



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 24 2008

REPLY TO THE ATTENTION OF:

SC-6J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John L. Codani
General Counsel and Secretary
MacDermid
245 Freight Street
Waterbury, CT 06702

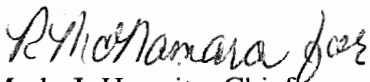
RE: Complaint and Expedited Settlement Agreement
ESA Docket No. RMP-08-ESA-005
Docket No. **CAA-05-2008-0022** **BD#**: 2750803A020

Dear Mr. Codani

Enclosed please find a copy of the fully executed Expedited RMP Settlement Agreement (ESA). The ESA is binding on EPA and Respondent. EPA will take no further action against Respondent for the violations cited in the ESA. The ESA requires no further action on your part.

Please feel free to contact Monika Chrzaszcz at (312) 886-0181, or Chrzaszcz.monika@epa.gov, if you have any questions regarding the enclosed document or if you have any other question about the program. Thank you for your assistance in resolving this matter.

Sincerely yours,


Mark J. Horwitz, Chief
Chemical Emergency
Preparedness & Prevention Section

Enclosure(s)

cc. Frank Stone



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

**EXPEDITED SETTLEMENT
AGREEMENT (ESA)**

DOCKET NO: RMP-08-ESA-005

This ESA is issued to: MacDermid, Inc.

At: 1221 Farrow Ave., Ferndale, Michigan 48220

for violating Section 112(r)(7) of the Clean Air Act. CAA-05-2008-0022, BD#: 2750803A020

This Expedited Settlement Agreement (ESA) is being entered into by the United States Environmental Protection Agency (EPA), Region 5, by its duly delegated official, the Director, Superfund Division, and by Respondent pursuant to Section 113(a)(3) and (d) of the Clean Air Act, 42 U.S.C. § 7413(a)(3) and (d), and by 40 C.F.R. § 22.13(b). On November 13, 2007, EPA obtained the concurrence of the U.S. Department of Justice, pursuant to Section 113(d)(1) of the Act, 42 U.S.C. §7413(d)(1), to pursue this administrative enforcement action.

ALLEGED VIOLATIONS

On June 26, 2007 an authorized representative of the EPA conducted a compliance inspection of the subject facility (Respondent) to determine compliance with the Risk Management Plan (RMP) regulations promulgated at 40 C.F.R. Part 68 under Section 112(r) of the Act. EPA found that the Respondent had violated regulations implementing Section 112(r) of the Act by failing to comply with the regulations as noted on the attached RISK MANAGEMENT PLAN INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET (FORM), which is hereby incorporated by reference.

SETTLEMENT

In consideration of Respondent's size of business, its full compliance history, its good faith effort to comply, and other factors as justice may require, and upon consideration of the entire record the parties enter into the ESA in order to settle the violations, described in the attached FORM for the total penalty amount of **\$2,140.00**.

This settlement is subject to the following terms and conditions:

The Respondent by signing below waives any objections that it may have regarding jurisdiction, neither admits nor denies the specific factual allegations contained in herein and in the FORM, and consents to the assessment of the penalty as stated above. Respondent waives its rights to a hearing afforded by Section 113(d)(2)(A) of the Act, 42 U.S.C §7413(d)(2)(A), and to appeal this ESA. Each party to this action shall bear its own costs and fees, if any. Respondent also certifies, subject to civil and criminal penalties for making a false submission to the United States Government, that the Respondent has corrected the violations listed in the attached FORM and has sent a cashier's check or certified check (payable to the "Treasurer, United States of America") in the amount of **\$2,140.00** in payment of the full penalty amount to the following address:

2008 JUN 21 11:11
RECEIVED
REGIONAL HEARING CLERK
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, IL 60604-3590

US Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, MO 63197-9000

The DOCKET NUMBER OF THIS ESA **must be included on the check.** (The DOCKET NUMBER is located at the top left corner of this ESA.)

This original ESA and a **copy of the check must be sent by certified mail to:**

Monika Chrzaszcz
Chemical Emergency
Preparedness and Prevention Section (SC-6J)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590


Upon Respondent's submission of the signed original ESA, EPA will take no further civil action against Respondent for the alleged violations of the Act referenced in the FORM. EPA does not waive any other enforcement action for any other violations of the Clean Air Act or any other statute.

If the signed original ESA **with an attached copy of the check** is not returned to the **EPA Region 5 office** at the above address in correct form by the Respondent within 45 days of the date of Respondent's receipt of it (90 days if an extension is granted), the proposed ESA is withdrawn, without prejudice to EPA's ability to file an enforcement action for the violations identified herein and in the FORM.

This ESA is binding on the parties signing below.

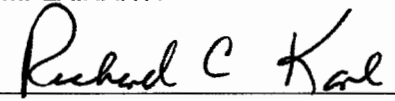
This ESA is effective upon filing with the Regional Hearing Clerk.

FOR RESPONDENT:

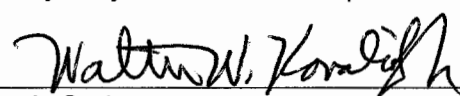
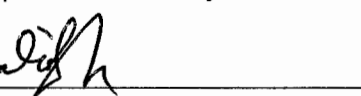
Signature:  Date: 5-23-08
Name (print): John L. Cordani
Title (print): Secretary

MacDermid, Inc.

FOR COMPLAINANT:

 Date: 6-18-08
Richard C. Karl, Director
Superfund Division

I hereby ratify the ESA and incorporate it herein by reference. It is so ORDERED.

