mineral which may contain de minimis quantities of the elements or substances listed.

The thermal expansion of the raw shale is an energy intensive process and utilizes a mix of fossil fuels (coal, #4 oil), natural gas and/or waste-derived or supplemental fuels consisting of spent solvents or used oils. The quality of these incoming fuels is controlled under Norlite's Waste Analysis Plan which is incorporated within Norlite's Part 373 Application.

A priority pollutant analysis of the settling pond water was conducted as part of the additional requirements of the SPDES permit. No priority pollutants were detected.

Q 7 - COMMENTS

Outfall 001: Non-Contact Cooling & Stormwater Lagoon Overflow

This existing outfall is the non-contact cooling and stormwater lagoon overflow. Currently, boiler blowdown is discharged to the settling pond and subsequently the settling pond is transferred to the mid-pond (non-contact cooling water reservoir) for discharge through outfall 001. With the elimination of the settling pond as a result of modifications to the air pollution control system, it is planned to route the steam boiler blowdown directly to the mid-pond, eliminating the settling pond, and then to discharge through outfall 001 as is currently the case.

Outfall 003 - Quarry Water

No changes requested to the existing permit.

Outfall 004 - Shale Fines Leachate

Outfall 004 is an addition to the existing SPDES permit. Norlite is in the construction phase of an on-site landfill and leachate collection system for the shale fines generated from its air pollution control systems. Leachate generated and collected will result from the shale fines placed in the landfill. Accordingly, the leachate should have the same characteristics as the water discharged from outfall 001 which emanates from the existing settling pond.

The discharge from this proposed outfall will be intermittent and controlled by a level operated pump located in a sump as part of the leachate collection system. It is anticipated that discharges will be limited to those times of the year during which excessive rainfall or snowmelt occur. Until the final cover is placed, leachate generation will be primarily a function of precipitation. After placement of final cover, leachate generation will be primarily a function of the rate at which the shale fines give up water. Until placement of final cover, leachate production is expected to range between 100,000 gallons per month in mid summer, to 200,000 gallons per month during the spring. Once the final cover has been placed, leachate production is expected to gradually reduce to 10,000 gallons per month after several years. The design flow has been based on this conservative estimate. The actual flow has been calculated using mid-summer rates.

Outfall 005 - Air Pollution Control Saline Water

Outfall 005 is an addition to the existing SPDES permit.

As a result of Norlite entering into an Order on Consent with the NYSDEC with respect to its Low Grade Fuel Program, Norlite is installing BACT as its air pollution control system for its kilns. As a result, Norlite will be improving its existing kiln air pollution control system with the installation of a fabric filter (baghouse) for additional particulate/dust removal concurrent with modifications to its existing wet scrubbing system to increase acid gas removal. The fabric filter control system will enable the particulate dust to be collected and handled in a dry manner and will allow Norlite to eliminate the settling pond. Water necessary for the "wet" components will be supplied upon a recycled basis from a 1,000 gallon storage tank attached to each kiln's control system. The settling lagoon will be eliminated. However, make-up water will be required to replace water lost due to evaporation and blowdown, with the blowdown necessary to maintain a constant dissolved solid concentration in the scrubbing liquid.

Outfall 005 is this continuous blowdown stream.

The blowdown discharge volume and composition were calculated under two worst-case scenarios depending on the type of fuel being utilized in the lightweight aggregate manufacturing process.

Under the first scenario, a fuel input of 3.5 tons per hour of 2% sulfur coal was assumed. The "wet" system would deliver 112 pounds per hour SO_2 . This would mix with 115 pounds per hour of soda ash (Na_2CO_3) used as the neutralizing agent and form 220 pounds per hour of sodium sulfite (Na_2SO_3). This 220 pounds per hour of Na_2SO_3 at a 10% solution would amount to 4.4 gpm per kiln of blowdown.

Alternately, if Low Grade Fuel was utilized as fuel at a rate of 12 gpm, 3% organic halogen content and a specific gravity of 0.88, the "wet" system would see 32.6 pounds per hour of HCl assuming an 80% capture in the fabric filter (baghouse).

This stream would be treated with Na_2CO_3 and would yield 52 pounds per hour of sodium chloride (NaCl) from the scrubber. At a 10% slurry coming from the blowdown, there would be 1.04 gpm per kiln being emitted by the blowdown of a 10% solution of NaCl.

Again, to be conservative, worst-case (maximum) fuel usage scenarios were used. Even at these conditions, and rounding upward for additional conservancy, the blowdown of the wet systems in both kilns would be 10 gpm (14,400 gallons per day) of process water containing up to 10% sodium sulfite (Na_2SO_3) or 2.5 gpm (3600 gallons per day) of process water containing up to 10% sodium chloride (NaCl).

New York State Department of Environmental Conservation
Region IV Headquarters, 2176 Guilderland Avenue,
Schenectady, NY 12306, (518) 382-0680

File



Thomas C. Jorling
Commissioner

October 29, 1987

Mr. Jay Derman, President
Norlite Corporation
P.O. Box 694
Cohoes, NY 12047

Re: Unfiltered Groundwater Testing
Incomplete SPDES Modification
Request, Facility NY-0004880

Dear Mr. Derman:

Your request of October 19, 1987 to Allan Geisendorfer to modify the collection procedure for groundwater samples has been determined to be after the allowable comment period indicated in the Department's August 3, 1987 permit modification cover letter and as further extended to August 17, 1987 by our agreement. Since Norlite is concerned that monitoring for total metals will upset the existing data base, we recommend you monitor for both total and soluble metals.

For a modification request to your permit to be considered complete it must include all supporting information as well as the formal request. At least one set of tests showing the results of both test methods appear necessary for a valid comparison. Until such time as the above information mentioned in this paragraph is submitted your request will be considered incomplete.

Sincerely,

David Stout

David Stout
Sr. Environmental Analyst

xc: Steve Lukowski, ACHD-DEHS
Skip Shoemaker, R4 DOW

DAG

Norlite Corporation



P O BOX 694 638 SO SARATOGA ST COHOES, N Y. 12047

TEL: (518) 235-0401

FAX: 5182350233

RECEIVED

OCT 21 1987

N. Y. STATE DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 4 OFFICE

October 19, 1987

Mr. Allan Geisendorfer
Sr. Sanitary Engineer
NYSDEC
Region 4
2176 Guilderland Avenue
Schenectady, NY 12306

Re: Norlite Corporation - SPDES Permit

Dear Mr. Geisendorfer:

Enclosed is a letter prepared by Dunn Geoscience Corporation, at my request, evaluating the recent permit modification that requires Norlite Corporation to analyze future groundwater samples on an unfiltered basis. Previously, Norlite has built a groundwater database which included only field filtered samples. Dunn Geoscience concluded that continuing with filtered samples will provide more information on the actual metal concentration in the groundwater.

Dunn's reasoning is site specific. The groundwater collected from Norlite's wells has been extremely turbid and not representative of actual groundwater conditions -- groundwater moving through the tight soils at Norlite moves at a low velocity and thus does not carry significant amounts of suspended matter. Monitoring wells have not yielded water free of turbidity despite development of the well by bailing to dryness prior to sampling. Dunn believes that the sediment in the samples is caused by temporary hydraulic gradients created during well evacuation and sample collection. Acid preservation of the sample without prior filtration will leach metals from the unfiltered sample sediment producing abnormally high metal concentrations that are not representative of the groundwater-sediment mixture. The analysis of unfiltered groundwater for metals will result in data variability from one sampling period to the next and will measure merely the amount of sediment that was carried into the water by the temporary hydraulic gradient caused by the sampling. The database created by the previous five rounds of monitoring filtered groundwater samples will be of little value.

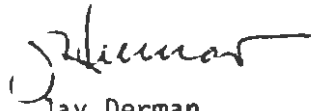
NYSDEC
Region 4
2176 Guilderland Avenue
Schenectady, NY 12306

Re: Norlite Corporation - SPDES Permit

Accordingly, Norlite requests that its SPDES permit be modified to require filtered groundwater samples, not unfiltered samples. We believe that site specific conditions at Norlite make unfiltered samples of questionable value.

Thank you for your consideration.

Sincerely,



Jay Derman
Executive Vice President

cc: D. Stout, NYSDEC, Reg. 4 ✓



12 METRO PARK RD. •
ALBANY, NEW YORK 12205
518-458-1313
FAX 518-458-2472

October 6, 1987

Mr. Jay Derman
Norlite Corporation
628 South Saratoga Street
Cohoes, New York 12047

Re: Filtered Groundwater Metals Analysis
Settling Pond Area

Dear Mr. Derman:

This letter presents Dunn Geoscience Corporation's (DGC) site-specific response to a requirement of the New York State Department of Environmental Conservation, Region 4, Solid and Hazardous Waste Division, stating that future groundwater metal analyses at Norlite Corporation's settling pond area be performed on unfiltered samples.

The probable reason for DEC's action is suspected adsorption of metals onto the filtercake, as well as any physical-chemical changes which would enhance an apparent loss of metals through precipitation or adsorption. There are on-going discussions in the literature as to the effect of filter pore size, pressure versus vacuum filtration, degassing of carbon dioxide, significance of the colloidal fraction and solid-liquid partitioning/equilibrium. However, what has not been evident in the literature is a method by which to normalize different samples over time and space with regard to the various solids fractions in a total matrix sample: settleable, suspended, dissolved, colloidal, total. In the event that total matrix metal analysis is still required at the settling pond area, DGC is prepared to discuss with you an appropriate protocol for assessing the metals content of site groundwater.

The settling pond monitoring wells (SP-1, -2, -3 and -4) at the Norlite facility are screened in fill and/or glaciolacustrine material characterized as moist to wet, medium to very stiff, brown or gray clay and silt. The

permeability of this layer is low and is probably associated with very slow groundwater movement.

Groundwater collected from these wells is extremely turbid and not representative of actual groundwater conditions; groundwater moving through such soils at low velocity does not carry suspended matter. Monitoring wells screened in the glaciolacustrine geologic material have not yielded turbidity free water despite development of the wells upon completion of construction and bailing to dryness prior to sampling. Sediment in the samples is caused by temporary hydraulic gradients created during well evacuation and sample collection which carry sediment into the well. Acid preservation of a sample without prior field filtration will leach metals from the unfiltered sample sediment load producing abnormally high metal concentrations that are representative only of the groundwater-sediment mixture. The analyses would not be representative of groundwater.

Analysis of a well's unfiltered groundwater for metals will result in data variability from one sampling period to the next. The varying amounts of sediment between wells and in individual wells during different sampling periods do not allow for comparison of metal results throughout the site. Filtration immediately following sample collection minimizes this variability.

The previous five rounds of monitoring have resulted in the development of a sizable data base for filtered metals. If the protocol was to change from filtered to unfiltered metals, the previous data would not be useful for comparison. The cost of developing a new data base is not justified in view of the questionable value of any total metals data collected from analysis of the geologic material in which the Norlite wells are placed.

Any potential metal contamination at the Norlite settling pond would most likely arise from shale fines and crushed shale. Total metal analyses of the crushed shale and settling pond fines (June 18, 1983) showed that the primary

October 6, 1987

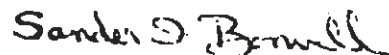
metals of potential concern are arsenic, cadmium, chromium, copper, lead, nickel, and zinc. DGC's experience with similar sites has shown that iron and manganese may also be parameters of concern. Analytical filtered metals data have indicated that only cadmium and manganese have exceeded groundwater standards; well SP-2 has exhibited slightly elevated cadmium levels and SP-2, -3 and -4 have revealed high manganese concentrations.

Groundwater samples at the Norlite facility have historically been field-filtered immediately following sample collection. This minimizes the potential for any physical or chemical changes associated with the removal of the sample from the ground and its exposure to the air. Potential sorption of metals is also minimized.

NYSDEC's policy on collecting unfiltered groundwater samples and analyzing for total matrix metals is not consistent within the Department. DGC is currently aware of a number of projects involving NYSDEC regulation and guidance where field filtering is the protocol. This apparent inconsistency within the NYSDEC indicates that the unfiltered versus filtered metal criterion is decided on a case-by-case basis. The scientific and economic factors previously stated present a valid case for the continued collection of filtered metals at the Norlite facility.

Very truly yours,

DUNN GEOSCIENCE CORPORATION



Sander I. Bonvell
Senior Chemist

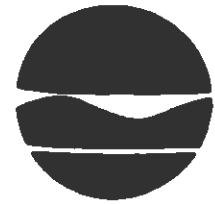
SIB/kdw

New York State Department of Environmental Conservation

2176 Guilderland Avenue, Schenectady, New York 12306

Tel. (518) 382-0680

Fax #(518) 382-1065



Thomas C. Jorling
Commissioner

January 9, 1991

Mr. William J. Ziegler
Vice President of Health, Safety,
and Environmental Affairs
American NuKem
454 S. Anderson Road BTC 532
Rock Hill, SC 29730

Re: Norlite Corporation
Cohoes (C), Albany County
SPDES Permit #NY0004880

Dear Mr. Ziegler:

The following attempts to answer some of the questions which arose during the meeting of January 8, 1991:

1. The current requirements for operator certification in New York State do not apply to operators at industrial facilities. Therefore, formal certification is not needed for any operators at the anticipated chemical precipitation plant for the facility. If the regulations are amended, you will be notified.
2. The justification attempting to support the request for higher metals limits in the Low Grade Fuel will be reviewed by the Bureau of Wastewater Facilities Design (BWFD). Additional information regarding a mass balance of metals is needed before a meaningful review can be performed. Please submit additional information regarding the process and removal of the additional precipitated metals. Further information may be needed upon further review of BWFD.
3. The Department will consider the request to reduce or eliminate the monitoring requirement for PCBs if their absence can be clearly demonstrated. A formal request should be submitted for review. Such request should include a proposal for testing the shale boring which demonstrates that the sample tested is representative of the landfill and the leachability testing of the shale will be able to detect the low levels required by the permit. This can be incorporated into the Engineering Report required by the permit. It should be noted that, until a determination is made by the Department, the monitoring requirements contained in the permit must be followed to abide by the terms and conditions of the permit.

If you have any further comments or questions, please contact me.

Sincerely,

Carol Lamb-LaFay
Environmental Engineer I
Region IV

CL/ml-3CL37

cc: Mark Wykes, ACHD
Joe Kelleher, BWFD

Mr. William J. Ziegler
Vice President of Health Safety and Environmental Affairs
American NuKem
454 S. Anderson Road BTC 532
Rock Hill, SC 29730

RE: Norlite Corporation
Cohoes (C), Albany County
NY 000 4880

Dear Mr. Ziegler:

The following attempts to answer some of the questions which arose during the meeting of January 8, 1991:

1. The current requirements for operator certification in New York State do not apply to operators at industrial facilities. Therefore, formal certification is not needed for any operators at the anticipated chemical precipitation plant for the facility. If the regulations are amended, you will be notified.
2. The justification attempting to support the request for higher metals limits in the Low Grade Fuel will be reviewed by the Bureau of Wastewater Facilities Design (BWFD). Additional information regarding a mass balance of metals is needed before a meaningful review can be performed. Please submit additional information regarding the process and removal of the additional precipitated metals. Further information may be needed upon further review by BWFD.
3. The Department will consider the request to reduce or eliminate the monitoring requirement for PCBs if their absence can be clearly demonstrated. A formal request should be submitted for review. Such request should include a proposal for testing the shale boring which demonstrates that the sample tested is representative of the landfill and the leachability testing of the shale will be able detect to the low levels required by the permit. This can be incorporated into the Engineering Report required by the permit. It should be noted that, until a determination is made by the Department, the monitoring requirements contained in the permit must be followed to abide by the terms and conditions of the permit.

