

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION**

MODULE II

**CORRECTIVE ACTION REQUIREMENTS
FOR SOLID WASTE MANAGEMENT UNITS AND
AREAS OF CONCERN
AKZO NOBEL CHEMICAL INC**

A. APPLICABILITY

1. Statute and Regulations. Article 27, Title 9, Section 27-0913 and 6 NYCRR §373-2.6 require Corrective Action, including Corrective Action beyond the facility boundary where necessary to protect human health and the environment, for all releases of hazardous wastes, including hazardous constituents, from any Solid Waste Management Unit (SWMU) at a storage, treatment or disposal facility seeking a 6 NYCRR Part 373 Permit, regardless of the time at which waste was placed in such unit. Pursuant to 6 NYCRR §373-1.6(c)(2) the Commissioner may impose permit conditions as the Commissioner determines necessary to protect human health and the environment {i.e., Areas of Concern [AOC(s)]}.
2. Solid Waste Management Units and Areas of Concern. The conditions of this Module apply to:
 - a. All the SWMUs and AOCs listed in this Module individually or in combinations;
 - b. Any additional SWMUs and AOCs identified during the course of groundwater monitoring, field investigations, environmental audits or other means as described in Condition D. below; and
 - c. The following identified SWMUs and AOCs located on-site and/or off-site:
 - (1) SWMU 1 – Hazardous Waste Storage Pad – Area 1
 - (2) SWMU 2 – Hazardous Waste Storage Pad – Area 2
 - (3) SWMU 3 – Process Sewer
 - (4) SWMU 4 – Destruction Tank
 - (5) SWMU 5 – East Influent Well
 - (6) SWMU 6 – West Influent Well
 - (7) SWMU 7 – Holding Tank
 - (8) SWMU 8 – Equalization Basin
 - (9) SWMU 9 – Settling Channel
 - (10) SWMU 10 – Filter Carts
 - (11) SWMU 11 – Primary Clarifier
 - (12) SWMU 12 – East Sludge Tank

- (13) SWMU 13 – West Sludge Tank
- (14) SWMU 14 – Process Reactor
- (15) SWMU 15 – Building 2 Sump
- (16) SWMU 16 – Building 2B Separator
- (17) SWMU 17 – Former UST No. 2 Area
- (18) SWMU 18 – Former UST No. 9 Area
- (19) SWMU 19 – Sewer Pre-Treatment Pit
- (20) SWMU 20 – Inside Building 2B Accumulation Area
- (21) SWMU 21 – Outside Building 2B Accumulation Area
- (22) SWMU 22 – QC Laboratory Accumulation Area
- (23) SWMU 23 – Burning Cage
- (24) SWMU 24 – Landfill Site No. 1
- (25) SWMU 25 – Landfill Site No. 2
- (26) SWMU 26 – Landfill Site No. 3
- (27) SWMU 27 – Former Clay Pad Storage Area
- (28) SWMU 28 – Dimethyl Phthalate Meter Leak
- (29) SWMU 29 – Venturi Scrubber
- (30) SWMU 30 – Fume Scrubber
- (31) SWMU 31 – Building 16 Drum Storage Area
- (32) SWMU 32 – Debris Pile
- (33) SWMU 33 – Former Waste Sulfuric Acid Tank Area
- (34) SWMU 34 – Empty Drum Storage Area No. 1
- (35) SWMU 35 – Empty Drum Storage Area No. 2
- (36) SWMU 36 – Empty Drum Storage Area No. 3
- (37) SWMU 37 – Truck Trailer Storage Area
- (38) AOC A – Dimethyl Phthalate Spill Area
- (39) AOC B – Building 32 Fuel Line Leak
- (40) AOC C – Former Underground Storage Tank No. 11 Area
- (41) AOC D – Former Underground Storage Tank No. 12 Area
- (42) AOC E – Former Underground Storage Tank No. 20 Area

B. STANDARD CONDITIONS FOR CORRECTIVE ACTION

1. Work Plans. All work plans submitted pursuant to this Module shall include:
 - a. Quality Assurance/Quality Control protocols to ensure that data generated is valid and supported by documented procedures;
 - b. Other plans, specifications and protocols, as applicable;
 - c. A schedule for starting specific tasks, completing the work and submitting progress and final reports; and
 - d. Plans for the treatment, storage, discharge or disposal of wastes to be generated by activities described therein.

