

I.	JURISDICTION	1
II.	DEFINITIONS.....	1
III.	STATEMENT OF PURPOSE	5
IV.	PARTIES BOUND	5
V.	FINDINGS OF FACT.....	7
VI.	CONCLUSIONS OF LAW AND DETERMINATIONS	18
VII.	PROJECT COORDINATORS	19
VIII.	WORK TO BE PERFORMED.....	20
IX.	PUBLIC PARTICIPATION AND COMMENT IN CORRECTIVE MEASURES SELECTION.....	23
X.	AGENCY APPROVALS/PROPOSED CONTRACTOR/ADDITIONAL WORK...	24
IX.	QUALITY ASSURANCE.....	26
XII.	SAMPLING AND DATA/DOCUMENT AVAILABILITY	28
XIII.	ACCESS	29
XIV.	RECORD PRESERVATION	30
XV.	REPORTING AND DOCUMENT CERTIFICATION.....	31
XVI.	DELAY IN PERFORMANCE/STIPULATED PENALTIES.....	33
XVII.	DISPUTE RESOLUTION.....	37
XVIII.	FORCE MAJEURE AND EXCUSABLE DELAY	38
XIX.	RESERVATION OF RIGHTS	40
XX.	OTHER CLAIMS.....	42
XXI.	OTHER APPLICABLE LAWS.....	43

XXII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT 43

XXIII. COST ESTIMATES AND ASSURANCES OF FINANCIAL RESPONSIBILITY
FOR COMPLETING THE WORK 43

XXV. MODIFICATION 59

XXVI. SEVERABILITY 59

XXVII. TERMINATION AND SATISFACTION..... 59

XXVIII. SURVIVABILITY/PERMIT INTEGRATION..... 60

XXX. WAIVER OF HEARING 60

XXXI. EFFECTIVE DATE..... 61

I. JURISDICTION

1. This Administrative Order on Consent (“Order”) is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (“EPA”) by Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (“RCRA”), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §6928(h). The authority vested in the Administrator under Section 3008(h) of RCRA has been delegated to the Regional Administrator of EPA, Region 7, by EPA Delegations Nos. 8-31 and 8-32, dated May 11, 1994; and has been further delegated to the Director of the Air and Waste Management Division of EPA (“Director”), Region 7, by Delegation Nos. R7-8-031 and R7-8-032, dated January 1, 1995, and July 1, 2005, (and revised September 16, 2007).

2. This Order is issued to the Pella Corporation (“Respondent”), the owner/operator of the Pella Corporation located at 102 Main Street, Pella, Iowa (“Facility”).

3. Respondent consents to and agrees not to contest EPA’s jurisdiction to issue this Order or to enforce its terms. Further, Respondent will not contest EPA’s jurisdiction to: compel compliance with this Order in any subsequent enforcement proceedings, either administrative or judicial; require Respondent’s full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order.

II. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA shall have the definitions given to them in RCRA or in such regulations.

“Annually” means one time per calendar year such that at least 11 months and no more than 13 months have elapsed since the last annual event.

“Area of Concern” or “AOC” means any area of the Facility under the control or ownership of the owner or operator where a release to the environment of hazardous waste(s) or hazardous constituents has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration of the release.

“AWMD” shall mean the Air and Waste Management Division of Region 7 of the EPA, or subsequently renamed division of EPA Region 7 that includes the personnel that conduct oversight of RCRA.

“Corrective Measures” shall mean those measures or actions necessary to control, prevent, or mitigate the release or potential release of hazardous waste or hazardous constituents into the environment.

“Corrective Measures Implementation” or CMI shall mean those activities necessary to initiate, complete, monitor, and maintain the remedies EPA has selected or may select to protect human health and/or the environment from the release or the potential release of hazardous wastes, or hazardous constituents, into the environment from the facility. The CMI requirements are detailed in the Scope of Work included as Attachment I.

“Corrective Measures Study” or “CMS” shall mean the investigation and evaluation of potential remedies which will protect human health and/or the environment from the release or potential release of hazardous wastes, or hazardous constituents, into the environment from the Facility. The CMS requirements are detailed in the Scope of Work included as Attachment I.

“Daily” means once each calendar day, unless expressly stated to be a working day.
“Working day” or “business day” means a day other than a Saturday, Sunday, or a federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or a federal holiday, the period shall run until the close of business of the next working day.

“Data Quality Objectives” means the qualitative or quantitative statements, the application of which is designed to ensure that data of known and appropriate quality are obtained.

“Director” means the Division Director of AWMD, his or her designee, or an authorized representative.

“EPA” means the United States Environmental Protection Agency.