If you have any further comments or questions, please contact me.

Sincerely,

Carol Lamb-LaFay
Environmental Engineer

cc: Mark Wykes, ACHD
Joe Kelleher, BWFD

NOTICE OF COMPLETE APPLICATION

Applicant: Norlite Corp.

Date: 12/18/91

Address: P.O. Box 694, 628 So. Saratoga St.
Cohoes, NY 12047

Permits applied for and application numbers SPDES Permit Renewal - DEC #4-0103-16/20-0;
SPDES #NY0004880

Project description and location. ~~TOWN~~ City of Cohoes County of Albany

Application for 5 year renewal of SPDES permit originally effective on 4/1/87, which has been modified with the most recent modification issued on 12/5/91, which requires a schedule for bringing discharges into the Salt Kill into compliance with permit effluent limitations and adds additional discharge limitations and monitoring requirements for substances in the air pollution control saline water discharge. No changes are proposed from this permit.

STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) DETERMINATION: (Check appropriate box)

- SEQR-1 Project is not subject to SEQR because it is an exempt, excluded or a Type II action.
- SEQR-2 Project is a Type I action and will not have a significant effect on the environment. A Negative Declaration is on file and a coordinated review with other agencies performed.
- SEQR-3 Project is an unlisted action and will not have a significant effect on the environment, a Negative Declaration is on file:
 - A-coordinated review performed
 - B-no coordinated review performed.
- SEQR-4 A draft environmental impact statement has been prepared on this project and is on file.
- SEQR-5 A final environmental impact statement has been prepared on this project and is on file.
- SEQR-6 Project is an Unlisted Action. Mitigation measure required by the Lead Agency will modify the proposed action so that no significant adverse environmental impacts will result. A Conditioned Negative Declaration is on file.

SEQR LEAD AGENCY _____

STATE HISTORIC PRESERVATION ACT (SHPA) DETERMINATION: (Check appropriate box)

- SHPA-0 The proposed project is not subject to SHPA review
- SHPA-1 No registered, eligible or inventoried archeological or historic sites were identified at the project location.
- SHPA-2 Based on an assessment, the proposed project will not cause any change to registered, eligible or inventoried archeological or historic sites.
- SHPA-3 A cultural resources survey is on file. No archeological or historic sites were identified at the project location.
- SHPA-4 A cultural resources survey is on file. The NYS Office of Parks, Recreation and Historic Preservation has determined that the proposed activity will have no impact on registered or eligible archeological or historic sites.
- SHPA-5 A cultural resources survey is on file. The NYS Office of Parks, Recreation and Historic Preservation has determined that the proposed activity will have an impact on registered or eligible archeological or historic sites.

AVAILABILITY FOR PUBLIC COMMENT:

The application may be reviewed at the address to the right. Written comments on the project must be submitted to the Contact Person by no later than:

January 24, 1992

CONTACT PERSON:

William J. Clarke
Regional Permit Administrator
NYSDEC, Region 4
2176 Guelderland Avenue
Schenectady, NY 12306
(518) 382-0680

1. THIS IS NOT A PERMIT

- 2. This is to advise you that your application is complete and a review has commenced. Additional information may be requested from you at a future date, if deemed necessary, in order to reach a decision on your application.
- 3. Your project is classified MAJOR. Accordingly, a decision will be made within 90 days of the date of this Notice. If a public hearing is necessary, you will be notified within 60 days and the hearing will commence within 90 days of the date of this notice. If a hearing is held, the final decision will be made within 60 days after the hearing is completed.
- 4. Publication of this Notice in a newspaper is: required not required
if required, please consult the accompanying transmittal letter for further instructions.

PUBLISH IN ALBANY TIMES UNION

Norlite Corporation



P.O. BOX 694 628 SO. SARATOGA ST. COHOES, N. Y. 12047 TEL.: (518) 235-0401

September 24, 1991

Mr. William Clarke
Regional Permit Administrator
New York State Department of
Environmental Conservation
2176 Guilderland Avenue
Schenectady, NY 12306

Re: Norlite Corporation
SPDES No. NY0004880

Dear Mr. Clarke:

Enclosed please find the renewal application form and filing fees for the above captioned facility.

This form is being used in accordance with discussions with Carol Lamb LaFay, R4, DOW.

If you have any questions, please contact me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Jay D. Derman".

Jay D. Derman
Executive Vice President

Encs:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



State Pollutant Discharge Elimination System (SPDES)

NOTICE/APPLICATION/PERMIT



Please read **ALL** instructions on the back before completing this application form. Please **TYPE** or **PRINT** clearly in ink.

PART 1 - NOTICE

Date: JUN 19 1991

OWNER ID _____ DEC # _____ / _____ - _____ APPL DUE BY 10 / 4 / 91
 Permittee Contact Name, Title, Address Facility Name, Location, Permit Number, Expiration Date

NPDES: NY0004880
 NORLITE CORPORATION
 JAY DERMAN
 NORLITE CORPORATION
 628 SOUTH SARATOGA STREET
 COHOES, NY 12047

NORLITE CORPORATION
 COHOES
 ALBANY
 PERMIT NO: NY0004880
 EXPIRES: 04/01/92 SEP 26 1991
 SIC: 1422 3299

Are these labels correct? if not, please write corrections on the labels.

The State Pollutant Discharge Elimination System Permit for the facility referenced above expires on the date indicated. You are required by law to file for a permit renewal at least 180 days prior to expiration of your current permit. Note the "Application Due By" date above.

CAUTION: This short application form may be used for permit renewal only if your facility has been identified as eligible by the Department (receipt of this form identifies you as eligible) AND you are proposing no changes to your existing permitted discharge or to operations directly or indirectly affecting your discharge (ie: your previous application is still valid).

If you qualify to use this form under the preceding paragraph, sign Part 2 below and mail only this form and proper filing fee to the appropriate Regional Permit Administrator (see attached Filing Locations & Fee Schedule pages).

If there are changes to your discharge, or to operations affecting the discharge, then you must complete and return the attached full permit application package with the correct application filing fee to the appropriate Regional Permit Administrator (See the enclosed lists - Filing Locations, Application Fee Schedule).

PART 2 - APPLICATION

CERTIFICATION: I hereby certify that the facility referenced above has had no changes to the permitted discharges or to operations directly or indirectly affecting that discharge; that the application I submitted for my current SPDES permit is still valid except as described in this application; and that I have a copy of the current SPDES permit, understand and have complied with all conditions in the referenced permit; and that I hereby apply for a new SPDES permit which will reference the same conditions as the permit currently in force. I hereby affirm that under penalty of perjury that the information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law. (Note: The application for your current permit required that you sign a federally mandated certification. Your signature below is an endorsement of this previously filed certification.)

Jay D. Derman Executive Vice President
 Name of person signing application (see instructions on back) Title

Signature Date
 Sept. 24, 1991

PART 3 - PERMIT (Below this line - Official Use Only)

Effective Date: ___ / ___ / ___ Expiration Date: ___ / ___ / ___

Regional Permit Administrator Address

Signature Date

This permit together with the previous valid permit for this facility issued ___ / ___ / ___ and subsequent modifications constitute authorization to discharge wastewater in accordance with all terms, conditions and limitations specified in the previously issued valid permit, modifications thereof or issued as part of this permit, including any special or general conditions attached hereto.

Attachments: General Conditions dated ___ / ___

INSTRUCTIONS FOR RENEWAL State Pollutant Discharge Elimination System (SPDES) Permits

The Department has established a new priority system for renewal of SPDES permits that enhances technical review and upgrades permit requirements for certain high priority discharges identified as potentially of serious environmental concern. Under this new system, the Department has developed a streamlined process for the routine renewal of existing SPDES permits which are not in the high priority categories. Applications for both the high priority (regular application package) and low priority (short form - on the reverse side of these instructions) categories are enclosed.

The Department has classified your permitted discharge as a lower priority permit and thus eligible for the routine renewal procedure using the short form **provided there are no changes to the permitted discharge or to operations directly or indirectly affecting the discharge.**

IF there are NO changes to the discharge or to operations affecting it, follow the directions in **SECTION A ONLY.**

NOTE: The following types of changes **DO NOT** affect the discharge or your eligibility for routine renewal:

- Correction of typographical errors.
- Transfer of ownership.
- Changes in a construction schedule for a new point source.
- Deletion of a point source outfall which causes no changes in other outfalls which would violate permit conditions.
- Inclusion of a pretreatment compliance schedule.

IF there ARE changes to the discharge or operations directly affecting the discharge, or you need to request changes to the limits and monitoring requirements in your existing permit or you need to update your previous application, follow the directions in **SECTION B ONLY.**

If you have any questions, including which application to file, contact your Regional Permit Administrator.

SECTION A. - NO CHANGES AFFECTING THE DISCHARGE

Complete this one page NOTICE/APPLICATION/PERMIT form **ONLY.** Fill in PARTS 1 and 2 of this form.

1. **NOTICE:** Check the information on the labels carefully. Make any appropriate corrections **on** the labels.
2. **APPLICATION:** Read the certification carefully and fill in the blanks. Print or type the name and title of the person who will sign the application in the blanks. Acceptable signatures are as follows:

<u>Organization</u>	<u>Required Signature</u>
● Corporation	Principal executive officer of at least vice-president level or a duly authorized representative who is responsible for the overall operation of the facility.
● Partnership	General partner.
● Sole proprietorship	Proprietor.
● Municipality, state, federal, or public facility	Principal executive officer, other ranking elected official, or other duly authorized employee.

Fill in the date of signing. *(See the complete regular application instructions for a full description of acceptable signatures.)*
3. **FILING THE PERMIT APPLICATION:** Send this one page NOTICE/APPLICATION/PERMIT **AND** the correct application fee to the correct office of the Division of Regulatory Affairs. (See the attached fee schedule and list of Regional Offices.) Keep a copy for your records. **DO NOT FILL OUT THE OTHER APPLICATION FORMS.**
4. **PERMIT:** Following public notice, you will receive a copy of this NOTICE/APPLICATION/PERMIT back with PART 3 PERMIT, filled in and signed. **Attach this page to your old permit.** The new effective and expiration dates will be indicated. (If substantive adverse comments are received, a full renewal package may be required)

SECTION B. - CHANGES WHICH AFFECT THE DISCHARGE

If there are changes to the discharge or to operations which directly or indirectly affect the discharge:

1. **LABELS:** Examine the labels **ONLY** on Part 1 of this NOTICE/APPLICATION/PERMIT form. Make any appropriate corrections **on** the labels **DO NOT SIGN PART 2.**
2. **APPLICATION:** Complete all parts of the **regular** application package enclosed with the NOTICE/APPLICATION/PERMIT. Sign and date the regular application. Acceptable signatures are those listed in #2 under SECTION A above.
3. **FILING THE APPLICATION:** Send the following to the appropriate office of the Division of Regulatory Affairs:
 - a. The regular application form completed, signed, and dated.
 - b. The correct application fee.
 - c. The one-page NOTICE/APPLICATION/PERMIT form. (Be sure to make any appropriate changes to the labels.) (See the attached fee schedule and list of Regional Offices.)
4. **PERMIT:** Your permit application will be processed, and a permit decision will be made based on the new information supplied in the application.

**Lawler,
Matusky
& Skelly
Engineers**

Environmental Science & Engineering Consultants

JOHN P. LAWLER, P. E.
FELIX E. MATUSKY, P. E.
MICHAEL J. SKELLY, P. E.
KARIM A. ABOOD, P. E.
PATRICK J. LAWLER, P. E.
FRANCIS M. MCGOWAN, P. E.
THOMAS L. ENGLERT, P. E.
PETER M. MCGRODDY, P. E.
THOMAS E. PEASE, P. E.

ONE BLUE HILL PLAZA
P.O. BOX 1508
PEARL RIVER, NEW YORK 10865
(814) 735-8300
FACSIMILE (814) 735-7488

19 August 1991
File No. 442-125

Mr. William Clarke
Regional Permit Director
New York State Department of Environmental Conservation
Region IV Headquarters
2176 Guilderland Avenue
Schenectady, NY 12306



1001

Re: Norlite Corporation SPDES No. NY0004880

Dear Mr. Clarke:

The following are the errata for the report on the treatability study sent to you on 14 August.

Table 2-1: all values for cadmium, chromium and nickel should be qualified with footnote "c".

Yours very truly,

Stuart E. Bassell, P.E.
Project Manager

SEB:tms

cc: Jay Derman
Kevin Young

**Lawler,
Matusky
& Skelly
Engineers**

Environmental Science & Engineering Consultants

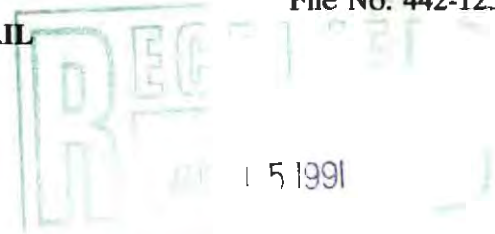
JOHN P. LAWLER, P. E.
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PATRICK J. LAWLER, P. E.
FRANCIS M. MCGOWAN, P. E.
THOMAS L. ENGLERT, P. E.
PETER M. MCGRODDY, P. E.

ONE BLUE HILL PLAZA
P. O. BOX 1509
PEARL RIVER, NEW YORK 10985
(814) 735-8300
FACSIMILE (814) 735-7488

August 14, 1991
File No. 442-125

VIA OVERNIGHT MAIL

Mr. William Clarke
Regional Permit Director
New York State Department of
Environmental Conservation
Region IV Headquarters
2176 Guilderland Avenue
Schenectady, NY 12306




Re: Norlite Corporation SPDES Permit - Engineering Report on Wastewater Treatment and Discharge Alternatives

Dear Mr. Clarke:

Enclosed for your use are three copies of the report on the treatability study conducted in support of the above referenced document, previously submitted to you.

Any questions you have regarding this report and Norlite's future plans should be directed to Jay Derman at Norlite.