2. Health/Safety Plans. The Permittee shall develop, according to applicable Federal, State and local requirements, and submit to the Commissioner, health and safety plans that will be implemented to ensure that the health and safety of project personnel, plant personnel and the general public are protected. These plans are not subject to approval by the Commissioner.
3. Guidance Documents. When preparing the submissions described in this Permit Module, the Permittee shall take account of applicable guidance documents issued by the U.S. Environmental Protection Agency and the New York State Department of Environmental Conservation (NYSDEC or "Department") in a manner reflecting reasonable technical considerations.
4. Compliance with Governmental Requirements. During investigative activities, interim corrective measures, and final corrective measures (including, but not limited to, equipment decommissioning, excavation and unit demolition) required under this Module, the Permittee shall ensure that the transportation, treatment, storage, discharge, and disposal of all contaminated materials generated as a result of such activities (including, but not limited to, soils, sediments, liquids, tanks, pipes, pumps, rubble, debris, and structural materials) are performed in an environmentally sound manner pursuant to all applicable Federal, State and local requirements and that is protective of public health and the environment. Nothing in this Module shall be construed to require the Permittee to proceed in a manner which is in violation of any such requirements.
5. Notifications.
 - a. Notification of groundwater contamination. If at any time the Permittee discovers that hazardous constituents in groundwater that may have been released from a solid waste management unit or area of concern at the facility have migrated beyond the facility boundary in concentrations that exceed action levels, the Permittee shall, within fifteen (15) calendar days of discovery, provide written notice to the Commissioner and any person who owns or resides on the land which overlies the contaminated groundwater.
 - b. Notification of air contamination. If at any time the Permittee discovers that hazardous constituents in air that may have been released from a solid waste management unit or area of concern at the facility have or are migrating to areas beyond the facility boundary in concentrations that exceed action levels, and that residences or other places at which continuous, long-term exposure to such constituents might occur are located within such areas, the Permittee shall, within fifteen (15) calendar days of such discovery;
 - (1) Provide written notification to the Commissioner, and
 - (2) Initiate any actions that may be necessary to provide notice to all individuals who have or may have been subject to such exposure.

- c. Notification of residual contamination. Akzo Nobel Polymer Chemicals LLC filed a “DECLARATION of COVENANTS and RESTRICTIONS” with the Niagara County Clerk on December 3, 2009 for the site located at 2153 Lockport-Olcott Road in Burt, NY. The deed restriction makes the property subject to restrictive covenants and provides notice of residual site contamination and use restrictions to potential purchasers of the Property upon title examination.

C. CORRECTIVE MEASURES REQUIREMENTS

Introduction

This section of Module II begins with a brief summary of the nature and extent of the releases of hazardous waste constituents which have been identified at the Akzo Nobel Polymer Chemicals LLC (ANC) facility in Burt, New York. It establishes the “Remedial Goals” which the Department has designated to address those releases, describes the “remedial criteria” which shall be used to ensure that the remedial goals will be obtained, and requires the development and implementation of a corrective measures program to achieve the remedial criteria.

Background

The RCRA Facility Investigation (RFI) for ANC was initially documented in an April 1997 report along with several addendums to supplement the initial RFI. A RCRA Report Addendum (October 1998) and a Phase II RFI Report (December 2000) were completed to address Department comments and data gaps. The RFI report was approved by the NYSDEC in a letter dated October 25, 2002. The investigations have shown contamination of the soil and groundwater at the ANC site. In response to those findings, ANC conducted a Corrective Measures Study (CMS) to identify potential risks to human health and the environment and to evaluate various remedial alternatives to address site conditions. The CMS report was submitted in May 2003 and approved in March 2004.