 Date: 6/19/08
Mary A. Gade
Regional Administrator

Bharat Mathur, Acting
Regional Administrator

CAA-05-2008-0022

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

CAA-05-2008-0022

Date RMP submitted: 01/27/2004

Date process(es) came online: 1966

All comments and suggestions are bold and italicized.

Section A-Management [68.15]

Management system developed and implemented as provided in 40 CFR 68.15? S M U N/A
 Comments:

Has the owner or operator:

1. Developed a management system to oversee the implementation of the risk management program elements? [68.15(a)] Y N N/A

2. Assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements? [68.15(b)] Y N N/A
Frank Stone, Operations Director, has been assigned overall responsibility for the development, implementation, and integration of the risk management program elements.

3. Documented other persons responsible for implementing individual requirements of the risk management program and defined the lines of authority through an organization chart or similar document? [68.15(c)] Y N N/A
An email sent on September 9, 2007, included a document that contained positions and primary responsibilities and changes pertaining to the elements of RMP.

Section B: Hazard Assessment [68.20-68.42]

Hazard assessment conducted and documented as provided in 40 CFR 68.20-68.42? S M U N/A
 Comments: ***Seeing that the facility has evaluated their ammonia process as no longer being subject to RMP because the facility has quantities less than threshold on site, the facility should remove their alternative release scenario from their submitted RMP for ammonia.***

Hazard Assessment: Offsite consequence analysis parameters [68.22]

1. Used the following endpoints for offsite consequence analysis for a worst-case scenario: [68.22(a)] Y N N/A
 a. For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]
 b. For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]
 or
 c. For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m² for 40 seconds? [68.22(a)(2)(ii)]
 or
 d. For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]

2. Used the following endpoints for offsite consequence analysis for an alternative release scenario: [68.22(a)] Y N N/A
 a. For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]
 b. For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]
 c. For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m² for 40 seconds? [68.22(a)(2)(ii)]
 d. For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]

3. Used appropriate wind speeds and stability classes for the release analysis? [68.22(b)] Y N N/A

4. Used appropriate ambient temperature and humidity values for the release analysis? [68.22(c)] Y N N/A

5. Used appropriate values for the height of the release for the release analysis? [68.22(d)] Y N N/A

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

6. Used appropriate surface roughness values for the release analysis? [68.22(e)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
7. Do tables and models, used for dispersion analysis of toxic substances, appropriately account for dense or neutrally buoyant gases? [68.22(f)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
8. Were liquids, other than gases liquefied by refrigeration only, considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for a stationary source, or at process temperature, whichever is higher? [68.22(g)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Hazard Assessment: Worst-case release scenario analysis [68.25]	
9. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated toxic substance from covered processes under worst-case conditions? [68.25(a)(2)(i)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
10. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated flammable substance from covered processes under worst-case conditions? [68.25(a)(2)(ii)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
11. Analyzed and reported in the RMP additional worst-case release scenarios for a hazard class if the a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under 68.25(a)(2)(i) or 68.25(a)(2)(ii)? [68.25(a)(2)(iii)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
12. Has the owner or operator determined the worst-case release quantity to be the greater of the following: [68.25(b)] <input checked="" type="checkbox"/> a. If released from a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity? [68.25(b)(1)] <input type="checkbox"/> b. If released from a pipe, the greatest amount held in the pipe, taking into account administrative controls that limit the maximum quantity? [68.25(b)(2)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
13a. Has the owner or operator for <u>toxic substances</u> that are <u>normally gases</u> at <u>ambient temperature</u> and handled as <u>a gas or liquid under pressure</u> :	
13.a.(1) Assumed the whole quantity in the vessel or pipe would be released as a gas over 10 minutes? [68.25(c)(1)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
13.a.(2) Assumed the release rate to be the total quantity divided by 10, if there are no passive mitigation systems in place? [68.25(c)(1)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
13.b. Has the owner or operator for <u>toxic gases</u> handled as <u>refrigerated liquids at ambient pressure</u> :	
13.b.(1) Assumed the substance would be released as a gas in 10 minutes, if not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less? [68.25(c)(2)(i)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.b.(2) [Optional for owner / operator] Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool, if the released substance would be contained by passive mitigation systems in a pool with a depth greater than 1 cm? [68.25(c)(2)(ii)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.b.(3) Calculated the volatilization rate at the boiling point of the substance and at the conditions specified in 68.25(d)? [68.25(c)(2)(ii)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.c. Has the owner or operator for <u>toxic substances</u> that are <u>normally liquids at ambient temperature</u> :	
13.c.(1) Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool? [68.25(d)(1)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