Sincerely,


Stuart Bassell, P.E.
Project Manger

SEB/rms

Enc.

cc: Kevin M. Young, Esq. (w/enclosures)
Jay Derman (w/enclosure)

WHITEMAN OSTERMAN & HANNA

ATTORNEYS AT LAW

ONE COMMERCE PLAZA
ALBANY, NEW YORK 12260

(518) 487-7600
TELECOPY (518) 487-7777
CABLE ADVOCATE ALBANY

BUFFALO OFFICE

1700 LIBERTY BUILDING
BUFFALO, NEW YORK 14202
(716) 854-4420
TELECOPY (716) 854-4428

NEW YORK OFFICE

110 EAST 59TH STREET
NEW YORK, NEW YORK 10022
(212) 223-0202
TELECOPY (212) 223-4811

MICHAEL WHITEMAN
MELVIN H. OSTERMAN, JR.
JOHN HANNA, JR.
JOEL L. HODES
PHILIP H. GITLEN
SCOTT H. FEIN
ALICE J. KRZYAN
DANIEL A. RYZOW
PHILIP H. DIXON
KEVIN M. YOUNG
GÜNTER DULLY
JAMES W. LYTLE
RICHARD E. LECKERLING
MARGARET J. GILLIS
JONATHAN P. NYE

NEIL L. LEVINE
HEATHER D. DIODEL
DONALD S. STEFANSKI
KENNETH S. RITZENBERG
MARY JANE BENDON COUCH
JEAN F. GERBINI
JOHN T. KOLAGA
ELAINE M. LICCIONE
JONATHAN WOOD
KATHRYN GIRARDAT HART
JEFFREY S. BAKER
TERRESA M. BAKNER
LAURENCE DEUTSCH
ELIZABETH M. MORSS
WILUAM C. SCHOELLKOPF
CHARLENE D. FLESZAR
CARLA E. HOGAN
ANNE K. HOHENSTEIN*
JOHN P. STOCKLI, JR.
PATRICIA MASTRIANNI McMAHON
MARY WALSH SNYDER

MARC S. KOPLIK
OF COUNSEL

*ADMITTED IN CALIFORNIA ONLY

February 25, 1991

William Clarke
Regional Permit Director
New York State Department of
Environmental Conservation
Region IV Headquarters
2176 Guelderland Avenue
Schenectady, NY 12306

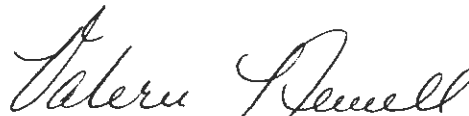
Re: Norlite -- Comments on Modified SPDES Permit

Dear Mr. Clarke:

The enclosed hard-copy of Exhibit A was omitted from the hand-delivered package sent to you on Friday, February 22, 1991. A copy of this was faxed to your office when the omission was discovered.

I apologize for this omission and for any inconvenience it may have caused.

Sincerely,



Valerie Newell
Secretary to Kevin Young

Enclosure

cc: Jay Derman
Stuart Bassell

017-1123-vln



CAMO LABORATORIES, INC.

SERVING INDUSTRY, UTILITIES, MUNICIPALITIES
AND REGULATORY AGENCIES SINCE 1976

POUGHKEEPSIE AREA FACILITY:
367 VIOLET AVENUE
POUGHKEEPSIE, NY 12601

(914) 473-9200
FAX 914-473-1962

February 14, 1991

Mr. Stuart E. Bassell, P.E.
Lawler, Matusky & Skelly Engineers
One Blue Hill Plaza
P. O. Box 1509
Pearl River, New York 10963

Dear Mr. Bassell:

I have reviewed the parameter list and the proposed detection limits that you have recently submitted to me. The listed analysis methods, for the most part, are Atomic Absorption Graphite Furnace and, if we ignore the typographical errors, (for Ba, Cd and Zn) all of the detection limits given are published Method Detection Limits (MDL's).

These Method Detection Limits are statistically calculated based on repetitive injection of standards under optimum instrument conditions. The Practical Quantitation Limits (PQL's) for environmental samples is typically two (2) to five (5) times higher than the MDL with the exception of Mercury where the MDL and PQL are equivalent.

The only non-metallic parameter listed is PCB. We have achieved a detection of 0.08 ug/l by EPA Method 608 and with some method modification we have been able to match the published detection limit.

There are some steps that can be taken for the metal analysis that will allow the PQL to approach or match the MDL. These steps are: concentration during the digestion of the sample or concentration by multiple injections on the graphite furnace each followed by a drying step prior to the atomization stage. However, any concentration of the sample will not only increase the amount of the analyte but will also increase the matrix interference. Having looked at the description of samples for analysis, there could be serious matrix interferences present especially from high chlorides. If these interferences occur, a dilution step or Method of Standard Additions would have to be used that would increase rather than decrease the PQL.

February 14, 1991

Page 2

If the presence or absence of a particular element is the overriding concern, then we can report results similar to organic analysis (i.e. analyte present but below quantifiable levels).

In such case a result could be given, with qualification, that would be between the MDL and the PQL; providing no dilution took place.

I hope this explanation sufficiently addresses the analytical concerns of this SPDES Modification. If you have any further questions, don't hesitate to call.

Yours truly,



John F. Eisenhardt
Laboratory Director

JFE:plg



314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

February 12, 1991
Norlite Corporation
PO Box 694
Cohoes, New York 12047

Attention: Mr. Jay Derman

Re: SPDES Permit Minimum Detection Limits

Dear Mr. Derman:

The Minimum Detection Limits (MDL) that were outlined on Page 5 of your NYS DEC SPDES Discharge Permit are extremely difficult to achieve. Any MDL is highly matrix dependent, and the ones reported are based on distilled deionized water. There is a realm of difference between DI water with a conductivity of approximately <2 umhos/cm and your wastewater with a conductivity of approximately 50,000 umhos/cm.

We propose a normal EPA MDL study using your samples to produce an MDL for your matrix.

If you have any questions, or require additional information, please feel free to contact me at the above number.

Very truly yours,
ADIRONDACK ENVIRONMENTAL SERVICES, INC.

Frank Scuderi
Laboratory Director

New York State Department of Environmental Conservation

NYS Dept. Environmental Conservation - Region 4
2176 Guilderland Avenue, Schenectady, NY
(518) 382-0680



Thomas C. Jorling
Commissioner

January 23, 1991

Mr. Jay Derman, Executive Vice President
Norlite Corporation
628 South Saratoga Street
Cohoes, NY 12047

Appl. #4-0103-16/20-0
SPDES #NY-0004880
Fac.: Waste Fuel Incineration &
Aggregate Expansion
C,T,V: (T) Colonie
County: Albany

Dear Mr. Derman:

This is to inform you that pursuant to Environmental Conservation Law ("ECL"), Article 17, Title 8 (McKinney's) and 6NYCRR, Part 757, the New York State Department of Environmental Conservation (NYSDEC) has made a determination to modify the above referenced State Pollutant Discharge Elimination System (SPDES) Permit. Outfalls and limits for the Shale Fines Landfill and Air Pollution Control Blowdown have been added. Revised limits meeting current standards are set for the Stormwater Lagoon Overflow. A compliance schedule for characterization of waste streams and submittal of Best Management Plan for discharges is included.

This modification is effective on the date shown on the revised pages. If you object to any part of this change, you may contact me in writing within 30 days of the date of this letter. Your letter must contain specific evidence to support your contention(s).

Sincerely,

William J. Clarke
Regional Permit Administrator
Region IV

C:\SPDES\1S3

Attachment

cc: R4DOW - Carol Lamb
BWFD - Robert Hannaford, Loc. 3505
DOH - Mark Wykes
ACSD - Tim Murphy
R4SW - Howard Vics ✓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
 Special Conditions (Part I)



Industrial Code: 1422
 Discharge Class (CL): 01
 Toxic Class (TX): T
 Major Drainage Basin: 13
 Sub Drainage Basin: 01
 Water Index Number: H-239
 Compact Area: _____

SPDES Number: NY - 0004880
 DEC Number: 4-0103-16/20-0
 Effective Date (EDP): 04/01/87
 Expiration Date (ExDP): 04/01/92
 Modification Date(s): 01/23/91
 Attachment(s): General Conditions (Part II) Date: /

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.)(hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Attention: Jay Derman, Executive VP

Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Norlite Corporation
 Location (C,T,V): Cohoes (C) County: Albany
 Facility Address: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 NYTM - E: _____ NYTM - N: 4
 From Outfall No.: 001 at Latitude: 42° 45' 14" & Longitude: 73° 40' 20"
 into receiving waters known as: Salt Kill Creek Class: D

and; (list other Outfalls, Receiving Waters & Water Classifications)

- 003 Salt Kill Creek D
- 004 Salt Kill Creek D
- 005 Salt Kill Creek D

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 Responsible Official or Agent: Jay Derman Phone: (518)235-0401

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: Carol Lamb - R4 Dow
R. Hannaford - Room 318
Mark Wykes - ACHD
DRA
Tim Murphy - ACSD (North Plant)
Howard Vics - R4SW

Permit Administrator: <u>William Clarke</u>	
Address: <u>2176 Guilderland Avenue</u> <u>Schenectady, New York 12306</u>	
Signature: <u>William J. Clarke</u>	Date: <u>1/23/91</u>

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

MODIFICATION DATE:
January 23, 1991During the period beginning JANUARY 23, 1991and lasting until APRIL 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Non-Contact Cooling Water, Boiler Blowdown, and Storm Water Lagoon Overflow</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	0.5	1.0	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab
<u>Outfall 003 - Quarry Water</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Instantaneous
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab

Outfall Number & Effluent Parameter	Discharge Limitations			Measurement Frequency	Sample Type
	Daily Ave.	Daily Max.	Units		
<u>Outfall 004 - Shale Fines Leachate</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.10	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	NA	1.7	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.080	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.10	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.30	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab

Outfall 005 - Air Pollution Control Saline Water

Flow	Monitor	Monitor	GPD	Daily ¹	Grab
------	---------	---------	-----	--------------------	------

FOOTNOTES:

- 1 = Samples shall be taken each day a discharge occurs
- 2 = Each individual Aroclor shall be "Not Detected" by USEPA Method 608 with a MDL of 0.065ppb.
- 3 = Representative composite consisting of a minimum of three samples (one at the beginning, middle, and end of the discharge period).

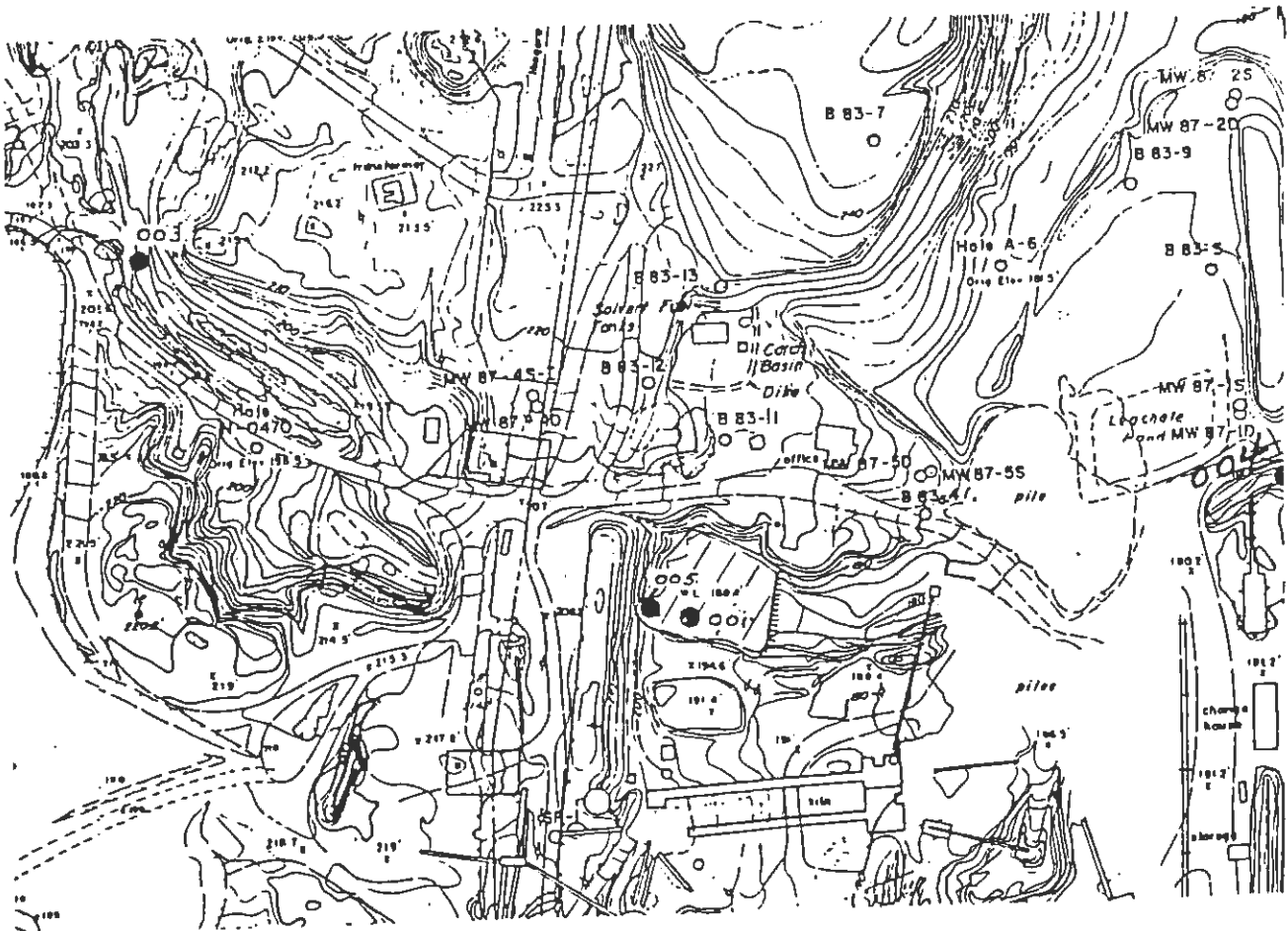
Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).



- Initial
 Interim
 Final

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
001		The permittee shall submit to the	April 1, 1991
004		Department an Approvable	
005		Engineering Report detailing the treatment and discharge alternatives for the following waste streams to meet the SPDES limitations set forth in this permit:	

Scrubber Blowdown
Landfill Leachate
Boiler Blowdown

The report will characterize all wastestreams and investigate the feasibility of disposing of a portion of the discharge at the Albany County Wastewater Treatment Plant as well as alternatives if the Sewer District does not accept the discharge. The characterization of wastestreams shall include a short-term high intensity monitoring to determine the presence, or absence of the permit parameters using the following methods and detection limits:

PARAMETER	DETECTION LEVEL	METHOD #
Arsenic	1.0 ug/l	USEPA 206.2
Barium, Total	2.0 ug/l	USEPA 208.1
Beryllium, T	0.2 ug/l	USEPA 213.4
Cadmium, T	0.1 ug/l	USEPA 213.2
Chromium, T	1.0 ug/l	USEPA 218.4
Chromium, H	8.0 ug/l	USEPA 218.4
Copper, T	1.0 ug/l	USEPA 220.2
Lead, T	1.0 ug/l	USEPA 239.2
Mercury	0.2 ug/l	USEPA 245.1
Nickel, T	1.0 ug/l	USEPA 249.2
Selenium, T	2.0 ug/l	USEPA 270.3
Zinc	0.05 ug/l	USEPA 236.2

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

COMPLIANCE SCHEDULE (CONTINUED)

The monitoring program shall consist of three grab samples collected over the operating day and lab composited for three consecutive days.

001 The permittee shall submit approvable plans July 1, 1991
004 and specifications for construction of any
005 treatment plan needed to comply with the
SPDES limitations as approved in the
Engineering Report described above.