The field investigations at ANC focused on assessing the SWMUs and identifying the subsurface conditions that would control contaminant migration. The investigations included soil vapor screening analysis at 470 locations, 247 groundwater screening samples, the installation of 15 groundwater wells, the installation of three piezometers, and numerous soil borings and soil samples across the site.

Soil sampling was conducted as part of the RCRA Facility Assessment (RFA) and RFI field efforts. Approximately 161 soil samples were collected and tested from various depths. Soil gas samples were also used as a guide to locate highly contaminated areas. Test methods included conventional laboratory analysis as well as laboratory screening methods designed to help identify contaminated soils. Grain size and total organic carbon testing were also conducted on selected samples. Table 1 shows a summary of contaminants detected in soils that were found at concentrations exceeding reference values from NYSDEC Technical Administrative Guidance Memorandum (TAGM) # 4046 Soil Cleanup Objectives guidance document. Exceedances were noted primarily for organic compounds and semi-volatile compounds.

Additional information concerning testing can be found in the RFI Report, RFI Phase II Report, and the RFI Addendum Report.

Groundwater in the central area of the ANC facility is contaminated above New York State comparison values. The potential risk posed by the groundwater depends to a large degree on the ultimate discharge of the groundwater and/or consumption of groundwater. Groundwater can also pose a potential threat to residential and/or buildings on site via indoor air quality.

The groundwater data gathered during 1999-2002 indicates the combined effects of abiotic and biotic attenuation appear to limit the extent of contaminants in groundwater to a finite area of the overburden within the property boundary and within the limited industrialized section of the ANC facility. Contaminants have not been detected in excess of groundwater standards in down gradient overburden groundwater at wells MW-3, MW-4 and bedrock groundwater at wells MW-3B and MW-4B. Evaluation of contaminant plume sequence maps illustrate a relatively stable contaminant plume condition in the overburden groundwater, with some contaminant plumes disappearing over the course of study.

As a result of the groundwater monitoring, the data indicates that there are no off-site impacts or receptors and the contaminated groundwater remains within the boundaries of the site. All residents and workers are supplied by municipal water. Regarding the potential for indoor air risk from contaminants associated with the groundwater, the assessment of potential vapor intrusion exposures to current administrative workers and future site residents outside the industrialized portion of the facility posed by the groundwater indicated that the pathway is incomplete.

Table 1 identifies the hazardous constituents which have exceeded action levels as well as those which have been determined to threaten human health and the environment at the ANC facility for soil and groundwater.

TABLE I

		Threshold action	Level
Contaminant	Media with exceedance	Soil (mg/kg)	Groundwater (ug/l)
Acetone	Soil, GW	0.2	50
Acetophenone	Soil	50	50
Benzene	GW	0.06	0.7
Benzo(a)Pyrene	Soil	0.061	0.002
2-Butanone	Soil, GW	0.3	50
Butylbenzylphthalate	Soil	50	50
Chlorobenzene	GW	1.7	5
1,2-Dichlorobenzene	GW	7.9	5
1,3-Dichlorobenzene	GW	1.6	5
1,4-Dichlorobenzene	GW	8.5	5
1,1-Dichloroethane	GW	0.2	5
1,2-Dichloroethane	GW	0.1	5
1,2-Dichloroethene	GW	0.25	5
Dimethylphthalate	Soil	2.0	50
Di-n-Butylphthalate	Soil	8.1	50
Styrene	GW	N/A	5
Ethylbenzene	GW	5.5	5
Toluene	GW	1.5	5
1,1,1-Trichloroethane	GW	1.5	5
Trichloroethene	GW	0.7	5
Vinyl Chloride	GW	0.2	2
Xylenes (Total)	GW	1.2	5
Naphthalene	GW	13	10

Soil values obtained from NYSDEC TAGM # 4046-Determination of Soil Cleanup Objectives and Cleanup Levels.

Groundwater values obtained from 6 NYCRR §703.5 Standards.

Determination

The Department has determined that the presence of contaminants in the soil and groundwater represents a potential threat to human health and the environment. Corrective Measures are required to mitigate that threat. Based upon the review of the RFI and the CMS for the SWMUs identified, the Department has determined that development and implementation of the following Corrective Measures are appropriate and protective of human health and the environment.