“Facility” means the property owned by Respondent at 102 Main Street, Pella, Iowa, and all contiguous property at this location under the control of the Respondent. The facility is located in the NW ¼ of the SE ¼ of Section 10, T76N, R18W, City of Pella, Marion

County, Iowa. A map depicting the location of the Facility is set forth in Attachment II.

“Hazardous Constituent” means any constituent identified in Appendix VIII of 40 CFR Part 261 or any constituent identified in Appendix IX to 40 CFR Part 264.

“Hazardous Waste” means any solid waste as defined in 40 CFR §261.2 which also meets any of the criteria of a hazardous waste as listed in 40 CFR §261.3. The term hazardous waste includes hazardous constituent as defined above.

“Health and Safety Plan” shall mean those submittals as detailed in the Scope of Work included as Attachment I.

“Inspection Schedule” means the inspection schedule attached to this Order, and any subsequent EPA approved revision or modification to the Inspection Schedule.

“Interim Measures” or “IM” means those actions taken to immediately control or abate threats or potential threats to human health or the environment from releases or potential releases of hazardous waste or hazardous constituents, which can be initiated before implementation of the final corrective measures for a facility.

“Iowa Department of Natural Resources” or “IDNR” shall mean the Iowa Department of Natural Resources.

“Monthly” means 12 times per year (once per calendar month) such that at least 15 days and no more than 45 days have elapsed since the last monthly event.

“PDF format” means the Adobe Portable Document Format developed by Adobe Systems Incorporated.

“Quality Assurance Project Plan” or “QAPP” means a plan of the same name prepared consistent with the EPA’s document titled “EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5)” and any subsequent revisions or editions.

“Quarterly” means four times per calendar year such that at least two months and no more than four months have elapsed since the last quarterly event.

“RCRA Facility Investigation Report” or “RFI Report” means the submittal as detailed in the Scope of Work included as Attachment I.

“RCRA Facility Investigation” or “RFI” means the investigation and characterization of the source(s) of contamination and the nature, extent, direction, rate, movement, and concentration of the source(s) of contamination and releases of hazardous waste, including hazardous constituents, that have been or are likely to be released into the environment from the Facility. The activities required for the RFI are detailed in the Scope of Work included as Attachment I.

“Respondent” means the Pella Corporation, an Iowa Corporation, and its agents, successors, receivers, trustees and assigns. Also, in Section V. Findings of Fact, the term “Respondent” includes Respondent’s predecessor, Rolscreen Corporation.

“RCRA Corrective Action Plan” means the document of the same name dated May 1994 and given the OSWER Directive Number 9902.3-2A and EPA Document Number 520-R-94-004 and any subsequent revisions or editions.

“RCRA Facility Investigation Guidance” means the document of the same name dated May 1989 and given the OSWER Directive Number 9502.00-6D and the EPA Document Number 530/SW-89-031.

“Regional Administrator” means the Regional Administrator of EPA, Region 7, or his or her designee.

“Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes and/or hazardous constituents.

“Sampling Analysis Plan” or “SAP” means a plan of the same name prepared consistent with the EPA’s document titled “EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5)” and any subsequent revisions or editions.

“Semi-Annually” means two times per calendar year such that at least five months and no more than seven months have elapsed since the last semi-annual event.

“Solid Waste Management Unit” or “SWMU” means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

“Stabilization” means actions to control or abate threats to human health and/or the environment from releases at RCRA facilities, and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

“Standard Operating Procedure” or “SOP” means a document that establishes or prescribes methods to be followed in the operation of hazardous waste storage, treatment and disposal activities. All SOPs must be signed by a responsible corporate officer and include the certification in 40 CFR §270.11(d)(1). The responsible corporate officer shall be as defined in 40 CFR §270.11(a).

“Weekly” means 52 times per calendar year such that no fewer than five days and no more than 10 days have elapsed since the last weekly event.

III. STATEMENT OF PURPOSE

5. In entering into this Order, the mutual objectives of EPA and Respondent are for the Respondent to perform the following tasks, in accordance with the terms and conditions of this Order and the Scope of Work attached hereto as Attachment I:

A. Upon written request of EPA, IMs to prevent, mitigate, and/or remediate any migration or release of hazardous wastes and/or hazardous constituents from the facility to prevent immediate or potential threat to human health and/or the environment.

B. RFI that provides a complete investigation and characterization of the source(s) of contamination and releases of hazardous waste and/or hazardous constituents that have been or are likely to be released into the environment from the Facility, to support the development of a CMS.

C. CMS, which shall provide sufficient information to support the selection of an appropriate remedy and to support the implementation of corrective measures;

D. CMI that implements the remedy selected by EPA to prevent, mitigate, and/or remediate any migration or release of solid and/or hazardous wastes and/or hazardous constituents at, and/or from, the Facility; and

E. Any other activities necessary to correct or evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of solid and/or hazardous waste or hazardous constituents at or from the Facility.