13.c.(2) Determined the surface area of the pool by assuming that the liquid spreads to 1 cm deep, if there is no passive mitigation system in place that would serve to contain the spill and limit the surface area, or if passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate? [68.25(d)(1)(i)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.c.(3) Taken into account the actual surface characteristics, if the release would occur onto a surface that is not paved or smooth? [68.25(d)(1)(ii)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.c.(4) Determined the volatilization rate by accounting for the highest daily maximum temperature in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution? [68.25(d)(2)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.c.(5) Determined the rate of release to air from the volatilization rate of the liquid pool? [68.25(d)(3)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.c.(6) Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(d)(3)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.d. Has the owner or operator for <u>flammables</u> :	
13.d.(1) Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an undiked area vaporizes resulting in a vapor cloud explosion? [68.25(e)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.d.(2) For refrigerated gas released to a contained area or liquids released below their atmospheric boiling point, assumed the quantity volatilized in 10 minutes results in a vapor cloud? [68.25(f)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
13.d.(3) Assumed a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods? [68.25(e)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
14. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.25(g)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
15. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(g)] a. What modeling technique did the owner or operator use? [68.25(g)] <i>RMP Comp was used for analysis.</i>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
16. Ensured that the passive mitigation system, if considered, is capable of withstanding the release event triggering the scenario and will still function as intended? [68.25(h)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
17. Considered also the following factors in selecting the worst-case release scenarios: [68.25(i)] <input type="checkbox"/> a. Smaller quantities handled at higher process temperature or pressure? [68.25(i)(1)] <input type="checkbox"/> b. Proximity to the boundary of the stationary source? [68.25(i)(2)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Hazard Assessment: Alternative release scenario analysis [68.28]	
18. Identified and analyzed at least one alternative release scenario for each regulated toxic substance	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes? [68.28(a)]	
19. Selected a scenario: [68.28(b)] <input type="checkbox"/> a. That is more likely to occur than the worst-case release scenario under 68.25? [68.28(b)(1)(i)] <input type="checkbox"/> b. That will reach an endpoint off-site, unless no such scenario exists? [68.28(b)(1)(ii)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
20. Considered release scenarios which included, but are not limited to, the following: [68.28(b)(2)] <input type="checkbox"/> a. Transfer hose releases due to splits or sudden hose uncoupling? [68.28(b)(2)(i)] <input type="checkbox"/> b. Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds? [68.28(b)(2)(ii)] <input type="checkbox"/> c. Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure? [68.28(b)(2)(iii)] <input type="checkbox"/> d. Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks? [68.28(b)(2)(iv)] <input checked="" type="checkbox"/> e. Shipping container mishandling and breakage or puncturing leading to a spill? [68.28(b)(2)(v)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
21. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.28(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
22. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.28(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
23. Ensured that the passive and active mitigation systems, if considered, are capable of withstanding the release event triggering the scenario and will be functional? [68.28(d)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
24. Considered the following factors in selecting the alternative release scenarios: [68.28(e)] <input type="checkbox"/> a. The five-year accident history provided in 68.42? [68.28(e)(1)] <input type="checkbox"/> b. Failure scenarios identified under 68.67? [68.28(e)(2)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Hazard Assessment: Defining off-site impacts–Population [68.30]	
25. Estimated population that would be included in the distance to the endpoint in the RMP based on a circle with the point of release at the center? [68.30(a)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
26. Identified the presence of institutions, parks and recreational areas, major commercial, office, and industrial buildings in the RMP? [68.30(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
27. Used most recent Census data, or other updated information to estimate the population? [68.30(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
28. Estimated the population to two significant digits? [68.30(d)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Hazard Assessment: Defining off-site impacts–Environment [68.33]	
29. Identified environmental receptors that would be included in the distance to the endpoint based on a circle with the point of release at the center? [68.33(a)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
30. Relied on information provided on local U.S.G.S. maps, or on any data source containing U.S.G.S. data to identify environmental receptors? [Source may have used LandView to obtain information] [68.33(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Hazard Assessment: Review and update [68.36]	

RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

31. Reviewed and updated the off-site consequence analyses at least once every five years? [68.36(a)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
32. Completed a revised analysis and submit a revised RMP within six months of a change in processes, quantities stored or handled, or any other aspect that might reasonably be expected on increase or decrease the distance to the endpoint by a factor of two or more? [68.36(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A

Hazard Assessment: Documentation [68.39]

Has the owner/operator maintained the following records:

33. For worst-case scenarios: a description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate? [68.39(a)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
34. For alternative release scenarios: a description of the scenarios identified, assumptions and parameters used, the rationale for the selection of specific scenarios, and anticipated effect of the administrative controls and mitigation on the release quantity and rate? [68.39(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
35. Documentation of estimated quantity released, release rate, and duration of release? [68.39(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
36. Methodology used to determine distance to endpoints? [68.39(d)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
37. Data used to estimate population and environmental receptors potentially affected? [68.39(e)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

Hazard Assessment: Five-year accident history [68.42]

38. Has the owner or operator included all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage? [68.42(a)] <i>According to the owner or operator, there have been no accidental releases from covered processes in the past five years.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
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39. Has the owner or operator reported the following information for each accidental release: [68.42(b)] <input type="checkbox"/> a. Date, time, and approximate duration of the release? [68.42(b)(1)] <input type="checkbox"/> b. Chemical(s) released? [68.42(b)(2)] <input checked="" type="checkbox"/> c. Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)] <input type="checkbox"/> d. NAICS code for the process? [68.42(b)(4)] <input type="checkbox"/> e. The type of release event and its source? [68.42(b)(5)] <input type="checkbox"/> f. Weather conditions (if known)? [68.42(b)(6)] <input type="checkbox"/> g. On-site impacts? [68.42(b)(7)] <input type="checkbox"/> h.. Known offsite impacts? [68.42(b)(8)] <input type="checkbox"/> i. Initiating event and contributing factors (if known)? [68.42(b)(9)] <input type="checkbox"/> j. Whether offsite responders were notified (if known)? [68.42(b)(10)] <input type="checkbox"/> k. Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
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Section C: Prevention Program

Implemented the Program 3 prevention requirements as provided in 40 CFR 68.65 - 68.87? Comments:	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> N/A
-----------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------

Prevention Program- Process Safety information [68.65]

1. Has the owner or operator compiled written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by the rule? [68.65(a)] Does the process safety information contain the following for hazards of the substances: [68.65(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
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RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET

Program Level 3 Process Checklist

Facility Name: MacDermid, Inc., 1221 Farrow Ave., Ferndale, Michigan 48220

<p><input checked="" type="checkbox"/> a. Toxicity information? [68.65(b)(1)]</p> <p><input checked="" type="checkbox"/> b. Permissible exposure limits? [68.65(b)(2)]</p> <p><input checked="" type="checkbox"/> c. Physical data? [68.65(b)(3)]</p> <p><input checked="" type="checkbox"/> d. Reactivity data? [68.65(b)(4)]</p> <p><input checked="" type="checkbox"/> e. Corrosivity data? [68.65(b)(5)]</p> <p><input checked="" type="checkbox"/> f. Thermal and chemical stability data? [68.65(b)(6)]</p> <p><input checked="" type="checkbox"/> g. Hazardous effects of inadvertent mixing of materials that could foreseeably occur? [68.65(b)(7)]</p> <p>MSDS were reviewed. Copies of all MSDS are available in the lunch room and also online. Celanese MSDS dated 7/3/1997 was reviewed, should make sure this is the most recent copy of MSDS. In addition, Formaldehyde 37%, 7% Metranol solution was reviewed. The owner or operator stated that they have changed concentrations of formaldehyde from 37 to 36% and should make sure that the MSDS on site reflect the correct concentration of formaldehyde.</p>	
<p>2. Has the owner documented information pertaining to technology of the process?</p> <p><input checked="" type="checkbox"/> A block flow diagram or simplified process flow diagram? [68.65(c)(1)(i)]</p> <p><input checked="" type="checkbox"/> Process chemistry? [68.65(c)(1)(ii)]</p> <p><input type="checkbox"/> Maximum intended inventory? [68.65(c)(1)(iii)]</p> <p>The owner or operator must document the maximum intended inventory of each piece of equipment in which the regulated substances are stored or processed. The facility does have some documentation on storage tanks, but needs to include all pieces of equipment in the relevant process and must include information on operating capacities.</p> <p><input checked="" type="checkbox"/> Safe upper and lower limits for such items as temperatures, pressures, flows, or compositions? [68.65(c)(1)(iv)]</p> <p>The owner or operator must make sure that safe operating limits are listed and available for employees operating the process, even when some of these limits (such as flow) are based on output. Some standard operating limits are available in procedures and identified in documentation. Recommend the facility goes through pieces of equipment and identified all operating limits appropriately.</p> <p><input type="checkbox"/> An evaluation of the consequences of deviation? [68.65(c)(1)(iv)]</p> <p>The owner or operator did not maintain documentation on consequences of deviation.</p> <p><input type="checkbox"/> Does the process safety information contain the following for the equipment in the process: [68.65(d)(1)]</p> <p><input checked="" type="checkbox"/> Materials of construction? 68.65(d)(1)(i)</p> <p>A letter dated September 13, 2007 documents additional information that has been collected as a result of a MIOSHA request. This information is vital in understanding the equipment on site and evaluating that equipment based on manufacturer's recommendations.</p> <p><input type="checkbox"/> Piping and instrumentation diagrams [68.65(d)(1)(ii)]</p> <p>P&ID's need to be updated to include relief valves on the steam side. In addition, information on pressure relief and vacuum break need to be included on DWG MDF-000002</p> <p><input checked="" type="checkbox"/> Electrical classification? [68.65(d)(1)(iii)]</p> <p>Not rated for flammables.</p> <p><input checked="" type="checkbox"/> Relief system design and design basis? [68.65(d)(1)(iv)]</p> <p><input type="checkbox"/> Ventilation system design? [68.65(d)(1)(v)]</p> <p>Did not review.</p> <p><input checked="" type="checkbox"/> Design codes and standards employed? [68.65(d)(1)(vi)]</p> <p><input checked="" type="checkbox"/> Material and energy balances for processes built after June 21, 1999? [68.65(d)(1)(vii)] - NA</p> <p><input checked="" type="checkbox"/> Safety systems? [68.65(d)(1)(viii)]</p>	<p align="center"><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>3. Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices? [68.65(d)(2)]</p>	<p align="center"><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>4. Has the owner or operator determined and documented that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner? [68.65(d)(3)]</p>	<p align="center"><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>Prevention Program- Process Hazard Analysis [68.67]</p>	