Remedial Goals

1. Eliminate the future risk to human health posed by the contaminated soil and remaining source materials present within the industrialized area of the facility.
2. Eliminate the future risk to human health posed by the contaminated overburden groundwater present beneath the industrialized area of the facility.
3. Control migration of the contaminated groundwater.

Remedial Criteria

1. Maintain a long term groundwater monitoring program to ensure that the concentration of contaminants continues to decline in the central area of the facility.
2. Continue groundwater monitoring in the perimeter wells to ensure that there is no off-site contaminant migration.

Corrective Measures Implementation

The Corrective Measures process will continue upon the issuance of this Permit. ANC shall continue to implement the Department-approved Site-Wide Groundwater Monitoring Plan (GWMP) that ensures that all remedial goals and criteria are addressed. The Site-Wide GWMP includes procedures for collecting groundwater levels and sampling at all perimeter, interior, and background wells.

1. Corrective Measures Implementation

Corrective measures shall continue upon issuance of this permit. The corrective measures program shall be operated, maintained, and if necessary, modified to achieve and maintain the "Remedial Criteria" set forth above.

2. Analytical Reporting Requirements

All analytical data must be obtained using the procedures outlined in Part 373 Appendix II-A. Modification of these protocols requires written authorization from the Department. ANC shall include sampling procedures in the Site-Wide Groundwater Monitoring Plan.

3. Modification of the Remedial System

If after review of the performance data, the Department determines that the design of the Site-Wide GWMP is not sufficient to achieve the remedial criteria, the Department may require ANC to modify the groundwater monitoring system so as to achieve the remedial criteria.

If after review of the performance data, the Department determines that the data indicates the presence of contamination above 6 NYCRR §703.5 Standards in the perimeter wells, or that interior wells indicate that the level of contamination is increasing, the Department will require ANC to develop and implement an Interim Corrective Measures (ICM) Study to address the groundwater contamination. The ICM Study shall be submitted to the Department within sixty (60) days of ANC obtaining the data indicating the exceedance of 6 NYCRR §703.5 Standards in perimeter wells.

4. Termination of Groundwater Monitoring

ANC must petition the Department for approval to cease the groundwater monitoring program. Termination of groundwater monitoring program will be permissible when “Termination Criteria” (1) or (2) described herein are met in the area and aquifer(s) associated with the well(s).

a. Termination Criteria

- (1) All Groundwater Protection Standards set forth in Table 1 have been achieved; or
- (2) The total concentration of all organic compounds found in Table 1 is no greater than 100 parts per billion (ppb), and no single organic compound concentration exceeds 50 ppb.

Termination of the entire system may not take place until ANC submits, and the Department approves, an assessment which indicates that the residual groundwater contamination does not pose an unacceptable risk to human health and the environment.

b. Termination Monitoring

ANC will initiate Termination Monitoring whenever it determines cleanup in all or part of the area/aquifer is achieving the Termination Criteria. Eight (8) consecutive

sampling episodes are required to demonstrate groundwater quality meets the termination criteria. At least sixty (60) days prior to commencing Termination Monitoring, ANC shall submit for Department review and approval a Termination Monitoring Plan. That plan will describe the area (or wells) for which Termination Monitoring is proposed, and the monitoring program, including wells, which will be used to determine whether the Termination Criteria have been achieved.

The basis for determining whether the termination criteria have been met for a particular monitoring well shall be determined by the following methodology:

- (1) Analyze samples taken from designated groundwater monitoring wells within the central area of the plume and evaluate the data to determine the mean concentration for each constituent. The mean concentration for a constituent is determined for eight (8) consecutive samples using the arithmetic mean.
- (2) Constituents that can be demonstrated as not attributable to releases from the ANC site may be excluded from the data evaluation used to determine whether the termination criteria have been met. ANC shall notify and have the burden to demonstrate to the Department the justification for excluding data on that basis.