IV. PARTIES BOUND

6. This Order shall apply to and be binding upon EPA, Respondent and its officers, directors, employees, agents, successors and assigns, heirs, trustees, receivers,

and upon all persons, including but not limited to contractors and consultants, acting on behalf of Respondent.

7. No change in ownership or corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this Order. Any conveyance of title, easement, or other interest in the Facility, or a portion of the Facility, shall not affect Respondent's obligations under this Order. Respondent will be responsible for and liable for any failure to carry out all activities required of Respondent by the terms and conditions of the Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks.

8. Respondent shall provide a copy of this Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within 14 days of the issuance of this Order or the retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Order.

9. Before transferring ownership of any property interest in the Facility, Respondent shall notify the new owner in writing of the requirements of this Order. At least ninety (90) calendar days prior to the anticipated date of transfer, the new owner shall submit to EPA a certification that the new owner has read this Order and understands its requirements and will consent to EPA access to the facility pursuant to this Order and will not interfere in the implementation of this Order. If the transferred property interest involves subdividing the property to more than one owner, a map and legal description shall be provided to the Director of the Air and Waste Management Division that identifies the properties to be occupied by each new owner.

10. Respondent agrees to undertake all actions required by the terms and conditions of this Order, including any portions of this Order incorporated by reference. Respondent waives any rights to request a hearing on this matter pursuant to RCRA § 3008(b) and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing pursuant to RCRA § 3008(b) as a Consent Order issued pursuant to RCRA § 3008(h).

V. FINDINGS OF FACT

11. Respondent is a person doing business in the State of Iowa. Beginning in the 1920s, and thereafter to the present date, Respondent has manufactured wood-framed windows, doors, sunrooms and/or skylights at its Facility located at 102 Main Street, Pella, Iowa.

12. On August 18, 1980, pursuant to RCRA § 3010, Respondent submitted a Notification of Hazardous Waste Activity form to notify EPA of its hazardous waste activity at its Facility. In its notification Respondent identified itself as a large quantity generator of hazardous waste F001, F002, F003, F005, F017, D001, and D002 and a treatment, storage, and disposal facility (TSDF) at the Facility. On January 21, 1981, Respondent amended its notification to indicate that no TSDF activities were being conducted or planned at the Facility.

13. In early 1985, approximately 10,230 gallons of wastewater was generated as a result of routine wood treating unit maintenance and a fire during those maintenance activities. Because it was contaminated with pentachlorophenol (PCP), the wastewater was a RCRA hazardous waste (F032). The wastewater was placed in containers and held on site pending shipment to a RCRA-permitted hazardous waste disposal facility. The

wastewater was held at the Respondent's Facility for longer than the allowable 90-day generator accumulation period.

14. The Respondent historically stored a variety of raw manufacturing materials and fuels in Underground Storage Tanks ("USTs") across the facility. A total of 19 USTs have historically been registered at the facility, as listed below.

Registered Underground Storage Tanks* at the Pella Corporation Facility

Tank Number	SWMU Number	Month Installed	Capacity (gallons)	Contents	Hazardous Constituents or Approximate Formulation	Date Re-moved
T1	1	8/66	550	Lacquer Thinner A-1156	Ketone, Xylene, Isopropyl Alcohol	9/88
T2	3	8/66	550	Dri-Sol D-19	Petroleum Distillate	9/88
T3	3	8/66	550	Toluol	Toluene	9/88
T4	3	8/66	550	Gun Cleaner A-1005	Toluene, Acetone, Isopropyl Alcohol	9/88
T5	3	8/66	1,500	Xylol	Xylene	9/88
T6	3	8/66	1,000	Xylol	Xylene	9/88
T7	3	8/66	550	Mineral Spirits	Petroleum Distillate	9/88
T8	4	10/58	12,000	Miltreat	5% PCP 95% Petroleum Distillate	9/88
T9	4	9/53	8,000	Miltreat	5% PCP 95% Petroleum Distillate	9/88
T10	4	5/63	4,000	Miltreat	5% PCP 95% Petroleum Distillate	9/88
Tank Number	SWMU Number	Month Installed	Capacity (gallons)	Contents	Hazardous Constituents or Approximate Formulation	Date Re-moved
T11	10	7/72	12,000	No. 2 Fuel Oil	Hydrocarbons	9/88
T12	10	7/72	12,000	No. 2 Fuel Oil	Hydrocarbons	9/88
T13	10	12/77	30,000	No. 2 Fuel	Hydrocarbons	9/88

				Oil		
T14	11	5/61	3,000	Urea Glue	Urea, Formaldehyde	9/88
T15	11	5/61	3,000	Urea Glue	Urea, Formaldehyde	9/88
T16	12	9/80	1,000	Gasoline	Hydrocarbons	9/88
T17	13	7/76	560	Diesel	Hydrocarbons	9/88
T18	14	6/85	10,000	HVAC Solution	10% Glycol 90% Water	In Use
T19	2	9/77	8,000	Miltreat	5% PCP 95% Petroleum Distillate	10/01

* A map of the tank and SWMU locations is contained in Attachment III.