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<p>5. Has the owner or operator performed an initial process hazard analysis (PHA), and has this analysis identified, evaluated, and controlled the hazards involved in the process? [68.67(a)]</p> <p><i>Conestoga-Rovers & Associates Inc. (CRA) completed the initial PHA in October of 2003. This PHA included utility systems, human factors, global events, the unloading area (formaldehyde unloading, bulk tank storage, unloading and loading of transfer pumps), blending operation area (formaldehyde process tank, ingredient addition to dump pump, product transfer pumps, product filter, ammonia hydroxide poly pressure tank, ingredient addition to dump pump, product filter), ammonia hydroxide process tank, ingredient addition to drum pump, product transfer pump product filter.</i></p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>6. Has the owner or operator determined and documented the priority order for conducting PHAs, and was it based on an appropriate rationale? [68.67(a)]</p>	<p><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>7. Has the owner used one or more of the following technologies to conduct process PHA: [68.67(b)]</p> <p><input type="checkbox"/> What-if? [68.67(b)(1)]</p> <p><input type="checkbox"/> Checklist? [68.67(b)(2)]</p> <p><input checked="" type="checkbox"/> What-if/Checklist? [68.67(b)(3)]</p> <p><input type="checkbox"/> Hazard and Operability Study (HAZOP) [68.67(b)(4)]</p> <p><input type="checkbox"/> Failure Mode and Effects Analysis (FMEA) [68.67(b)(5)]</p> <p><input type="checkbox"/> Fault Tree Analysis? [68.67(b)(6)]</p> <p><input type="checkbox"/> An appropriate equivalent methodology? [68.67(b)(7)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>8. Did the PHA address:</p> <p><input checked="" type="checkbox"/> The hazards of the process? [68.67(c)(1)]</p> <p><input checked="" type="checkbox"/> Identification of any incident which had a likely potential for catastrophic consequences? [68.67(c)(2)]</p> <p><input checked="" type="checkbox"/> Engineering and administrative controls applicable to hazards and interrelationships? [68.67(c)(3)]</p> <p><input checked="" type="checkbox"/> Consequences of failure of engineering and administrative controls? [68.67(c)(4)]</p> <p><input type="checkbox"/> Stationary source siting? [68.67(c)(5)]</p> <p><i>The 2003 PHA did not adequately address stationary source siting.</i></p> <p><input checked="" type="checkbox"/> Human factors? [68.67(c)(6)]</p> <p><input checked="" type="checkbox"/> An evaluation of a range of the possible safety and health effects of failure of controls? [68.67(c)(7)]</p>	<p><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>9. Was the PHA performed by a team with expertise in engineering and process operations and did the team include appropriate personnel? [68.67(d)]</p> <p><i>Manufacturing employees, maintenance employees, ES&H, Production employees, and contractor.</i></p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>10. Has the owner or operator established a system to promptly address the team's findings and recommendations; assured that the recommendations are resolved in a timely manner and documented; documented what actions are to be taken; completed actions as soon as possible; developed a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations? [68.67(e)]</p> <p><i>The owner or operator did not promptly address the team's findings and recommendations; and did not document what action are to be taken; completed actions as soon as possible; develop a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations.</i></p>	<p><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>11. Has the PHA been updated and revalidated by a team every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process? [68.67(f)]</p> <p><i>An initial PHA should have been conducted no later than June 21, 1999. An initial PHA was completed in 2003. The facility should complete their next PHA by October 2008.</i></p>	<p><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>12. Has the owner or operator retained PHAs and updates or revalidations for each process covered, as well as the resolution of recommendations for the life of the process? [68.67(g)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>

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Prevention Program- Operating procedures [68.69]	
<p>13. Has the owner or operator developed and implemented written operating procedures that provides instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]</p> <p><i>At the time of the inspections, operating procedures were reviewed for both covered processes. The facility has both operating procedures and work instructions that spell out steps to be taken to operate equipment and the process. FE-WI-7318 was reviewed and should clearly identify who is responsible for loading and unloading, whether it is employee personnel or the supplier drivers.</i></p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
<p>14. Do the procedures address the following: [68.69(a)]</p> <p><input checked="" type="checkbox"/> <u>Steps for each operating phase:</u> [68.69(a)(1)]</p> <p><input checked="" type="checkbox"/> Initial Startup? [68.69(a)(1)(i)]</p> <p><input checked="" type="checkbox"/> Normal operations? [68.69(a)(1)(ii)]</p> <p><input checked="" type="checkbox"/> Temporary operations? [68.69(a)(1)(iii)]</p> <p><input checked="" type="checkbox"/> Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)]</p> <p><input checked="" type="checkbox"/> Emergency operations? [68.69(a)(1)(v)]</p> <p><input checked="" type="checkbox"/> Normal shutdown? [68.69(a)(1)(vi)]</p> <p><input checked="" type="checkbox"/> Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)]</p> <p><input checked="" type="checkbox"/> <u>Operating limits:</u> [68.69(a)(2)]</p> <p><input checked="" type="checkbox"/> Consequences of deviations [68.69(a)(2)(i)]</p> <p><input checked="" type="checkbox"/> Steps required to correct or avoid deviation?[68.69(a)(2)(ii)]</p> <p><input checked="" type="checkbox"/> <u>Safety and health considerations:</u> [68.69(a)(3)]</p> <p><input checked="" type="checkbox"/> Properties of, and physical hazards presented by, the chemicals used in the process[68.69(a)(3)(i)]</p> <p><input checked="" type="checkbox"/> Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment? [68.69(a)(3)(ii)]</p> <p><input checked="" type="checkbox"/> Control measures to be taken if physical contact or airborne exposure occurs? [68.69(a)(3)(iii)]</p> <p><input checked="" type="checkbox"/> Quality control for raw materials and control of hazardous chemical inventory levels? [68.69(a)(3)(iv)]</p> <p><input checked="" type="checkbox"/> Any special or unique hazards? [68.69(a)(3)(v)]</p> <p><input checked="" type="checkbox"/> <u>Safety systems and their functions?</u> [68.69(a)(4)]</p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
<p>15. Are operating procedures readily accessible to employees who are involved in a process? [68.69(b)]</p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
<p>16. Has the owner or operator certified annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary?[68.69(c)]</p> <p><i>According to records, owner or operator began certifying procedures on 8/8/2003. Reviewed procedures certifications for 1/7/2005 and 6/22/2007. FE-WI-7864 addresses annual review of work orders containing formaldehyde and ammonia. The facility should make sure and specify what procedures exactly are being certified. Operating procedures must be certified annually and the facility should make sure and keep documentation on such certifications.</i></p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A
<p>17. Has the owner or operator developed and implemented safe work practices to provide for the control of hazards during specific operations, such as lockout/tagout? [68.69(d)]</p> <p>FE-SOP-H&S-0001</p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Prevention Program - Training [68.71]	
<p>18. Has each employee involved in operating a process, and each employee before being involved in operating a newly assigned process, been initially trained in an overview of the process and in the operating procedures?[68.71(a)(1)]</p> <p><i>New employees participate in on the job training. New employees are assigned to senior mixers who monitor new employee progress and who provide shadowing and on the job explanation and examples.</i></p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