c. Alternative Termination Criteria

In the event the groundwater protection standards set forth in Table 1 are not met, the only other basis for the termination of a groundwater monitoring system is by meeting Alternative Termination Criteria. Once the alternative criteria are met, ANC may petition the Department to shut down a groundwater monitoring system and/or well as provided below:

A groundwater monitoring well may be shut down if:

- (1) The chemical concentration of hazardous waste constituents in the monitoring well indicates the "Zero Slope Condition" defined below can be attained during Termination Monitoring.

and

- (2) The chemical concentration of hazardous waste constituents in the monitoring wells are such that after shut down of the groundwater monitoring system, the concentration of hazardous constituents in the wells downgradient of the groundwater monitoring remain below the groundwater protection standard.

or in lieu of (2) above

ANC submits, and the Department approves, an analysis which indicates the residual groundwater contamination would not result in an unacceptable risk to human health and the environment.

(3) “Zero Slope Condition” – The zero slope condition is defined as follows: when the slope of the plot of the sum of concentration of hazardous waste constituents in a well versus time is deemed zero according to the procedures described herein. The determination of said condition shall be made on a well-by-well basis at all specified groundwater monitoring wells. The determination of whether there is a zero slope shall be made as follows:

- (a) The sum of concentration of hazardous waste constituents resulting from eight (8) consecutive events will be plotted versus time.
- (b) If the curve which best fits these data points is linear, then a straight line using a least squares regression model will be fitted to the data and the slope of the fitted curve will be computed and designed as the estimated slope.
- (c) If the data points fit a non-linear form, then an exponential curve using a least squares regression model will be fitted to the data. The estimated slope will be the first derivative of the curve at a value of time half-way between the last two sampling points.
- (d) The estimated slope shall be deemed zero if:

The slope is less than or equal to zero, (i.e., the concentration is stable) or the yearly decrease of the total concentration of hazardous waste constituents is less than the average overall precision of analytical methods used. ANC and the Department will develop a methodology of calculating the average overall precision prior to implementation of Termination Monitoring.

- (e) In addition, the spatial and temporal distributions of the concentrations of compounds will be assessed to provide additional information regarding trends.

d. Post Termination Monitoring System Reactivation

Whenever ANC petitions the Department to shut down the Remedial System, the petition must include a proposal for a “Post Termination Monitoring Program”. The purpose of the program shall be to continue to demonstrate the Remedial Criteria have been achieved. Post Termination Monitoring shall be performed semi-annually for three (3) years after termination of the system.

Upon receipt of Department approval to shut down the groundwater monitoring system, ANC must initiate the Post Termination Monitoring Program. During Post Termination Monitoring, ANC must keep the groundwater monitoring system in place and be prepared to place it back into service, if required, within a reasonable period of time.

In the event one of the following events occurs during Post Termination Monitoring, ANC shall notify the Department and the Department in its discretion may require ANC to restart the associated groundwater monitoring system:

- (1) Two consecutive quarterly results from any well exceed the Termination Criteria by an amount greater than the average overall precision of the analytical methods used. ANC and the Department will develop a methodology for calculating the overall precision prior to implementation of Termination Monitoring.
- (2) The yearly average results from any well exceed the termination criteria.

Notwithstanding the above, in the event that the total of all organic compounds or the concentration of any given compound at a well exceeds the termination criteria by a factor of 10, the Department will be notified, and the well will be resampled within thirty (30) days to verify the analysis. If the original analysis has been verified, the associated groundwater monitoring system shall be restarted by ANC as soon as practicable unless ANC receives authorization from the Department to delay reactivation.

5. Institutional Controls

ANC shall submit all legal documents, deed restrictions, or covenants related to the contamination on site to the Department within thirty (30) days of filing. All notifications sent to property owners shall also be submitted to the Department prior to the mailing.