The permittee shall submit a Best Management July 31, 1991
Plan (BMP) to prevent or minimize the
potential for release of significant amounts
of kiln dust, silt and shale fines to the
waters of the State arising from the
permittee's operations and disturbances from
the facility

001 The permittee shall comply with all Nov. 31, 1991
004 limitations set forth in the SPDES permit
005

Except for the BMP submittal deadline modified above,
the permittee shall comply with all requirements of
the Order on Consent #R4-0768-90-01, executed 6/21/90
and DEC approved environmental control plans submitted
pursuant to that order.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**
- (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Albany County Health Department
Division of Environmental Health
South Ferry & Green Streets
Albany, NY 12201

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer
2176 Guilderland Avenue
Schenectady, NY 12306

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the Regional Water Engineer and/or County Health Department or Environmental Control Agency listed above.
- d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.
- g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller State Plaza, Albany, New York 12201

New York State Department of Environmental Conservation
2176 Guiderland Avenue, Schenectady, New York 12306
Tel. (518) 382-0680
Fax #(518) 382-1065

file

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 5	
To	Jay Derman	From	Bill Clarke
Co.	Norlite Corp.	Co.	NYSDEC, Reg. 4
Depl.		Phone #	382-0680
Fax #	235-0233	Fax #	382-1065

August 7, 1991

Thomas C. Jorling
Commissioner

Mr. Jay D. Derman
Executive Vice-President
Norlite Corporation
P.O. Box 694
628 Saratoga Street
Cohoes, NY 12047

Re: DEC # 4-0103-16/20-0
SPDES Modification
Cohoes (C), Albany County

Dear Mr. Derman:

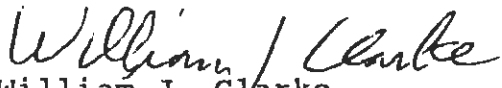
In response to your letter of July 5, 1991, the Department offers the following:

- 1) The added conditions represent no substantive change from the permit modification issued on January 23, 1991 which contained, on page 6, a condition requiring compliance with Order on Consent #4-0768-90-01 and the DEC approved environmental control plans (i.e. fugitive dust and noise) submitted under that Order. As there is no separate permit for these requirements, we have incorporated the Norlite prepared and DEC approved control plans into the facility's DEC permits. Since the substance of these requirements is not at issue, and there is a nexus between the dust control measures and a portion of the SPDES discharges, I am unclear as to why this should be an issue.
- 2) The Department cannot agree to renewing/extending your SPDES permit to June 7, 1996. There is continuing public interest in the operation of Norlite, such that public review at the time of renewal will be warranted. Further, as you have been previously made aware, the Salt Kill is likely to be reclassified from D to C within the next twelve months. This will require the imposition of more stringent effluent discharge limitations, making this upcoming renewal a substantive modification of the permit as well. As Carol Lamb-LaFay of our Division of Water has urged previously, Norlite needs to start seriously thinking now about what treatment strategies and methods will be needed to comply with the new limits. It will make little sense to design and construct a treatment system/facility which does not have the capability to meet the more stringent limits as well.

- 3) The LMS study has been reviewed and found unapprovable until the attached comments have been addressed. The due date for the wastestream characterization and treatment alternatives study was previously extended from April 1, 1991. We are willing to agree to the extension date of August 15, 1991, but see it as necessary that you include adequate responses to the attached in your submittal, as the critical dates for construction plans submittal (October 1, 1991) and the deadline for meeting the effluent standards (November 31, 1991) are not far away.
- 4) We have no objection to your requests regarding either further discussions on treatment alternatives or your retention of the option for a hearing on the presumption that Norlite continues to make expeditious progress in meeting the compliance schedule in the permit. Should we reach a point where there is either insufficient progress by Norlite, or we are unable to resolve points of disagreement, then we will proceed to hearing.

If you have any questions, please feel free to contact either Carol Lamb-LaFay or myself at the above number.

Sincerely yours,


William J. Clarke
Regional Permit Administrator
Region IV

WJC/ml-3CL3

cc: C. Lamb-LaFay, DOW
M. Wykes, ACHD

The Engineering Report on wastewater treatment and discharge alternatives, submitted by Lawler, Matusky & Shelly Engineers, as required by the modified SPDES permit has been reviewed. The report cannot be approved until the following are addressed:

1. CALCULATION OF HARDNESS VALUE

While the rationale of using a measured hardness appears correct, the method of obtaining an accurate hardness value of the Salt Kill contains several errors:

- a) Hardness values of the scrubber blowdown were obtained during the February sampling event. However, the report states that this event was not representative of the discharge.
- b) The report states (page 2-3) that samples, for hardness value analyses, were taken from the Scrubber Blowdown only. The standards are written such that the in-stream hardness is used in the calculation. Outfalls 001 and 003 contribute a significant portion of the stream flow and the hardness of these streams should be taken into account. The hardness values should be obtained from a point in the stream bed downgradient from the mixing zone of the outfalls.
- c) The standards are intended to protect the best usage of the receiving stream and are based on a natural hardness of the receiving water. The natural hardness of New York State surface waters should not exceed 350 mg/l.

The limits should be recalculated using an acceptable hardness value. The hardness and appropriate limits must be agreed upon before treatability studies are completed.

2. DEVELOPMENT OF TECHNOLOGY-BASED EFFLUENT LIMITS

The discussion of treatability studies does not indicate that the class C limits, made available in my letter to you dated October 26, 1990, which may result if the Salt Kill is reclassified, will be considered. While the permittee will not be required to meet class C standards until after the reclassification is official, it is recommended that they be considered if a treatment system is constructed. A treatment system which has the flexibility to meet more stringent limits with minor modifications would be much more desirable than one that would be abandoned for a new treatment system in 5 years.

3. METHOD DETECTION LIMITS

As previously stated in our initial response to comments regarding the permit, as transmitted to you by Mr. William Adriance on June 7, 1991, the method detection limits may be different than those cited in the Department's guidance document. However, the data must be inspected and reviewed by the Division's Quality Assurance officer. Data should be developed according to Appendix B to Part 136- "Definition and Procedure for the Determination of the Method Detection Limit - Revision 1.11" published in the Federal Register on October 26, 1984. This office has not received a request accompanied by the required data for review. The permit cannot be modified until such material is submitted and a recommendation is received from the Analytical Services Section. It should be noted that this problem may be resolved by treatment of the waste streams, which may result in an effluent which does not pose any matrix interference. therefore, it is recommended that a detection limit study be performed in conjunction with treatability testing.

4. SCRUBBER BLOWDOWN

The results of the intensive monitoring program indicates that a permit modification is required to authorize discharge of detected metals. However, an appropriate hardness must be agreed upon before permit modification. since the affected wastestream is a new outfall, it is not restricted by the anti-backsliding rule. Therefore, BPF limits, developed for Otufall 001, from the previous permit, do not apply to this outfall. As described in the Division of Water's Technical Guidance Series (TOGS) #1.3.4, action levels are developed for metals which do not exceed the threshold criteria of 1.0 lb/day. Action levels representing the highest of the 3 data points will be proposed for all parameters. In those cases where a water quality standard exists and is more stringent than the proposed Action level, the water quality standard will be applied as an effluent limit. Based on a review of the data against the highest possible standard (i.e. that calculated using 350 mg/l), it appears that action levels will be applied for Arsenic, Beryllium, Barium and Selenium. The effluent limits for the remaining metals must be determined using an appropriate hardness based standard as discussed under item 1.

5. LANDFILL LEACHATE

The report requests that the monitoring frequency be changed to quarterly since groundwater is not subject to rapid fluctuations. Since the make-up of the leachate is still an unknown, permit modification will be deferred until the monitoring program is complete. At that time, the monitoring frequency and permit limits will be reviewed and modified accordingly.

6. BOILER BLOWDOWN

The permit cannot be modified until the permittee provides written verification from Albany County Sewer District that this waste stream can be discharged into the sanitary sewer under the Pretreatment Program. It is our understanding that the Albany County Sewer District is not willing to accept this waste stream since the facility would not provide any treatment. This would constitute a violation of their local law. The treatment of the boiler blowdown should be evaluated for discharge through the SPDES program.

Norlite Corporation



P. O. BOX 694 628 SO. SARATOGA ST. COHOES, N. Y. 12047 TEL.: (518) 235-0401

July 5, 1991

William R. Adriance
Deputy Regional Permit Administrator
NYSDEC
2176 Guilderland Avenue
Schenectady, NY 12306

Re: Norlite Corporation
SPDES No. NY-0004880
Appl. No. 4-0103-16/20-0



This letter is in response to your letter to me dated June 7, 1991 enclosing a revised SPDES permit for the Norlite facility in Cohoes, New York. In your letter, you indicate that if Norlite objects to any change that it provide a written response within 30 days of the date of your letter. This letter is that response.

1. Norlite objects to the Special Conditions numbered 10, 11, 12, 13 and 14 being incorporated into the SPDES permit. Norlite does not object to compliance with its obligations under the Order on Consent executed on June 21, 1990. Norlite does, however, object to the Department requiring compliance with the Order on Consent under a permit issued under Article 17 of the ECL. Article 17 of the ECL does not address fugitive dust control measures and noise impacts. The incorporation of these conditions in a SPDES permit is not authorized under Article 17 and creates certain enforcement implications and alternatives not contemplated when the Order on Consent was negotiated.

2. Norlite requests that the expiration date for the permit be extended to June 7, 1996. After having gone through this process in 1991 to conform the SPDES permit to Norlite's operations and current Department policy, Norlite does not see the need or the benefit to having to go through a renewal in 1992.

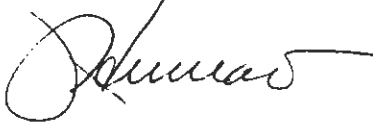
3. On or about May 31, 1991, Norlite submitted an engineering report prepared by Lawler, Matusky and Skelly Engineers (LMS) substantially complying with the requirement for an approvable engineering report by July 31, 1991. That report proposed a treatability study for the scrubber blowdown to determine the treatment alternatives. That study is now ongoing and, as indicated in the LMS report, will be submitted on or about August 15, 1991. With regard to the boiler blowdown, that report proposed to discharge the boiler blowdown to the Albany County Wastewater Treatment Plant. Norlite is proceeding with the program as outlined in the LMS report assuming that meets its obligations under the SPDES permit to conduct the intensive monitoring program and submit an approvable engineering report.

NYSDEC
2176 Guilderland Avenue
Schenectady, NY 12306

Pg 2

4. Norlite requests that the comment period on the permit modification be kept open to provide time for Norlite to complete its investigation into the treatment alternatives and to discuss the results of that study with the Department. In the alternative, Norlite requests a hearing on its objections as expressed in this letter and in our prior submissions to the Department including, but not limited to, our submissions dated 2/22/91, 3/29/91, 5/15/91 and 5/31/91.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Derman", written over a horizontal line.

Jay Derman
Executive Vice President

cc: Stuart Bassell, LMS
Kevin Young
Carol Lamb, DEC, Reg. 4

New York State Department of Environmental Conservation
2176 Guilderland Avenue, Schenectady, New York 12306

(518) 392-0680



Thomas C. Jorling
Commissioner

6-7-91

Mr. Jay Derman, Exec. V. P.
Norlite Corporation
628 South Saratoga Street
Cohoes, NY 12047

Appl. # 4-0103-16/20-0
SPDES # NY-0004880
Fac.: Waste Fuel Incineration & Aggregate
C,T,V: (T) Colonie Expansion
County: Albany

Dear Mr. Derman:

This is to inform you that pursuant to Environmental Conservation Law ("ECL"), Article 17, Title 8 (McKinney's) and 6NYCRR, Part 757, the New York State Department of Environmental Conservation (NYSDEC) has made a determination to modify the above referenced State Pollutant Discharge Elimination System (SPDES) Permit.

The correction of pages 2, 3, 5, and 6 are in response to your
comments of 3-29-91, 2-22-91, and 5-15-91. Carol Lamb's 5-24-91
Memoandum further replies to the inquiries of your 2-22-91 letter.*
Pages 8 and 9 have been added to conform with our policy on this
facility expressed in our letter of 11-7-90.

This modification is effective on the date shown on the revised pages. If you object to any part of this change, you may contact me in writing within 30 days of the date of this letter. Your letter must contain specific evidence to support your contention(s).

Sincerely,

William R. Osborne
Deputy Regional Permit Administrator
Region IV DRA

A:1S13

Attachment *

cc: R4DOW - Carol Lamb
BWF - Robert Hannaford, LOC 3505
ACHD-DEYS - Mark Wykes
ACSD (North Plant) - Tim Murphy
Corp. Counsel (C) Cohoes - Walter Forman
Special Counsel (C) Cohoes - Peter Henner
Ann Lapinski, R4 Legal

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
 Special Conditions (Part I)



Industrial Code: 1422
 Discharge Class (CL): 01
 Toxic Class (TX): T
 Major Drainage Basin: 13
 Sub Drainage Basin: 01
 Water Index Number: H-239
 Compact Area: _____

SPDES Number: NY-0004880
 DEC Number: 4-0103-16/20-0
 Effective Date (EDP): 04/01/87
 Expiration Date (ExDP): 04/01/92
 Modification Date(s): 01/23/91, 6/7/91
 Attachment(s): General Conditions (Part II) Date: /

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.) (hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESSAttention: Jay Derman, Executive VP

Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Norlite Corporation
 Location (C,T,V): Cohoes (C) County: Albany
 Facility Address: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 NYTM - E: _____ NYTM - N: 4
 From Outfall No.: 001 at Latitude: 42° 45' 14" & Longitude: 73° 40' 20"
 into receiving waters known as: Salt Kill Creek Class: D

and; (list other Outfalls, Receiving Waters & Water Classifications)

003	Salt Kill Creek	D
004	Salt Kill Creek	D
005	Salt Kill Creek	D

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 Responsible Official or Agent: Jay Derman Phone: (518)235-0401

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: Carol Lamb - R4 DOW
 R. Hannaford - Room 318
 Mark Wykes - ACHD
 DRA
 Tim Murphy - ACSD (North Plant)
 Howard Vics - R4SW

Permit Administrator: <u>William Clarke</u>	
Address: <u>2176 Guilderland Avenue</u> <u>Schenectady, New York 12306</u>	
Signature: <u>William Clarke</u>	Date: <u>1/23/91</u>