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<p>19. Did initial training include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks? [68.71(a)(1)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>20. In lieu of initial training for those employees already involved in operating a process on June 21, 1999, an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures [68.71(a)(2)]</p>	<p><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>21. Has refresher training been provided at least every three years, or more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process? [68.71(b)]</p> <p><i>The owner or operator stated that initial PSM Training was conducted on 12/4/2003. In addition, training was conducted on 9/7/2006, when class 136 was added to include formaldehyde. Training on PSM/RMP overview, specifically ammonia and formaldehyde was conducted on 9/30/2006. And email was sent after the RMP inspection that specified training was conducted on 8/6/2007 that included training on operating procedures. Refresher training must include training on current operating procedures of covered processes. The facility must continue refresher training and include operating procedures. Weekly safety meetings are conducted to review all environmental safety issues according to the owner or operator.</i></p>	<p><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>22. Has owner or operator ascertained and documented in record that each employee involved in operating a process has received and understood the training required?</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>23. Does the prepared record contain the identity of the employee, the date of the training, and the means used to verify that the employee understood the training? [68.71(c)]</p> <p><i>The owner or operator should maintain documentation that verified that an employee understood training for all training conducted.</i></p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>Prevention Program - Mechanical Integrity [68.73]</p>	
<p>24. Has the owner or operator established and implemented written procedures to maintain the on-going integrity of the process equipment listed in 68.73(a)? [68.73(b)]</p> <p><i>The facility uses a computer based program to track and identify needed inspections and tests. This system tracks the time intervals, dates, equipment, and other relevant information pertaining to the inspection or test performed.</i></p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>25. Has the owner or operator trained each employee involved in maintaining the on-going integrity of process equipment? [68.73(c)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>26. Performed inspections and tests on process equipment? [68.73(d)(1)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>27. Followed recognized and generally accepted good engineering practices for inspections and testing procedures? [68.73(d)(2)]</p>	<p><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>28. Ensured the frequency of inspections and tests of process equipment is consistent with applicable manufacturers' recommendations, good engineering practices, and prior operating experience? [68.73(d)(3)]</p> <p><i>The owner or operator must ensure that they are following frequencies and tests of process equipment specified in their mechanical integrity program and frequencies and tests strongly suggested by contractors performing maintenance work on their equipment.</i></p>	<p><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>29. Documented each inspection and test that had been performed on process equipment, which identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test? [68.73(d)(4)]</p>	<p><input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A</p>

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<p>The mechanical integrity program was reviewed at the time of the inspection. Scales are on a quarterly schedule. They are calibrated by an outside vendor. Inspections records dated 4/2/2007, 1/2/2007, 10/2/2006, 7/5/2006, 4/3/2006, and 1/3/2006 were reviewed. The FMD Bulk Tank is inspected every 6 months. Inspection records dated 8/14/2006, 2/6/2006, 8/8/2005, 2/8/2005, 9/28/2004, and 4/28/2004 were reviewed. After the inspection, maintenance information was sent regarding the FMD bulk system (FD103) which included information on an inspection due on 8/6/2007 and was actually completed on 8/4/2007. MacDermid Inc. Formaldehyde Bulk Storage Tank and Piping System Evaluation was conducted by Sidlock Group, Inc. according to API 570 and STIS001 standards in May 2007. A report was sent dated June 14, 2007. The report noted a maximum inspection schedule every 20 years. UL 142 Code and STIS001. Monthly inspection checklists must be completed according to the recommendations made by the contractor and annual inspections of piping and storage tanks must be completed in accordance with guidelines provided by the contractor as well. In addition, the owner or operator must address the issue of painting the tank as specified in the report of recommendations. A May 15, 2007 Structural Steel Ultrasonic Test was conducted by Engineering and Consultants Inc. No major problems were identified. The owner or operator must make sure that ultrasonic testing is conducted regularly. In addition, the owner or operator stated that daily area inspections are conducted, which include every manufacturing area and checklists to be completed by senior employees on a rotating basis. These checklists were started in 2003 and should continue to be completed. According to the owner or operator, managers walk through every Thursday and also conduct inspections. Scrubber daily log was reviewed dated 6/22/2007. This log keeps track of inspections of the scrubber and any additions made to the scrubber. After the inspection, Scrubber logs for weeks 6/18-22/2007, 6/25-29/2007, 7/16-7/20/2007, 7/23-7/27/2007, 8/13-8/17/2007, 9/17-9/21/2007, 9/24-9/28/2007. Many of these logs note the addition of peroxide on a daily basis. In fact on 6/26/2007, 6/29/007, and 9/16/2007 identified leaks in the peroxide tubing. The facility must address the issue of leaks in the peroxide tubing and the fact that peroxide has to be added on almost a daily basis. There may be issues with scrubber inefficiency. The owner or operator should evaluate these issues and address them accordingly.</p>	
<p>30. Corrected deficiencies in equipment that were outside acceptable limits defined by the process safety information before further use or in a safe and timely manner when necessary means were taken to assure safe operation? [68.73(e)]</p>	<p align="right"><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>31. Assured that equipment as it was fabricated is suitable for the process application for which it will be used in the construction of new plants and equipment? [68.73(f)(1)]</p>	<p align="right"><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>32. Performed appropriate checks and inspections to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions? [68.73(f)(2)]</p>	<p align="right"><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>33. Assured that maintenance materials, spare parts and equipment were suitable for the process application for which they would be used? [68.73(f)(3)]</p>	<p align="right"><input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A</p>
<p>Prevention Program - Management Of Change [68.75]</p>	
<p>34. Has the owner or operator established and implemented written procedures to manage changes to process chemicals, technology, equipment, and procedures, and changes to stationary sources that affect a covered process? [68.75(a)]</p> <p>The facility has formal Management to Change (MOC) procedures in place. For engineering changes, have own procedures dated 2003. Recommend including the MOC maintenance form in the MOC procedure, because it is a form that is actually supposed to be used. Did not review any actual MOC's.</p>	<p align="right"><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>
<p>35. Do procedures assure that the following considerations are addressed prior to any change: [68.75(b)]</p>	<p align="right"><input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A</p>