D. COMPLIANCE SCHEDULE FOR ASSESSMENT OF NEWLY IDENTIFIED SWMUs AND AOCs.

1. Notification of Assessment. The Permittee shall notify the Commissioner, in writing, of any additional SWMU(s) and/or AOC(s) not listed in this Module, which are identified during the course of groundwater monitoring, field investigations, environmental audits, or other means within fifteen (15) calendar days after discovery.
2. SWMU/AOC Assessment Report. Within thirty (30) calendar days after notifying the Commissioner, the Permittee shall submit an SWMU/AOC Assessment Report. This Report must provide, at a minimum, the following information for each newly identified SWMU/AOC:
 - a. Type of unit/area;
 - b. Location of each unit/area on a topographic map of appropriate scale;
 - c. Dimensions, capacities, and structural descriptions of the unit/area (supply available engineering drawings);

- d. Function of unit/area;
 - e. Dates that the unit/area was operated;
 - f. Description of the wastes that were placed or spilled at the unit/area;
 - g. Description of any known releases from the unit/area (to include groundwater data, soil analyses, air monitoring data, and/or surface water/sediment data);
 - h. The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes, including hazardous constituents, have occurred, are occurring, or are likely to occur from the unit/area; and
 - i. Whether this unit/areas, individually or in combination with other units/areas described in Condition A.2., is a significant source of contaminant release.
3. SWMU/AOC Sampling and Analysis Plan. Within thirty (30) calendar days after submittal of the SWMU/AOC Assessment Report required in Condition D.2., the Permittee shall submit to the Commissioner for approval a Plan in accordance with the most recent version of the NYS RCRA Quality Assurance Project Plan Guidance, for any sampling and analysis of groundwater, land surface and subsurface strata, surface water/sediment or air, as necessary to determine whether a release of hazardous waste, including hazardous constituents, from such unit(s) and/or area(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU/AOC Sampling and Analysis Plan must demonstrate that the sampling and analyses program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste, including hazardous constituents, from the newly-discovered SWMU(s) and/or AOC(s) to the environment.
4. Subsequent Assessment Actions. Following submission of the SWMU/AOC Sampling and Analysis Plan set forth in Condition D.3., subsequent activities for the Plan shall proceed in accordance with the following schedule:
- a. Meeting between the Permittee, the U.S. Environmental Protection Agency (Agency) and the Department to discuss Plan comments, as appropriate; and
 - b. Submission of a revised Plan to the Commissioner for approval within thirty (30) calendar days of the above-described meeting. (If the above-referenced meeting is determined not to be necessary, the Permittee shall submit a revised Plan to the Commissioner, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days after Permittee's receipt of Plan comments from the Commissioner); and
 - c. Begin implementation of the SWMU/AOC Sampling and Analysis Plan within thirty (30) calendar days following written approval from the Commissioner for the Plan.

5. SWMU/AOC Sampling and Analysis Report. Within thirty (30) calendar days of receipt by the Permittee of validated analytical data generated under the approved SWMU/AOC Sampling and Analysis Plan, the Permittee shall follow reporting requirements in the approved Plan and submit a SWMU/AOC Sampling and Analysis Report to the Commissioner. The Report shall describe all results obtained from the implementation of the approved Plan.
6. Assessment Conclusions. Based on the results of the SWMU/AOC Sampling and Analysis Report, the Commissioner shall determine the need for further investigations at the specific unit(s) covered in the SWMU/AOC Assessment Report. If the Commissioner determines that such investigations are needed, the Commissioner shall, by written notification, require the Permittee to prepare and submit for approval a RCRA Facility Investigation Work Plan.

E. COMPLIANCE SCHEDULE AND NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT SWMUs AND AOCs.

The Permittee shall notify the Commissioner, in writing, of any release(s) of hazardous wastes, including hazardous constituents, discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities no later than fifteen (15) calendar days after discovery. Such newly-discovered release(s) may be from the newly-identified unit(s)/area(s), from the unit(s)/area(s) for which, based on the findings of the RFA, the Commissioner had previously determined that no further investigation was necessary, or from the unit(s)/area(s) investigated as part of an RFI. Based on the information provided in the notification, the Commissioner shall determine the need for further investigation of the release(s). If the Commissioner determines that such investigations are needed, the Commissioner shall, by written notification, require the Permittee to prepare a RCRA Facility Investigation Work Plan.