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

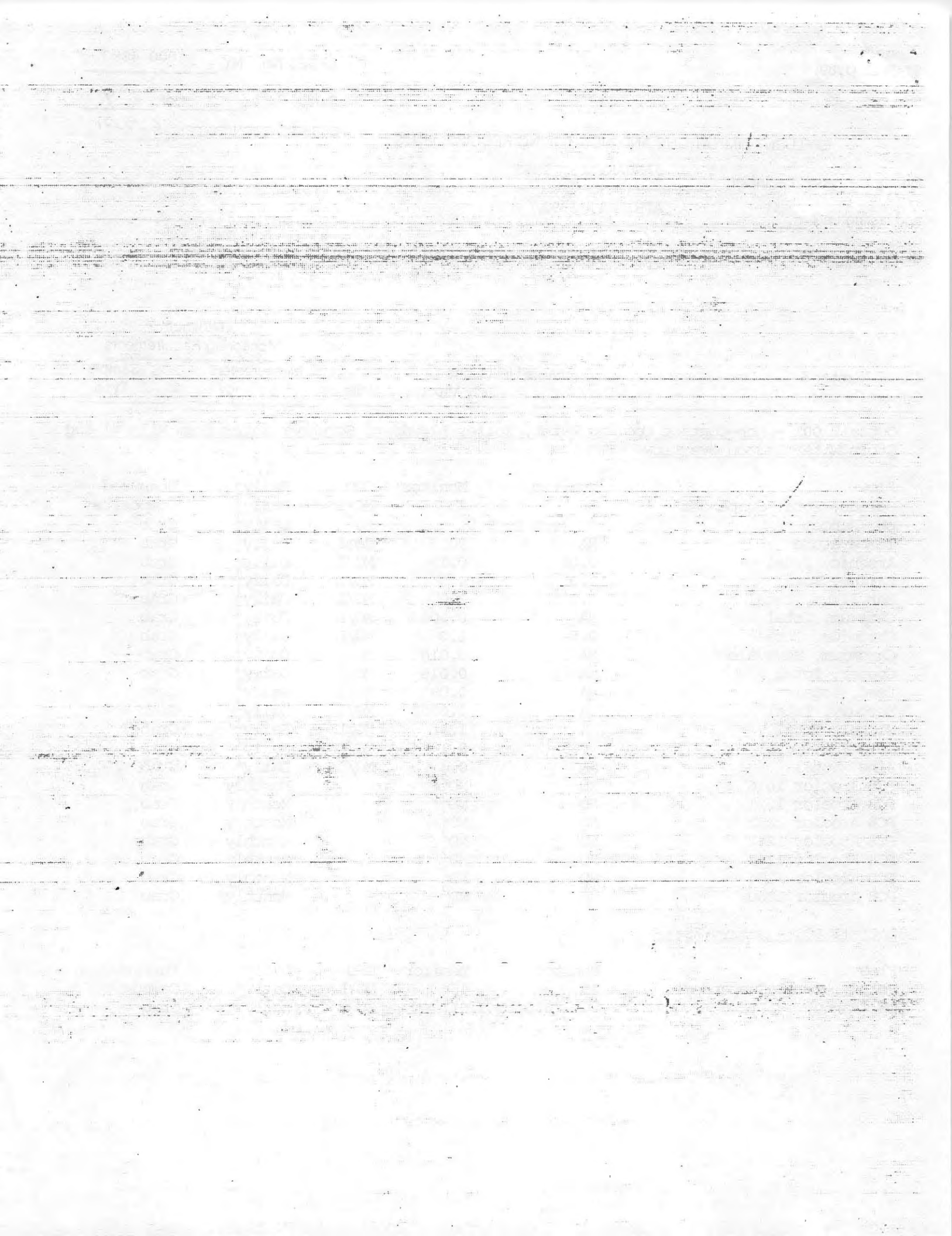
During the period beginning JANUARY 23, 1991and lasting until APRIL 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Non-Contact Cooling Water, Boiler Blowdown, Scrubber water from Kiln #1 and Storm Water Lagoon Overflow</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	0.5	1.0	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab

Outfall 003 - Quarry Water

Flow	Monitor	Monitor	GPD	Daily ¹	Instantaneous
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab



Modified 6-7-91

Outfall Number & Effluent Parameter	Discharge Limitations			Measurement Frequency	Sample Type
	Daily Ave.	Daily Max.	Units		
<u>Outfall 004 - Shale Fines Leachate</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	NA	1.7	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab

Outfall 005 - Air Pollution Control Saline Water

Flow	Monitor	Monitor	GPD	Daily ¹	Grab
Solids, Total Suspended	25	45	mg/l	Daily ¹	Grab
Solids, Settleable		0.3	ml/l	Daily ¹	Grab

FOOTNOTES:

- 1 = Samples shall be taken each day a discharge occurs
- 2 = Each individual Aroclor shall be "Not Detected" by USEPA Method 608 with a MDL of 0.065ppb.
- 3 = Representative composite consisting of a minimum of three samples (one at the beginning, middle, and end of the discharge period).

- Initial
- Interim
- Final

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

Modified 6-7-91

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
001		The permittee shall submit to the Department an	July 31, 1991
005		Approvable Engineering Report detailing the treatment and discharge alternatives for the following waste streams to meet the SPDES limitations set forth in this permit:	

Scrubber Blowdown
Boiler Blowdown

The report will characterize all wastestreams and investigate the feasibility of disposing of a portion of the discharge at the Albany County Wastewater Treatment Plant as well as alternatives if the Sewer District does not accept the discharge. The characterization of wastestreams shall include a short-term high intensity monitoring to determine the presence, or absence of the permit parameters using the following methods and detection limits:

PARAMETER	DETECTION LEVEL	METHOD #
Arsenic	1.0 ug/l	USEPA 206.2
Barium	2.0 ug/l	USEPA 208.1
Beryllium, T	0.2 ug/l	USEPA 210.2
Cadmium, T	0.1 ug/l	USEPA 213.2
Chromium, T	1.0 ug/l	USEPA 218.3
Chromium, H	8.0 ug/l	USEPA 218.4
Copper, T	1.0 ug/l	USEPA 220.2
Lead, T	1.0 ug/l	USEPA 239.2
Mercury	0.2 ug/l	USEPA 245.1
Nickel, T	1.0 ug/l	USEPA 249.2
Selenium, T	2.0 ug/l	USEPA 270.2
Zinc	0.05 ug/l	USEPA 289

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

COMPLIANCE SCHEDULE (CONTINUED)

The monitoring program shall consist of three grab samples collected over the operating day and lab composited for three consecutive days.

- | | | |
|-------------------|--|---------------|
| 001
004
005 | The permittee shall submit approvable plans and specifications for construction of any treatment plant needed to comply with the SPDES limitations as approved in the Engineering Report described above. | Oct. 1, 1991 |
| | The permittee shall submit a Best Management Plan (BMP) to prevent or minimize the potential for release of significant amounts of kiln dust, silt and shale fines to the waters of the State arising from the permittee's operations and disturbances from the facility. | July 31, 1991 |
| 001
004
005 | The permittee shall comply with all limitations set forth in the SPDES permit. | Nov. 31, 1991 |
| | Except for the BMP submittal deadline modified above, the permittee shall comply with all requirements of the Order on Consent #R4-0768-90-01, executed 6/21/90 and DEC approved environmental control plans submitted pursuant to that Order. | |
| 004 | The permittee shall perform a short-term high intensity monitoring program as detailed above for Outfalls 001 and 005 for the landfill leachate during the initial start up of the landfill operation. The results of this study shall be submitted within 60 days of landfill start up. | |

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**

[X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Wastewater Facilities Operations
50 Wolf Road
Albany, New York 12233-3506
Phone: (518) 457-3790

Albany County Health Department
Division of Environmental Health
South Ferry & Green Streets
Albany, NY 12201

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer
2176 Guilderland Avenue
Schenectady, NY 12306

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [] Regional Water Engineer and/or [] County Health Department or Environmental Control Agency listed above.
- d) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.
- g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller State Plaza, Albany, New York 12201

SPECIAL CONDITIONS

For Article 17 (State Pollutant Discharge Elimination System)

10. The permittee must comply with Order on Consent, file #4-0768-90-01 executed 6/21/90.
11. The primary dust control methods and implementation schedules in the Fugitive Dust Control Plan prepared by Sci-Tech and dated August 1990 will be implemented with the following changes:
- a. In Table 6-1 (Implementation Schedule) the water sprays will be installed by 8/7/91.
 - b. Norlite shall immediately implement fugitive dust controls consistent with this permit and supplemented control plan to cover the handling and storage of dust collected by its multiclone dust collection system.
 - c. Norlite shall notify DEC in writing when new control systems are operational,
 - d. Norlite shall meet an emission performance standard of no more than 10% opacity from any identifiable dust source.
 - e. Norlite shall provide to DEC a written report describing progress in meeting the fugitive dust implementation schedule and noise control recommendations, including a record of any complaints from the public, by 11/7/91,
 - f. If secondary fugitive dust controls are determined to be necessary by DEC, Norlite will submit an approvable implementation schedule to DEC within 3 weeks of DEC notification. The use of chemical stabilizers (discussed as a secondary control) must not create leachable constituents that could contravene state groundwater or surface water standards.
12. The recommendations of the Noise Impact Analysis report by Angerine Acoustical Consultants dated 8/24/90 will be implemented. The approved implementation schedule for the installation of microwave radar mobile equipment alarms and schedule of noise muffler replacement criteria shall begin DEC approval. In addition, the Permittee shall meet a performance standard of not exceeding beyond its property line, noise levels specified in 6NYCRR 360-1.14(p) for suburban communities. Norlite shall provide a written report to DEC describing progress in implementing noise control measures, including a record of any complaints from the public, by 11/7/91.

DEC PERMIT NUMBER

4-0103-00016/00020-0

FACILITY ID NUMBER

NY-0004880

PROGRAM NUMBER

Page 8 of 9

SPECIAL CONDITIONS

For Article 17 (State Pollutant Discharge Elimination System)

13. The Department may require modifications/additions to the dust or noise control plans as well as swift implementation of additional control measures to deal with significant noise or dust impacts to surrounding residential neighborhoods.
14. All submittals to DEC required by pages 8 and 9 of this permit shall be sent to the Regional Permit Administrator.

14DS1
DS/sjs

DEC PERMIT NUMBER
4-0103-00016/00020-0

FACILITY ID NUMBER
NY-0004880

PROGRAM NUMBER

Page 9 of 9

**Lawler,
Matusky
& Skelly
Engineers**

Environmental Science & Engineering Consultants

Daniel

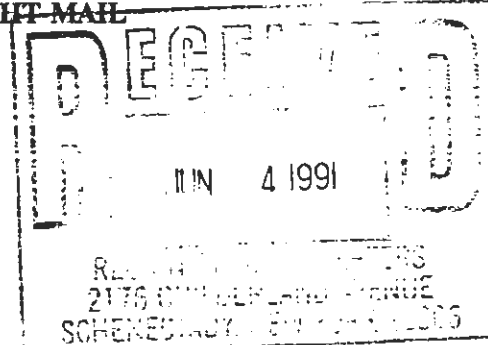
JOHN P. LAWLER, P. E.
FELIX E. MATUSKY, P. E.
MICHAEL J. SKELLY, P. E.
KARIM A. ABOOD, P. E.
PATRICK J. LAWLER, P. E.
FRANCIS M. MCGOWAN, P. E.
THOMAS L. ENGLERT, P. E.
PETER M. MCGRODDY, P. E.
THOMAS E. PEASE, P. E.

ONE BLUE HILL PLAZA
P.O. BOX 1508
PEARL RIVER, NEW YORK 10965
(914) 735-8300
FACSIMILE (914) 735-7488

May 31, 1991
File No. 442-125

VIA OVERNIGHT MAIL

Mr. William Clarke
Regional Permit Director
New York State Department of
Environmental Conservation
Region IV Headquarters
2176 Guilderland Avenue
Schenectady, NY 12306



Re: **Norlite Corporation SPDES Permit - Engineering Report on Wastewater Treatment and Discharge Alternatives**

Dear Mr. Clarke:

As required by the modified SPDES permit, enclosed are two copies of the above-referenced report. Chapter 5 of the report summarizes the conclusions and recommendations. As identified therein, Norlite is now proceeding with the treatability study on the treatment alternatives for the scrubber blowdown being discharged through Outfall 005. Norlite anticipates submitting the results from the treatability study to the Department on or about 15 August 1991 together with the results for its efforts to discharge the boiler blowdown to the Albany North POTW.

On or about 1 October 1991, Norlite must submit a renewal application for its SPDES permit. As part of this renewal application, Norlite anticipates including a proposed SPDES permit, incorporating the results of this study and the studies recommended in this report. Any questions you have regarding this report and Norlite's future plans should be directed to Jay Derman at Norlite.

Sincerely,

Stuart Bassell
Stuart Bassell, P.E.
Project Manger

SEB/cf
Enc.

cc: Kevin M. Young, Esq. (w/enclosures)
Jay Derman (w/enclosure)

WHITEMAN OSTERMAN & HANNA

ATTORNEYS AT LAW

ONE COMMERCE PLAZA
ALBANY, NEW YORK 12260

(518) 487-7800
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	CHARLENE D. FLESZAR
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OF COUNSEL	JOHN P. STOCKLI, JR.
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NEW YORK, NEW YORK 10022
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*ADMITTED IN CALIFORNIA ONLY

February 22, 1991

VIA HAND DELIVERY

FEB 22 1991

William Clarke
Regional Permit Director
NYS Dept. of Env. Conservation
2176 Guilderland Avenue
Schenectady, NY 12308

Re: Norlite Corporation -- Comments on Modified SPDES Permit

Dear Mr. Clarke:

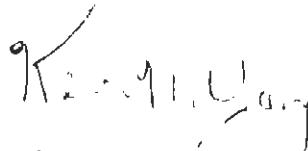
Enclosed are Norlite's comments on the modified SPDES permit issued on or about January 23, 1991. In your cover letter to Jay Derman, you indicated that Norlite must submit any comments on the modified SPDES permit within 30 days of service. In addition to submitting to these comments, Norlite requests some additional time to supplement these comments with the Engineering Report that is required under the SPDES permit to be submitted by April 1, 1991. Norlite has retained Lawler Matusky & Skelly Engineers to perform the requisite studies. Those studies are currently on-going.

You should also note that the SPDES permit required a short-term intensive monitoring program. The comments also address some discrepancies regarding the EPA method specified for the intensive monitoring program and clarify the methods being used by Norlite to complete the study.

William Clarke
February 22, 1991
Page 2

Please call me if you have any questions or need any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin M. Young". The signature is written in a cursive style with a large initial "K".

Kevin M. Young

cc: Jay Derman (w/enclosure)
Stuart Bassell (w/enclosure)

017-1116-vln

NORLITE CORPORATION

Comments on Modified SPDES Permit

Application #4-D103-16120-0

SPDES No. NY000480

2/22/91

I. Outfall 001 -- Non-conduct cooling water, boiler blowdown and stormwater.

A. Under the modified SPDES permit, Outfall 001 is listed for non-contact cooling water, boiler blowdown and stormwater. Currently, Outfall 001 also includes the discharge from the settling pond used for the scrubber water for Kiln No. 1. In revising the SPDES permit, the Department recognized that Norlite anticipates installing a new air pollution control system ("APCS") on Kiln No. 1 and, at some later date, will be closing the settling pond. As a result, the Department did not include on the SPDES permit the discharge from the scrubber water from Kiln No. 1. Norlite notes that until the new APCS is installed on Kiln No. 1, Norlite will be discharging from Outfall 001 on an intermittent basis scrubber water from the settling pond. Norlite also notes that it may be using the settling pond as a source of water to the existing wet air pollution control system on Kiln No. 1.

B. The short-term intensive monitoring program will be conducted on the boiler blowdown. The purpose of the intensive monitoring program is to identify the parameters that should be included on the SPDES permit for that discharge. There is no reason to believe that PCBs will be present in the non-contact cooling water and the boiler blowdown, and as a result, Norlite requests that PCBs be eliminated from Outfall 001 once the scrubber water from Kiln No. 1 is eliminated from that discharge. Based upon the results of the short-term intensive monitoring program, Norlite anticipates that specific metals will be deleted from Outfall 001 to the extent that the metal concentration in the wastewater is not above the metal concentration in Norlite's raw water supply. As a result, based upon the results of the intensive monitoring program, Norlite anticipates requesting that some of the metal parameters be deleted from Outfall 001.