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<input type="checkbox"/> The technical basis for the proposed change? [68.75(b)(1)] <input type="checkbox"/> Impact of change on safety and health? [68.75(b)(2)] <input type="checkbox"/> Modifications to operating procedures? [68.75(b)(3)] <input type="checkbox"/> Necessary time period for the change? [68.75(b)(4)] <input type="checkbox"/> Authorization requirements for the proposed change? [68.75(b)(5)]	
36. Were employees, involved in operating a process and maintenance, and contract employees, whose job tasks would be affected by a change in the process, informed of, and trained in, the change prior to start-up of the process or affected parts of the process? [68.75(c)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
37. If a change resulted in a change in the process safety information, was such information updated accordingly? [68.75(d)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
38. If a change resulted in a change in the operating procedures or practices, had such procedures or practices been updated accordingly? [68.75(e)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Prevention Program - Pre-startup Safety Review [68.77]	
39. Did the pre-startup safety review confirm that prior to the introduction of a regulated substance to a process: [68.77(b)] <input type="checkbox"/> Construction and equipment was in accordance with design specifications? [68.77(b)(1)] <input type="checkbox"/> Safety, operating, maintenance, and emergency procedures were in place and were adequate? [68.77(b)(2)] <input type="checkbox"/> For new stationary sources, a process hazard analysis had been performed and recommendations had been resolved or implemented before startup? [68.77(b)(3)] <input type="checkbox"/> Modified stationary sources meet the requirements contained in management of change? [68.77(b)(3)] <input type="checkbox"/> Training of each employee involved in operating a process had been completed? [68.77(b)(4)] <i>At the time of the inspection, the Pre-startup safety review procedures were not reviewed. The facility must maintain procedures on pre-startup safety reviews.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Prevention Program - Compliance audits [68.79]	
1. Has the owner or operator certified that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedures and practices are adequate and being followed? [68.79(a)] <i>CRA completed an initial audit in July of 2003. A subsequent audit was conducted in July of 2006. The first formal audit was under MI's self-evaluation audit program. Also, a corporate EH&S audit was conducted in June 2006. All compliance audits need to cover all areas of the prevention program.</i>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2. Has the audit been conducted by at least one person knowledgeable in the process? [68.79(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
3. Are the audit findings documented in a report? [68.79(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4. Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.79(d)] <i>The owner or operator did promptly determine and document an appropriate response to each of the findings of the audit. The owner or operator needs to make sure that each deficiency also has documentation that shows when and what exactly is being completed to address this deficiency. The audit should also make sure to be completed according to propriety dates specified. The audit process describes and ranks action items or deficiencies according to priorities. These priorities specify dates within which items need to be addressed. These dates range from 30-180 days according to the 2003 audit. These dates were not met for action items in the 2003 audit. The owner or operator needs to work on promptly addressing audit action items.</i>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A

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5. Has the owner or operator retained the two most recent compliance reports? [68.79(e)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Prevention Program - Incident investigation [68.81]	
1. Has the owner or operator investigated each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance? [68.81(a)] <i>According to the owner or operator, the facility has not has any incidents from formaldehyde and or ammonia. The owner or operator did state that the facility has an incident log database that they use for incidents.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
2. Were all incident investigations initiated not later than 48 hours following the incident? [68.81(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
3. Was an accident investigation team established and did it consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of a contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident? [68.81(c)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
4. Was a report prepared at the conclusion of every investigation?[68.81(d)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
5. Does every report include: [68.81(d)] <input type="checkbox"/> Date of incident? [68.81(d)(1)] <input type="checkbox"/> Date investigation began? [68.81(d)(2)] <input type="checkbox"/> A description of the incident? [68.81(d)(3)] <input type="checkbox"/> The factors that contributed to the incident? [68.81(d)(4)] <input type="checkbox"/> Any recommendations resulting from the investigation? [68.81(d)(5)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
6. Has the owner or operator established a system to address and resolve the report findings and recommendations, and are the resolutions and corrective actions documented? [68.81(e)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
7. Was the report reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable? [68.81(f)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
8. Has the owner or operator retained the incident investigation reports for five years? [68.81(g)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Section D - Employee Participation [68.83]	
1. Has the owner or operator developed a written plan of action regarding the implementation of the employee participation required by this section?[68.83(a)] <i>Did not review, but according to the 2003 audit, did not have a written employee participation program. The facility must make sure that they have a program in place for employee participation.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
2. Has the owner or operator consulted with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in chemical accident prevention provisions? [68.83(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
3. Has the owner or operator provided to employees and their representatives access to process hazards analyses and to all other information required to be developed under the chemical accident prevention rule? [68.83(c)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Section E - Hot Work Permit [68.85]	
1. Has the owner or operator issued a hot work permit for each hot work operation conducted on or near a covered process? [68.85(a)] <i>At the time of the inspection, the hot work procedures and program were not reviewed.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A