F. INSTITUTIONAL CONTROLS

The Permittee shall maintain institutional controls notifying workers and visitors of areas where hazardous waste or hazardous constituents remain. Akzo Nobel Polymer Chemicals LLC filed a "DECLARATION of COVENANTS and RESTRICTIONS" with the Niagara County Clerk on December 3, 2009 for the site located at 2153 Lockport-Olcott Road in Burt, NY. The deed restriction makes the property subject to restrictive covenants and provides notice of residual site contamination and use restrictions to potential purchasers of the Property upon title examination.

G. FINANCIAL ASSURANCE

Within thirty (30) days after the effective date of this Permit Modification, Akzo Nobel Polymer Chemicals LLC shall submit to the NYSDEC the necessary documentation to demonstrate financial responsibility for monitoring and maintenance. The estimate and the mechanism used to demonstrate financial responsibility must conform with the requirements set forth in 6 NYCRR §373-2.8.

Part 373 Appendix II-A

**COMPONENTS REQUIRED FOR RCRA ANALYTICAL DATA SUBMITTED TO
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

AKZO NOBEL POLYMER CHEMICALS LLC

A Report Narrative should accompany each submission, summarizing the contents, data and QA/QC results and all relevant circumstances of the work.

- A. Parameter requested.
- B. Sample Number or Numbers, Matrix, and:
 - 1. Date and time collected;
 - 2. Date extracted and/or digested;
 - 3. Date and time analyzed; and
 - 4. Chain of custody report and/or form, including confirmation of unbroken chain of custody, intact sample packaging and container seals and adequate temperature and/or other preservation.
- C. Results^{b,e,f}
 - 1. Sample results;
 - 2. Duplicate;
 - 3. Blanks^a;
 - 4. Matrix spike, matrix spike duplicate, blank spike; and
 - 5. Surrogate recoveries, if applicable.
- D. Supporting QA/QC^b
 - 1. Methodology;
 - 2. Method detection limits, instrument detection limits^c;
 - 3. Linear curves^d;
 - 4. Percent solids for soils, sludges, sediments, and where otherwise applicable;
 - 5. Calculations^d;
 - 6. Cleanup procedures;
 - 7. Data validation procedures, results, and completed data validation checklists; and
 - 8. Documentation which illustrates how blank water is determined to be analyte-free.

In addition to submitting the above, all sample data and its QA/QC data as specified in SW-846, latest edition, Chapter 1, must be maintained accessible to NYSDEC either in hard copy or disk (computer data files). The data, if requested by NYSDEC, should be formatted as described in EPA Publication SW-846, latest edition. This requirement may be changed in the future to mandate computer data files, accessible to NYSDEC on request.

This does not obviate the requirement to do the QA/QC specified in each individual EPA-approved method.

CLP deliverables are required, unless otherwise stated in the approved plan.

- a The data should include all blanks (trip, equipment rinse, method and instrument blanks) as specified in the sampling and analysis plan, guidance and regulation.
- b Supporting QA/QC should be specified to the RCRA samples analyzed.
- c Every effort practicable must be made to achieve detection limits below regulatory limits and comparable to or better than the Practical Quantification Limits specified in the EPA-approved methods. In no case, will reporting limits above the specified PQLs be accepted without extensive and complete documentation to the Department.
- d These may not need to be submitted if adequate QA/QC summaries validating the data, including calibration control charts, correlation coefficients, etc., are submitted. The Report Narrative should describe the data validation and explain discrepancies. The supporting data should be provided to NYSDEC upon request, without restriction. Calibration data must include date and time of analysis.
- e Frequencies of blanks, duplicates, spikes, surrogates, calibrations, standard reference materials, etc., should be as stated in the approved sampling and analysis plan, the approved analytical methods and the EPA Publication SW-846, latest edition requirements. If there are any perceived conflicts, these should be resolved with NYSDEC in advance of sampling.
- f Spiking for metals, organics or other parameters must be done before sample preparation (i.e., before digestions, extractions, etc.) unless otherwise stated in the approved plan. Furnace analysis for metals will still require post-digestion spikes on all samples analyzed by this technique.