C. The boiler blowdown, stormwater and non-contact cooling water will be discharged on a batch basis. Because of the expected consistency of these streams and the unlikelihood of significant variation in water quality, Norlite requests that the sampling/monitoring frequency be modified to monthly.

D. The limits for Cr, Pb, Zn and Ni have been established based upon a water quality standard that is a function of the hardness of the water. It is Norlite's understanding that the

Department used a hardness value of 100 mg/l based upon some hardness data from the Hudson River. When Lawler Matusky & Skelly Engineers ("LMS") back-calculated the hardness from the discharge limits, it obtained a range of hardness values from 51 mg/l to 102 mg/l. In developing the discharge limits based upon water quality standards, the Department assumed no dilution because the Salt Kill was considered by the Department to be intermittent. In other words, the SPDES permit requires the discharge to meet the calculated water quality standards for Zn, Pb, Cr and Ni. As such, in calculating the water quality standards, the hardness value used in the calculation should be the hardness of the water being discharged. In the alternative, the Department should establish the monitoring/compliance location for these four parameters as the location where the stream exits Norlite's property. As part of its engineering study that will be submitted by April 1, 1991, Norlite will investigate the hardness levels for these two locations and include to the extent relevant, proposed water quality based standards calculated from the measured hardness values.

E. The proposed permit would limit the following metals which are based on BAT/BPJ: arsenic, barium, beryllium and selenium. The schedule of compliance specifies that an Engineering Report be completed, including a characterization of the waste streams. This report is needed because the treatability of the wastewater is, as of yet, unknown. Therefore, the limitation for the BAT/BPJ listed metals, i.e., arsenic, barium, beryllium and selenium, cannot be determined numerically until the Engineering Report is submitted.

F. Norlite believes that hexavalent chromium is not present in the Outfall 001 discharge and will not be present in Outfall 005 and Outfall 004. The high intensity sampling will describe the presence of hexavalent chromium. Norlite requests that the permit reflect that monitoring for hexavalent chromium can be eliminated if the intensive sampling demonstrates that hexavalent chromium is not present. A disproportionate management effort is required to insure that the 24-hour holding time is achieved for this parameter.

G. The following metal parameters have been assigned daily average discharge limitations in the permit modification of January 23, 1991: arsenic, total; barium, total; beryllium, total; chromium, total; and selenium, total. For all other metal parameters, no daily average discharge limitations have been included. In the draft permit proposal of November 14, 1990, no daily average value was included for chromium, total. Additionally, no daily average value is included in this permit modification for this parameter (i.e., chromium, total) at Outfall 004. Norlite requests that all metal parameter daily average

discharge limitations be eliminated. This request will be discussed in more detail in the Engineering Report.

H. The permit modification of January 23, 1991 provides a daily maximum discharge limit of 1.0 mg/L for chromium. The draft permit of November 14, 1990 proposed a daily maximum discharge of 1.7 mg/L. Additionally, the permit modification of January 23, 1991 for chromium, total at Outfall 004 is 1.7 mg/L. In its Engineering Report, Norlite will propose a water quality based limit for total chromium based upon actual hardness data.

I. In revising the SPDES permit, the Department recognized that the "settling pond" will be eliminated as a contributing source of this outfall. Additionally, Norlite is filtering the discharge at Outfall 001. Therefore, Norlite requested the sample type be changed to "grab" for total suspended solids.

II. Outfall 005 -- Air Pollution Control Saline Water ("Scrubber Blowdown").

A. The SPDES permit identified the wastewater for Outfall 005 as the scrubber blowdown. Currently, Norlite has installed its new air pollution control system only on Kiln No. 2. As a result, the only scrubber blowdown that will be discharged from Outfall 005 will be from Kiln No. 2. As previously stated, Norlite anticipates installing the new air pollution control system on Kiln No. 1 and at that time, the scrubber blowdown from Kiln No. 1 will be included in the discharge from Outfall 005.

B. Currently, the SPDES permit for Outfall 005 lists "flow" as the only permit parameter. The Compliance Schedule requires an intensive monitoring program "for the permit parameters." Based upon previous sampling, Norlite anticipates that some or all of the parameters currently listed for Outfall 001 (with the exception of PCBs and hexavalent chromium) will be present in the discharge from Outfall 005. As a result, Norlite will include as part of its intensive monitoring program for Outfall 005, the 12 metals and 7 PCB aroclors listed for Outfall 001. With regard to those discharge limits which now apply to Outfall 001, but may in the future be applicable to Outfall 005, Norlite incorporates by reference the comments raised in Section I above.

C. Outfall 005 will be a continuous discharge ranging from 2 to 10 gallons per minute, depending upon whether both kilns are operating and whether Norlite is burning hazardous waste fuels or coal. Previously, Outfall 001 was an intermittent discharge and, as a result, daily sampling was not cost-prohibitive. For Outfall 005, which is continuous discharge, daily sampling would be cost-prohibitive. As a result, in its engineering report due April 1, 1991, Norlite will propose a sampling/monitoring program

appropriate for the flow and variability of the discharge from Outfall 005.

III. Outfall 004 -- Landfill Leachate.

A. Outfall 004 is for the landfill leachate. At this time, Norlite has not received a permit to operate the landfill. As a result, shale fines have not been placed in the landfill which could generate leachate, and thus there is no leachate to sample in the short-term high intensity monitoring program.

B. When and if shale fines are placed in the landfill, Norlite will conduct the high intensity monitoring program. That sampling program will include PCBs. Norlite does not anticipate that PCBs will be found in the landfill leachate and, anticipates requesting that PCBs be deleted from the permit.

C. The storage capacity of the leachate containment unit is 200,000 gallons. Norlite anticipates discharging leachate on a batch basis and will propose a sampling program as part of its engineering report due April 1, 1991 on the protocol for taking a representative sample of each batch. For example, given the significant volume and retention capacity of the leachate containment unit, Norlite will request that the Total Suspended Solids sample be changed to "grab." Norlite will address the monitoring program for the leachate pond in its Engineering Report.

D. Since the discharge limit for Outfall 004 is based on, and for the most part the same as, Outfall 001, Norlite incorporates by reference the comments in Section I, subparagraphs E through I. In addition, Norlite notes the following inconsistencies:

1. The following metal parameters have been assigned daily average discharge limitations in the permit modification of January 23, 1991: arsenic, total; barium, total; beryllium, total; and selenium, total. For all other metal parameters, no daily average discharge limitations have been set. Norlite requests that all metal parameter daily average discharge limitations be eliminated. This issue will be addressed in the Engineering Report.

2. An additional significant digit has been added to the daily maximum discharge limitations for the following metal parameters: lead, total (0.080 mg/L); selenium, total (0.10 mg/L); and zinc, total (0.30 mg/L). For laboratory analysis and consistency in reporting, Norlite requests that these daily maximum values be equivalent to those provided for these parameters at Outfall 001, i.e., lead, total (0.08 mg/L); selenium, total (0.1 mg/L) and zinc, total (0.3 mg/L).

IV. Short-Term High Intensity Monitoring Program

The permit requires intensive sampling to determine the presence or absence of 12 metals in 3 waste streams: (1) scrubber blowdown, (2) landfill leachate and (3) boiler blowdown. The following methods and detection limits are specified:

<u>Parameter</u>	<u>Detection Level (distilled water)</u>	<u>DEC Proposed Methods</u>	<u>LMS Proposed Methods</u>
Arsenic	1.0 µg/1	USEPA 206.2	--
Barium, total	2.0 µg/1	USEPA 208.1	--
Beryllium, T	0.2 µg/1	USEPA 213.4	210.2
Cadmium, T	0.1 µg/1	USEPA 213.2	--
Chromium, T	1.0 µg/1	USEPA 218.4	--
Chromium, H	8.0 µg/1	USEPA 218.4	218.3
Copper, T	1.0 µg/1	USEPA 220.2	--
Lead, T	1.0 µg/1	USEPA 239.2	--
Mercury	0.2 µg/1	USEPA 245.1	--
Nickel, T	1.0 µg/1	USEPA 249.2	--
Selenium, T	2.0 µg/1	USEPA 270.3	270.2
Zinc	0.05 µg/1	USEPA 236.2	289.2

There is no Method 213.4 for beryllium, Method 210.1 can achieve 5 µg/1; Method 210.2, 0.2 µg/1.

EPA Method 218.4 is not capable of achieving the required detection levels for total or hexavalent chromium. Method 218.3 would be required.

Method 270.2, a furnace method, should be allowed as a substitute for Method 270.3, since it can achieve the same detection limit.

Method 236.2 is a test for iron, not zinc. Method 289.2 can achieve 0.05µg/1.

The above limits are the levels at which the analytical procedure is capable of determining whether the metal is present in distilled, i.e., laboratory pure, water with no interfering substances present. It is not the level to which the concentration can be quantitated.

The practical quantitation limit is the lowest level that can be measured within specified limits of precision and accuracy during routine laboratory operations on most environmental matrices. Except for mercury and selenium, the quantitation limits

for "clean" matrices, e.g., potable water, are higher than the detection limits.

Commercial laboratories may be able to determine whether a metal is present in an environmental matrix below the practical quantitation limit. The level below the practical quantitation limit that this presence/absence determination can be made depends on the metal and environmental matrix. The reporting on metals by the laboratory could be comparable to reporting on organics, i.e., present below method quantitation limit (usually referred to as BMDL). However, this appears to be a non-standard report.

Note that the quantitation limit that can be achieved for the waste streams (in particular for the scrubber blowdown and the boiler blowdown) will be significantly higher than can normally be achieved for most environmental matrices. The high levels of chlorides and dissolved solids will require dilution of the sample which will impact on the detection limits. Enclosed is correspondence with commercial laboratories on this issue.

With these understandings, Norlite will proceed with high intensity monitoring, making the corrections to the Department proposed methods suggested by LMS.

V. Summary

Norlite is submitting these comments at this time to conform to the 30 day comment period identified in Bill Clarke's letter to Jay Derman dated January 23, 1991. Norlite also requests that the comment period be extended to include its engineering report, which is due April 1, 1991. In that report, Norlite will clarify many of the issues raised in this letter and provide further documentation for the proposed revisions to the permit.

LMS has also informed Norlite that it will need additional time to submit the Engineering Report required by the SPDES permit to be submitted by April 1, 1991. LMS indicated that it will provide us with a schedule as soon as the data from the short intensive monitoring program is available.

90#

SJAENIGUE SW7

02/16 14:31



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POUGHKEEPSIE AREA FACILITY
367 VIOLET AVENUE
POUGHKEEPSIE, NY 12601

(914) 473-9200
FAX 914-473-1982

February 14, 1991

Mr. Stuart E. Bassell, P.E.
Laufer, Matusky & Skelly Engineers
One Blue Hill Plaza
P. O. Box 1509
Pearl River, New York 10965

Dear Mr. Bassell:

I have reviewed the parameter list and the proposed detection limits that you have recently submitted to me. The listed analysis methods, for the most part, are Atomic Absorption Graphite Furnace and, if we ignore the typographical errors, (for Ba, Cd and Zn) all of the detection limits given are published Method Detection Limits (MDL's).

These Method Detection Limits are statistically calculated based on repetitive injection of standards under optimum instrument conditions. The Practical Quantitation Limits (PQL's) for environmental samples is typically two (2) to five (5) times higher than the MDL with the exception of Mercury where the MDL and PQL are equivalent.

The only non-metallic parameter listed is PCB. We have achieved a detection of 0.08 ug/l by EPA Method 608 and with some method modification we have been able to match the published detection limit.

There are some steps that can be taken for the metal analysis that will allow the PQL to approach or match the MDL. These steps are: concentration during the digestion of the sample or concentration by multiple injections on the graphite furnace each followed by a drying step prior to the atomization stage. However, any concentration of the sample will not only increase the amount of the analyte but will also increase the matrix interference. Having looked at the description of samples for analysis, there could be serious matrix interferences present especially from high chlorides. If these interferences occur, a dilution step or Method of Standard Additions would have to be used that would increase rather than decrease the PQL.

02/16 14:32 LMS Engineers #07 OF 07

February 14, 1991

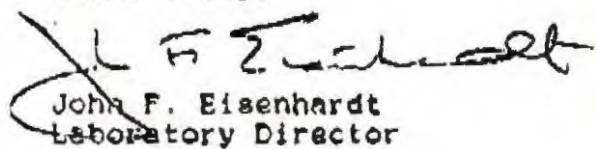
Page 2

If the presence or absence of a particular element is the overriding concern, then we can report results similar to organic analysis (i.e. analyte present but below quantifiable levels).

In such case a result could be given, with qualification, that would be between the MDL and the PQL; providing no dilution took place.

I hope this explanation sufficiently addresses the analytical concerns of this SPDES Modification. If you have any further questions, don't hesitate to call.

Yours truly,


John F. Eisenhardt
Laboratory Director

JFE:plg



314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

February 12, 1991
Norlite Corporation
PO Box 694
Cohoes, New York 12047

Attention: Mr. Jay Derman

Re: SPDES Permit Minimum Detection Limits

Dear Mr. Derman:

The Minimum Detection Limits (MDL) that were outlined on Page 5 of your NYS DEC SPDES Discharge Permit are extremely difficult to achieve. Any MDL is highly matrix dependent, and the ones reported are based on distilled deionized water. There is a realm of difference between DI water with a conductivity of approximately <2 umhos/cm and your wastewater with a conductivity of approximately 50,000 umhos/cm.

We propose a normal EPA MDL study using your samples to produce an MDL for your matrix.

If you have any questions, or require additional information, please feel free to contact me at the above number.

Very truly yours,
ADIRONDACK ENVIRONMENTAL SERVICES, INC.

Frank Scuderi
Frank Scuderi
Laboratory Director

New York State Department of Environmental Conservation

file



**Thomas C. Jorling
Commissioner**

NYS Dept. Environmental Conservation - Region 4
2176 Guilderland Avenue, Schenectady, NY
(518) 382-0680

January 23, 1991

Mr. Jay Derman, Executive Vice President
Norlite Corporation
628 South Saratoga Street
Cohoes, NY 12047

Appl. #4-0103-16/20-0
SPDES #NY-0004880
Fac.: Waste Fuel Incineration &
Aggregate Expansion
C,T,V: (T) Colonie
County: Albany

Dear Mr. Derman:

This is to inform you that pursuant to Environmental Conservation Law ("ECL"), Article 17, Title 8 (McKinney's) and 6NYCRR, Part 757, the New York State Department of Environmental Conservation (NYSDEC) has made a determination to modify the above referenced State Pollutant Discharge Elimination System (SPDES) Permit. Outfalls and limits for the Shale Fines Landfill and Air Pollution Control Blowdown have been added. Revised limits meeting current standards are set for the Stormwater Lagoon Overflow. A compliance schedule for characterization of waste streams and submittal of Best Management Plan for discharges is included.

This modification is effective on the date shown on the revised pages. If you object to any part of this change, you may contact me in writing within 30 days of the date of this letter. Your letter must contain specific evidence to support your contention(s).