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2. Does the permit document that the fire prevention and protection requirements in 29CFR 1910.252(a) have been implemented prior to beginning the hot work operations? [68.85(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
3. Does the permit indicate the date(s) authorized for hot work and the object(s) upon which hot work is to be performed? [68.85(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
4. Are the permits being kept on file until completion of the hot work operations? [68.85(b)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Section F - Contractors [68.87]	
1. Has the owner or operator obtained and evaluated information regarding the contract owner or operator's safety performance and programs when selecting a contractor? [68.87(b)(1)] <i>At the time of the inspection, the contractor procedures and program were not reviewed. The owner or operator did state that contractors are subject to an Initial safety program review and an Annual contractor EHS program review.</i>	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
2. Informed contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process? [68.87(b)(2)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
3. Explained to the contract owner or operator the applicable provisions of the emergency response or the emergency action program? [68.87(b)(3)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
4. Developed and implemented safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in the covered process areas? [68.87(b)(4)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
Section G - Emergency Response [68.90 - 68.95]	
Developed and implemented an emergency response program as provided in 40 CFR 68.90-68.95? <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> N/A Comments: <i>The facility uses an emergency response plan dated 9/2003. They also use an emergency response preparedness program ETQ system. The facility is designated as a first responder in the case of an accidental release of a regulated substance. Hazwoper training is conducted ever year according to the owner or operator. Records from 2006, 2005, 2004, and 2003 were reviewed. The training is conducted at the Macomb Co. Community College in conjunction with local firefighters and responders. There are approximately 25 employees trained to the technical level (24 hours). 8 employees are trained at the incident command level. Refresher training has been setup for every April, with training document reviewed for 2006 and 2007.</i>	
1. Is the facility designated as a "first responder" in case of an accidental release of regulated substances?"	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
1.a. If the facility is not a first responder:	
1.a.(1) For stationary sources with any regulated substances held in a process above threshold quantities, is the source included in the community emergency response plan developed under 42 U.S.C. 11003? [68.90(b)(1)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
1.a.(2) For stationary sources with only regulated flammable substances held in a process above threshold quantities, has the owner or operator coordinated response actions with the local fire department? [68.90(b)(2)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
1.a.(3) Are appropriate mechanisms in place to notify emergency responders when there is need for a response? [68.90(b)(3)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
2. An emergency response plan which is maintained at the stationary source and contains the following? [68.95(a)(1)] <input checked="" type="checkbox"/> a. Procedures for informing the public and local emergency response agencies about accidental releases? [68.95(a)(1)(i)] <input checked="" type="checkbox"/> b. Documentation of proper first-aid and emergency medical treatment necessary to treat	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A

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accidental human exposures? [68.95(a)(1)(ii)] <input checked="" type="checkbox"/> c. Procedures and measures for emergency response after an accidental release of a regulated substance? [68.95(a)(1)(iii)]	
3. Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance? [68.95(a)(2)] <i>At the time of the inspection, inspections records and testing records were reviewed for emergency response equipment. SCBA's are on a monthly general inspection schedule and are hydro tested every 5 years. Regulator assembly and miscellaneous inspection required at least every 2 years for 9 tanks. 6/13/2007, 5/30/2007, 4/28/2007, 3/30/2004, 2/27/2007, 1/20/2007 records reviewed. Started in 2003. After the RMP inspection, additional inspection records were sent to be reviewed. The last test of SCBA's was conducted on 7/20/2007. The facility should update procedures because they no longer use SCBA checklists at the facility. Respirators are also inspected on a monthly basis and are tracked electronically since 2006. The most recent inspection was conducted on 6/13/2007. 7/20/2007 inspections of Scotts T41148, T142331, T129169, T135619, T211634 and T128463 were reviewed. 10/10/2003 T142331, T157457, T75986, 8/10/2005 T123546, 12/17/2002 Hydrotest T123546, 1/28/2003 Scotts 88-30-0329 and 68-11-009 were reviewed. The owner or operator should maintain records and make sure that all tanks are inspected accordingly.</i>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
4. Training for all employees in relevant procedures? [68.95(a)(3)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
5. Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes? [68.95(a)(4)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
6. Did the owner or operator use a written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan")? If so, does the plan include the elements provided in paragraph (a) of 68.95, and also complies with paragraph (c) of 68.95? [68.95(b)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
7. Has the emergency response plan been coordinated with the community emergency response plan developed under EPCRA? [68.95(c)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Section H - Risk Management Plan [68.190 - 68.195]	
1. Has the owner or operator reviewed and updated the RMP and submitted it to EPA [68.190(a)]? Reason for update. <input checked="" type="checkbox"/> Five-year update. [68.190(b)(1)] <input type="checkbox"/> Within three years of a newly regulated substance listing. [68.190(b)(2)] <input type="checkbox"/> At the time a new regulated substance is first present in an already regulated process above threshold quantities. [68.190(b)(3)] <input type="checkbox"/> At the time a regulated substance is first present in a new process above threshold quantities. [68.190(b)(4)] <input type="checkbox"/> Within six months of a change requiring revised PHA or hazard review. [68.190(b)(5)] <input type="checkbox"/> Within six months of a change requiring a revised OCA as provided in 68.36. [68.190(b)(6)] <input type="checkbox"/> Within six months of a change that alters the Program level that applies to any covered process. [68.190(b)(7)]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
2. If the owner or operator experienced an accidental release that met the five-year accident history reporting criteria (as described at 68.42) subsequent to April 9, 2004, did the owner or operator submit the information required at 68.168, 68.170(j) and 68.175(l) within six months of the release or by the time the RMP was updated as required at 68.190, whichever was earlier. [68.195(a)]	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A
3. If the emergency contact information required at 68.160(b)(6) has changed since June 21, 2004, did the owner or operator submit corrected information within thirty days of the change? [68.195(b)]	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A

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<p><i>Wendy Brant is listed in the most recent RMP submittal as the emergency contact. According to the owner or operator, Wendy left the company in October of 2005. The owner or operator should have updated the emergency contact information within thirty days of her leaving the company.</i></p>	
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