Sincerely,
William J. Clarke
William J. Clarke
Regional Permit Administrator
Region IV

C:\SPDES\1S3
Attachment
cc: R4DOW - Carol Lamb
BWFD - Robert Hannaford, Loc. 3505
DOH - Mark Wykes
ACSD - Tim Murphy
R4SW - Howard Vics

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)



DISCHARGE PERMIT
 Special Conditions (Part I)

Industrial Code: 1422
 Discharge Class (CL): 01
 Toxic Class (TX): T
 Major Drainage Basin: 13
 Sub Drainage Basin: 01
 Water Index Number: H-239
 Compact Area: _____

SPDES Number: NY - 0004880
 DEC Number: 4-0103-16/20-0
 Effective Date (EDP): 04/01/87
 Expiration Date (ExDP): 04/01/92
 Modification Date(s): 01/23/91
 Attachment(s): General Conditions (Part II) Date: /

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act as amended, (33 U.S.C. Section 1251 et. seq.) (hereafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Attention: Jay Derman, Executive VP

Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Norlite Corporation
 Location (C,T,V): Cohoes (C) County: Albany
 Facility Address: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 NYTM - E: _____ NYTM - N: 4
 From Outfall No.: 001 at Latitude: 42° 45' 14" & Longitude: 73° 40' 20"
 into receiving waters known as: Salt Kill Creek Class: D

and; (list other Outfalls, Receiving Waters & Water Classifications)

- 003 Salt Kill Creek D
- 004 Salt Kill Creek D
- 005 Salt Kill Creek D

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Norlite Corporation
 Street: 628 South Saratoga Street
 City: Cohoes State: NY Zip Code: 12047
 Responsible Official or Agent: Jay Derman Phone: (518) 235-0401

This permit and the authorization to discharge shall expire on midnight of the expiration date shown and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for a permit renewal no less than 180 days prior to the expiration date shown above.

DISTRIBUTION: Carol Lamb - R4 Dow
R. Hannaford - Room 318
Mark Wykes - ACHD
DRA
Tim Murphy - ACSD (North Plant)
Howard Vics - R4SW

Permit Administrator: <u>William Clarke</u>	
Address: <u>2176 Guilderland Avenue</u> <u>Schenectady, New York 12306</u>	
Signature: <u>William Clarke</u>	Date: <u>1/23/91</u>

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

MODIFICATION DATE:
January 23, 1991During the period beginning JANUARY 23, 1991and lasting until APRIL 1, 1992

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Non-Contact Cooling Water, Boiler Blowdown, and Storm Water Lagoon Overflow</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.1	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	0.5	1.0	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.08	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.1	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.3	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab
<u>Outfall 003 - Quarry Water</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Instantaneous
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab

Outfall Number & Effluent Parameter	Discharge Limitations			Measurement Frequency	Sample Type
	Daily Ave.	Daily Max.	Units		
<u>Outfall 004 - Shale Fines Leachate</u>					
Flow	Monitor	Monitor	GPD	Daily ¹	Measured
Solids, Total Suspended	25	45	MG/L	Daily ¹	Composite ³
pH (Range)	(6.0 to 9.0)		SU	Daily ¹	Grab
Temperature	NA	90	degF	Daily ¹	Grab
Arsenic, Total	0.05	0.10	MG/L	Daily ¹	Grab
Barium, Total	2.0	4.0	MG/L	Daily ¹	Grab
Beryllium, Total	1.0	2.0	MG/L	Daily ¹	Grab
Cadmium, Total	NA	0.004	MG/L	Daily ¹	Grab
Chromium, Total	NA	1.7	MG/L	Daily ¹	Grab
Chromium, Hexavalent	NA	0.016	MG/L	Daily ¹	Grab
Copper, Total	NA	0.018	MG/L	Daily ¹	Grab
Lead, Total	NA	0.080	MG/L	Daily ¹	Grab
Mercury, Total	NA	0.0002	MG/L	Daily ¹	Grab
Nickel, Total	NA	1.8	MG/L	Daily ¹	Grab
Selenium, Total	0.05	0.10	MG/L	Daily ¹	Grab
Zinc, Total	NA	0.30	MG/L	Daily ¹	Grab
PCB Aroclor 1016	ND	ND ²		Monthly	Grab
PCB Aroclor 1221	ND	ND ²		Monthly	Grab
PCB Aroclor 1232	ND	ND ²		Monthly	Grab
PCB Aroclor 1242	ND	ND ²		Monthly	Grab
PCB Aroclor 1248	ND	ND ²		Monthly	Grab
PCB Aroclor 1254	ND	ND ²		Monthly	Grab
PCB Aroclor 1260	ND	ND ²		Monthly	Grab

Outfall 005 - Air Pollution Control Saline Water

Flow	Monitor	Monitor	GPD	Daily ¹	Grab
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FOOTNOTES:

- 1 = Samples shall be taken each day a discharge occurs
- 2 = Each individual Aroclor shall be "Not Detected" by USEPA Method 608 with a MDL of 0.065ppb.
- 3 = Representative composite consisting of a minimum of three samples (one at the beginning, middle, and end of the discharge period).

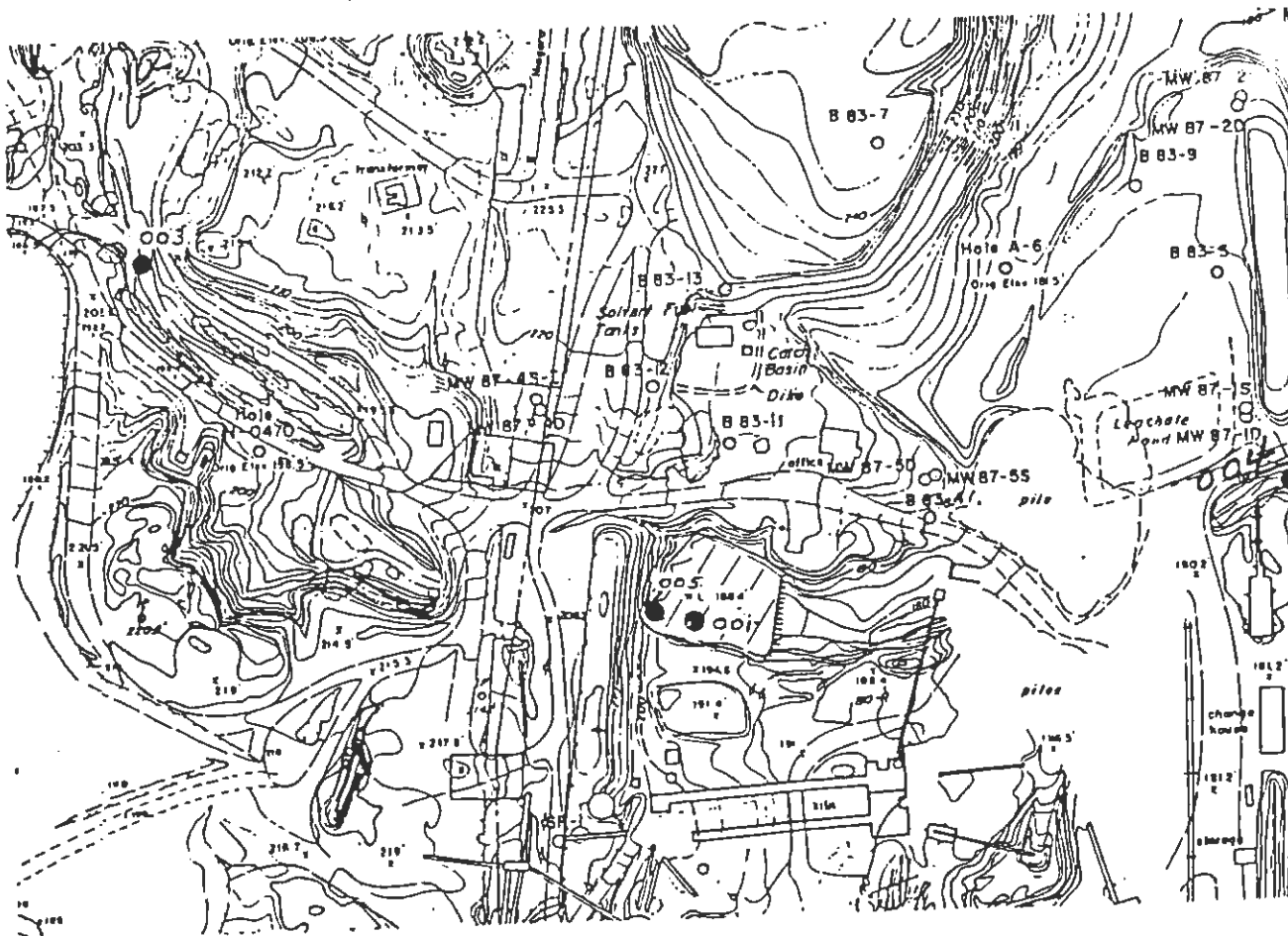
Definition of Daily Average and Daily Maximum

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).



Initial Interim

_____ SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

 Final

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
001		The permittee shall submit to the	April 1, 1991
004		Department an Approvable	
005		Engineering Report detailing the treatment and discharge alternatives for the following waste streams to meet the SPDES limitations set forth in this permit:	

Scrubber Blowdown
Landfill Leachate
Boiler Blowdown

The report will characterize all wastestreams and investigate the feasibility of disposing of a portion of the discharge at the Albany County Wastewater Treatment Plant as well as alternatives if the Sewer District does not accept the discharge. The characterization of wastestreams shall include a short-term high intensity monitoring to determine the presence, or absence of the permit parameters using the following methods and detection limits:

PARAMETER	DETECTION LEVEL	METHOD #
Arsenic	1.0 ug/l	USEPA 206.2
Barium, Total	2.0 ug/l	USEPA 208.1
Beryllium, T	0.2 ug/l	USEPA 213.4
Cadmium, T	0.1 ug/l	USEPA 213.2
Chromium, T	1.0 ug/l	USEPA 218.4
Chromium, H	8.0 ug/l	USEPA 218.4
Copper, T	1.0 ug/l	USEPA 220.2
Lead, T	1.0 ug/l	USEPA 239.2
Mercury	0.2 ug/l	USEPA 245.1
Nickel, T	1.0 ug/l	USEPA 249.2
Selenium, T	2.0 ug/l	USEPA 270.3
Zinc	0.05 ug/l	USEPA 236.2

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

COMPLIANCE SCHEDULE (CONTINUED)

The monitoring program shall consist of three grab samples collected over the operating day and lab composited for three consecutive days.

001 The permittee shall submit approvable plans July 1, 1991
004 and specifications for construction of any
005 treatment plan needed to comply with the
SPDES limitations as approved in the
Engineering Report described above.

The permittee shall submit a Best Management July 31, 1991
Plan (BMP) to prevent or minimize the
potential for release of significant amounts
of kiln dust, silt and shale fines to the
waters of the State arising from the
permittee's operations and disturbances from
the facility

001 The permittee shall comply with all Nov. 31, 1991
004 limitations set forth in the SPDES permit
005

Except for the BMP submittal deadline modified above,
the permittee shall comply with all requirements of
the Order on Consent #R4-0768-90-01, executed 6/21/90
and DEC approved environmental control plans submitted
pursuant to that order.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**
- [X] (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
 Division of Water
 Bureau of Wastewater Facilities Operations
 50 Wolf Road
 Albany, New York 12233-3506
 Phone: (518) 457-3790

Albany County Health Department
 Division of Environmental Health
 South Ferry & Green Streets
 Albany, NY 12201

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
 Regional Water Engineer
 2176 Guilderland Avenue
 Schenectady, NY 12306

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [] Regional Water Engineer and/or [] County Health Department or Environmental Control Agency listed above.
- d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II).
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording on the Discharge Monitoring Reports.
- g) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller State Plaza, Albany, New York 12201

PROJECT DESCRIPTION

NOTICE OF AVAILABILITY OF DRAFT PERMITS, NOTICE OF PUBLIC COMMENT PERIOD, NOTICE OF JOINT LEGISLATIVE PUBLIC COMMENT HEARING ON DRAFT PERMITS AND NOTICE OF PUBLIC INFORMATION SESSION

REGION 4—A public information session and public and public hearing with a written comment period have been scheduled as part of the public review of Norlite Corporation's applications for State and Federal permits to manage hazardous waste and associated air pollution controls. DEC—4-0103-16/16-0, EPA I.D. No. NYD080469935

Norlite, a manufacturer a light weight aggregate, accepts hazardous waste in bulk tankers for use as fuel in two rotary aggregate kilns at their Cohoes facility. The company proposes to renew DEC authorizations to continue to operate a hazardous waste storage, treatment and incineration facility, to install improved environmental control facilities and add new waste fuel streams.

The information sessions, set for Wednesday, April 8, 1992, at 7:00 p.m., will be held in the Common Council Chamber at City Hall in Cohoes. Staff from the Department of Environmental Conservation (DEC) and United States Environmental Protection Agency (EPA) will answer questions about the technical environmental and procedural aspects of the State DEC and Federal EPA draft permits. A representative from the Norlite Corporation will answer questions about their proposals for the facility.

A legislative public hearing on the application and the draft permits is set for Thursday, April 23, 1992 at 7:00 p.m. also in the Common Council Chamber at City Hall in Cohoes. Individuals, organizations, corporations or government agencies which may be affected by the proposed project are invited to participate by providing oral or written statements.

Written comments will be accepted until the close of the public comment period on May 8, 1992. Comments on the Part 373 permit should be sent to William J. Clarke, Regional Permit Administrator, NYSDEC Region 4, 2176 Guilderland Avenue, Schenectady, NY 12306. Comments on the Federal Hazardous and Solid Waste Amendments Act (HSWA) permit are to be submitted to Andrew Bellina, Chief, Hazardous Waste Facility Branch, U.S. Environmental Protection Agency, 26 Federal Plaza, New York 10278.

Complete application documents are available for public review at the Cohoes Public Library (169 Mohawk Street, Cohoes), the NYSDEC Region 4 Office (2176 Guilderland Avenue, Schenectady, contact William Clarke (518) 382-0680) and NYSDEC Central Office (Division of Hazardous Substance, Room 228, 50 Wolf Road, Albany, contact Sanjay Saraiya (518) 457-9254).

**STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGION 4, 2176 GUILDERLAND AVE.
SCHENECTADY, NEW YORK 12306**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278**

**NOTICE OF AVAILABILITY OF DRAFT PERMITS
NOTICE OF PUBLIC COMMENT PERIOD
NOTICE OF JOINT LEGISLATIVE PUBLIC COMMENT HEARING
ON DRAFT PERMITS
NOTICE OF PUBLIC INFORMATION SESSION
DEC NO. 4-0103-16/16-0
EPA I.D. NO. NYD080469935**

APPLICANT: Norlite Corporation, 628 South Saratoga Street, Cohoes, New York 12047
(Contact Person: Mr. William Vossell, Director of Compliance, (518) 235-0401).

PROJECT DESCRIPTION: The Applicant has filed a Part 373 hazardous waste management and associated Part 201 Air Pollution Control (APC) permit applications with the New York State Department of Environmental Conservation (NYSDEC) to: 1) renew prior DEC authorizations in order to continue to operate a hazardous waste storage, treatment and incineration facility in Cohoes, Albany County, 2) install improved environmental control facilities and 3) add new hazardous waste streams to be incinerated. The Applicant is a manufacturer of light weight aggregate which accepts ignitable and listed hazardous wastes (primarily liquid organic wastes) in bulk tankers from various generators and hazardous waste fuel marketers for use as a fuel in two rotary aggregate kilns.

1) Continuing Operations: Current operations include the on-site storage of liquid hazardous wastes in 6 tanks with a nominal total capacity of 24,000 gallons (total 144,000 gallons) prior to being burned for energy recovery in two rotary kiln industrial furnaces. Two of these tanks are not in use and have been removed pending their replacement in-kind with equivalent capacity tanks having secondary containment. Kiln 1 is not currently in operation pending completion of an upgrade to its Air Pollution Control system pursuant to a 1989 DEC enforcement Order on Consent (R4-0684-89-08), (this upgrade was accomplished on Kiln 2 in 1990). The maximum

PERMITS:

permitted incineration capacity is 600 gallons per hour. Natural gas or low sulfur fuel oil is used to fuel the kilns for startup, maintenance of proper flame temperature as needed and during those times hazardous waste is not burned. Tank sludge from cleaning operations and filtered debris are also stored in containers (no more than 214 55 gallon drums) prior to being shipped off-site for proper disposal.

2) Upgraded Facilities: Several facilities are required to be upgraded to meet regulatory standards and improve environmental controls. They include: the installation of secondary containment on the two storage tanks which do not have them (they have recently been removed pending approval to replace them) and the replacement of underground hazardous waste piping with above ground piping having secondary containment; the upgrading of Air Pollution Control (APC) equipment required under a 1989 DEC Order on Consent (Kiln 2 was upgraded in 1990 and subjected to a Trial Burn Stack test and will have its stack raised this year to a height consistent with Good Engineering Practices to further reduce air emissions impacts, Kiln 1 is shut down until upgrading is completed this year); the installation of a wastewater treatment plant its tanks will eventually be covered by the 373 HW permit) is required to comply with a 1990 DEC Order on Consent (R4-0768-90-1) and was incorporated into the facility's SPDES wastewater discharge permit and completion of the installation of fugitive dust and noise control measures required under the 1990 Consent Order. The applicant has recently submitted revised plans which propose alternate designs for the two replacement hazardous waste storage tanks (which includes a new LGF building, six 7,300 gallon storage tanks and four 1,000 gallon equalization tanks as well as improved liquid HW processing) and a design for the above ground piping, adding to APC baghouse dust storage capacity, a plan depicting the proposed location of the wastewater treatment facilities, the addition of a 25,000 gallon fuel oil storage tank, and revisions to the closure plan.

3) Hazardous Waste Fuel Changes: Proposed waste stream changes from what is currently permitted include an increase in the concentrations of 7 metals (Arsenic, Chromium, Copper, Mercury, Nickel, Selenium and Zinc) in the hazardous waste fuel (which is also referred to as LGF). Recently the applicant submitted a request to add as hazardous waste fuel sources: 1) two hazardous waste streams generated by the production of certain chlorinated aliphatic hydrocarbons - F024 (liquid organic wastes) and F025 (liquid organic wastes which can include spent filters and spent desiccant wastes); 2) the storage tank solids/sludges currently drummed and shipped for off-site disposal. (This will also require the construction of a tank solids processing building with a 300 gallon mixing tank.) None of these changes propose to increase the maximum allowable quantity of hazardous waste burned or stored on-site.

PERMITS: Permits sought are a New York State 6NYCRR Part 373 permit to continue to operate a Hazardous Waste Management Facility which includes air pollution control under Article 19, ECL; and a Federal Hazardous and Solid Waste Amendments Act (HSWA) permit. The federal permit will include requirements imposed by HSWA that

New York State does not yet have the authorization to implement. These permits can be issued for a term not to exceed five years. The hazardous waste storage, handling and incineration portion of this facility currently operates under Hazardous Waste Facility Interim Status Authorization granted by regulation in 1982, Solid/Hazardous Waste Permits To Operate issued in 1981 (expired in 1986, now extended under the State Administrative Procedures Act pending a final agency decision on this permit application) and Air Pollution Control Permits To Operate originally issued in 1979 and 1981 which have been previously renewed as recently as 1988 and modified in 1990, 1991 and 1992.

TENTATIVE SEQR AND PERMIT DETERMINATIONS:

NEW YORK STATE DEC:

The Department has made the following determinations in each of the above listed permit actions:

1) Continuing Operations: The Department has determined the application materials covering the renewal and continuance of the existing facility operation to be complete. Further, a tentative determination has been made that this renewal is approvable subject to the permit conditions contained in a draft 373 Hazardous Waste/Air Pollution Control permit prepared by the Department. This permit would continue the operation of a hazardous waste storage, treatment and incineration facility pursuant to the regulations in 6NYCRR Part 373-2 (Final Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities) as well as with all other applicable hazardous waste management/air pollution control laws and regulations. The application includes the results of the successful hazardous waste incineration trial burn which was conducted on Kiln No. 2 after new air pollution control equipment representing Best Available Control Technology (BACT) was installed as required by the 1989 Order-on-Consent with the Department.

The draft permit incorporates additional measures, as needed, based upon recently promulgated federal regulations on Burning of Hazardous Wastes in Boilers and Industrial Furnaces. These measures are being implemented pursuant to 6 NYCRR 1-6.(c).

The draft permit also requires the Applicant to identify releases or potential releases requiring further investigation; 2. fully characterize the extent of known releases; and 3. determine the need for and extent of corrective measures including the selection and implementation of these measures, if applicable.

This is a Type II action under the State Environmental Quality Review Act (SEQR) by virtue of its being a renewal without material (or substantial) change from what was previously authorized.

2) Upgraded Facilities: The 1989 DEC Order on Consent requiring the BACT upgrading of the APC equipment on both kilns is being incorporated into the draft permit. Kiln 2 which as described above was upgraded in 1990 will have its stack raised before the end of this year to a height consistent with Good Engineering Practices to further lessen emissions impact. Also by the middle of this year Kiln 1 must have BACT equipment installed on it. Kiln 1 must then successfully pass a Trial Burn stack test to demonstrate that the unit meets conditions in the draft permit in order to be allowed to operate. A trial burn plan for Kiln 1 has been submitted to the Department for review and approval, as part of the requirements of the above mentioned Order-on-Consent. The upgrading plans have been previously approved while additional changes on the Trial Burn are still needed. The addition of a tank for the recirculating Air Pollution Control scrubber water and storage facilities for the Air Pollution Control system baghouse dust is part of this system upgrade.

The draft permit also incorporates requirements from the 1990 DEC Order on Consent (R4-0768-90-10) requiring Norlite to develop a system to assure treatment of wastewater to comply with their SPDES wastewater discharge permit and install fugitive dust and noise control measures. (The wastewater treatment plant-WWTP-tanks will be covered by the 373 Hazardous Waste Permit when its final design is approved).

A tentative determination to approve the HW storage tank replacement designs submitted previously is reflected in the draft permit. The Department has completed a preliminary review of the revised replacement hazardous waste storage tank and above ground piping plans and has found the designs in concept to be acceptable along with the improved hazardous waste liquids processing system, the closure plan revisions and the location of the WWTP. Once final, approvable plans and specifications are received, they would be incorporated into the 373 HW permit.

These facilities represent no increase in present operations, emissions, discharges, storage capacities or wastes generated but are necessary for Norlite to meet regulatory standards for both air emissions and hazardous waste storage/handling. The necessity to implement these improved environmental controls expeditiously have been deemed important enough that the Department has previously approved those facilities subject to consent order. If the draft permit has not been issued by the time final plans and specifications have been received and approved by the Department, then approval will be given to proceed for the added APC baghouse dust storage under the 1989 consent order and the replacement hazardous waste storage tanks and piping as a modification of the currently in force Air Pollution Control and 360 Hazardous Waste permits and interim status authorization governing this facility in order to implement these improved environmental controls as expeditiously as possible.

The actions authorized under the DEC Orders on Consent (WWTP, fugitive dust and noise controls and APC upgrading which includes the baghouse dust storage) are exempt from SEQR under the provisions exempting enforcement actions. The other facilities to be upgraded constitute in-kind replacements. In neither case will these actions result in an increase in emissions or discharges to the environment nor in wastes generated or disposed of over what is currently permitted. The fuel oil tank is new and is covered under the Negative Declaration.

3) Hazardous Waste Fuel Changes: The draft permit reflects the Department's tentative determination to approve the increase in the metals concentrations in the hazardous waste fuel. It further reflects the completeness of the application materials submitted to support this request. Emissions, discharges and wastes generated are projected to remain within acceptable limits.

The application to add the hazardous waste storage tank sludges and waste stream F024 are preliminarily deemed complete and acceptable as these wastes are close in composition to the existing liquid organic wastes currently permitted to be burned and will be added to the permit. Retesting will be required on the baghouse dust to verify that it will continue to meet the treatment standards found in the land disposal regulations (40 CFR 260) when it is used in an aggregate product which will come in contact with soil, i.e. aggregate block mix. Waste stream F025 cannot be added until it is used in a Trial Burn (Kiln 1 this year) and successfully demonstrates the draft permit air emission limits and 373 Performance Standards will be complied with as this material can contain solid filter material which could affect the facility's ability to meet permitted emission limits.

These actions are subject to SEQR and the Department as lead agency has prepared a Negative Declaration based upon a determination that all regulated air emissions will continue to be within prescribed limits and there will be no adverse effect upon human health and the environment nor upon the ability of this facility to comply with all other applicable regulatory requirements and no increases in discharges or wastes generated or disposed of from what is currently permitted. The APC baghouse dust in particular is projected to continue to be acceptable for recycling as aggregate product. The HW fuel metals increases are not authorized unless the required wastewater treatment plant is in operation (this plant is required to assure SPDES discharge limits are met), interim treatment is provided or Norlite can demonstrate to the satisfaction of the Department there will be no deleterious impact on the wastewater discharge to the Salt Kill. Specific reasons are covered in the Negative Declaration.

The State Historic Preservation Act (SHPA) does not apply to any of these actions by virtue of extensive prior disturbance of the site which would have eliminated any archaeological resources on the site or the proposed activities will not affect the one historic resource on the site: the remains of an Erie Canal lock.

USEPA:

The United States Environmental Protection Agency has made a tentative determination to issue a HSWA permit which requires the Applicant to:

- a. Identify and address any contamination at all solid waste management units as required by Section 3004(u) of HSWA;
- b. Certify to waste minimization requirements, as required by HSWA, 40 CFR§264.73(b)(9).
- c. Comply with land disposal restrictions, as required by 40 CFR Part 268.
- d. Comply with Organic Air Emission Standards for Process Vents and Equipment Leaks.
- e. Comply with Storage/Treatment Standards for Toxicity Characteristic Wastes, as required by 40 CFR Part 264.

More specific information is provided in the FACT SHEET prepared for the project and available at locations specified below.

PUBLIC INFORMATION SESSION: The Department has scheduled an information session on Wednesday, April 8, 1992, 7:00 PM at the Cohoes City Hall, Common Council Chamber. The purpose of this session is for NYSDEC and USEPA staff to answer questions that the public may have on the technical, environmental and procedural aspects of the State DEC and Federal EPA draft permits. The applicant, Norlite Corp., will also be present to answer questions regarding their proposals for this facility. It is not necessary to file in advance to attend this Public Information Session.

PUBLIC HEARING AND WRITTEN COMMENT PERIOD: All persons, organizations, corporations or government agencies which may be affected by the proposed project are invited to comment on the application and the Draft Permits. A Legislative Public Comment Hearing on the application and the Draft Permits, will be held to receive unsworn statements from the public on ~~Thursday~~ ^{WEDNESDAY}, APRIL 23, 1992, 7:00 PM at the Cohoes City Hall, Common Council Chamber.

It is not necessary to file a written request in advance to speak at the legislative hearing. Written statements are encouraged and any statements and comments on the Part 373 permit may be filed prior to, at the hearing and until the comment due date with William J. Clarke, Regional Permit Administrator, NYSDEC Region 4, 2176 Guilderland Ave.,

Schenectady, New York 12306. Any comments on the Federal HSWA permit are to be submitted to Mr. Andrew Bellina, Chief, Hazardous Waste Facility Branch, U.S. Environmental Protection Agency, 26 Federal Plaza, New York, NY 10278. The PUBLIC COMMENT PERIOD ENDS ON FRIDAY MAY 8, 1992 unless extended by the Regional Permit Administrator. At their option, persons filing written statements as well as all oral statements made at the hearing will be given equal weight and will become part of the official record. A time limit may be imposed on oral statements.

This hearing location is reasonably accessible to persons with a mobility impairment. Interpreter services shall also be made available to deaf persons, at no charge, upon written request to the Regional Permit Administrator named below within a reasonable time prior to the hearing pursuant to SAPA §202(1).

All persons having an interest in this Project are urged to attend or be represented either individually or collectively.

Following the hearing the Department will make a determination on whether substantive or significant issues have been raised as defined in 6NYCRR621 Uniform Procedures and an Adjudicatory Hearing Issues Conference should be scheduled before an Administrative Law Judge. In order to raise substantive and significant issues written comments expressing objection to or opposition to the application must explain the basis of that opposition and identify the specific grounds which could lead the Department to deny or impose significant permit conditions on the project.

DOCUMENT AVAILABILITY: The complete application documents are available for review at (1) the New York State Department of Environmental Conservation, Region 4 Office, 2176 Guilderland Avenue, Schenectady, New York 12306 (contact person: William J. Clarke, Regional Permit Administrator, 518-382-0680), (2) the Division of Hazardous Substances Regulation, Room 228, (contact person: Sanjay Saraiya, 518-457-9254); and (3) the Cohoes Public Library, 169 Mohawk Street, Cohoes. The draft HSWA permit and supporting documentation are available for review at the above locations and U.S. Environmental Protection Agency, Permits Administration Branch, 26 Federal Plaza, New York, NY 10278 (contact person: Andrew Bellina, 212-264-0505). A copy of the FACT SHEET summarizing the permitting process, including descriptions of the application and draft permits, may be obtained by contacting the aforementioned Department contact persons located in Albany and Schenectady.

STATUTORY AND REGULATORY PROVISIONS: This application was filed and processed pursuant to Environmental Conservation Law ("ECL") Article 3 Title 3 (General Functions), Article 8 (State Environmental Quality Review), Article 19 (Air Pollution Control), Article 27 Title 9 (Industrial Hazardous Waste Management), and Article 70 (Uniform Procedures); and pursuant to Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6NYCRR") Part 617 (State

Environmental Quality Review), Part 621 (Uniform Procedures), Part 373 (Hazardous Waste Management Facilities) and Part 376 (Land Disposal Restrictions).

The applicable Federal Statute is the Resource Conservation and Recovery Act ("RCRA") with the Hazardous and Solid Waste Amendments of 1984 ("HSWA"), 42 U.S.C. Section 6901 et. seq.; and the applicable Federal regulations are at 40 CFR Parts 260 through 264, 266, 268, 270 and 124.

3/18/92

Date

William J. Clarke

William J. Clarke
Regional Permit Administrator
Region 4