15. In March 1986, Respondent discontinued use of a PCP-containing wood preservative formulation, and three USTs formerly used to store that formulation were removed from service. By November 1986, the tanks were emptied but remained in place.

16. On August 21, 1987, Respondent notified the EPA and IDNR that an investigation completed by Respondent on July 9, and 10, 1987, revealed that soil in the proximity of three of the company's three USTs (T8 -T10) used to store Miltreat, (a wood preserving compound consisting of mineral spirits (95%) and pentachlorophenol (5%)) contained concentrations of PCP (1.4 to 16 parts per million (ppm)) and total hydrocarbons (35 to 450 ppm).

17. As a result of this investigation Respondent installed three groundwater monitoring wells on September 29, 1987, (RS1-RS3) and six wells in December 1987 (RS4-RS9) (Monitoring well locations are included in Attachment IV). These wells were sampled on September 29, 1987, and December 11, 1987, respectively. The results of this sampling were as follows:

Detected Contaminants September/December 1987 (micrograms per liter (µg/L))

Sample Location	Total Hydrocarbons	Benzene	Toluene	Xylene	Ethyl Benzene	Pentachlorophenol
RS-1	13,000	0.89	0.44	0.13	<0.002	3
RS-2	3,600	0.14	<2	0.24	<0.002	3.7
RS-3	11,000	0.24	0.2	1.3	<0.002	5.9
RS-4	39	<0.002	0.003	0.003	<0.002	.58
RS-5	18	<0.002	<2	<0.002	<0.002	0.01
RS-6	2,500	<0.002	<2	<0.002	<0.002	1.5
RS-7	34	<0.002	<2	<0.002	<0.002	0.018
RS-8	42	<0.002	3	<0.002	<0.002	0.013
RS-9	21	0.004	<2	<0.002	<0.002	0.007
MCL*	NA	0.005	0.1	10	0.7	0.001

* Maximum Concentration Limit specified by the National Safe Drinking Water Act

18. On September 29, 1988, Respondent notified IDNR that USTs containing Toluene, Xylene, Acetone, Ethyl Acetate, Methyl Isobutyl Ketone and Isopropyl Alcohol were removed on September 24, 1988. Fourteen additional USTs were removed from the ground during the week of September 19, 1988. These USTs included solvent storage tanks T1 through T7, space heating fuel oil tanks T11 through T13, urea-formaldehyde glue storage tanks T14 and T15, gasoline storage tank T16, and diesel fuel storage tank T17. Sampling of soils remaining in place following tank removal efforts indicated that releases of hazardous constituents and associated environmental contamination had occurred in several locations. Both soil and groundwater impacts were identified. Upon

removal it was observed that several tanks had holes in them and soil gas readings taken soon thereafter revealed the presence of volatile organic compounds. Analysis of the soil samples revealed the presence of xylzene at a level of 300 ppm.

19. Respondent, in 1988, entered into Consent Order No. 88-HC-05 with the IDNR in accordance with Iowa Code Sections 455B.175, 455B.307, 455B.388 and 455B.416 due to the release of pollutants, hazardous substances, and hazardous wastes into the soil and groundwater. Respondent was ordered to clean-up contaminated groundwater to a level of 0.5 mg/l Benzene, 2.0 mg/l Toluene, 0.44 mg/l Xylene, and 0.22 mg/l PCP. Respondent was also ordered to remove two underground storage tanks, including the solvents contained in each tank.

20. Pursuant to Order No. 88-HC-05, Respondent installed and operated an in-situ/ex-situ bioremediation system and conducted groundwater monitoring beginning in 1989. Following eight years of operations, annual groundwater monitoring data indicated that the bioremediation system installed in 1988 had little if any impact on groundwater flow and quality in the affected area.

21. Pursuant to a September 30, 1990, Administrative Consent Order (ACO) between Respondent and EPA, formal RCRA closure was required for three specific on-site locations where the hazardous wastewater had been stored in violation of RCRA generator regulations. The final closure report for this action was submitted in July 1993 and approved by EPA on August 16, 1993.

22. On July 7, 1999, Iowa Order 88-HC-05 was amended to allow the cessation of active remediation efforts at the site, despite the fact that the groundwater clean-up standards of the original order were not met. The amended order required the

Respondent to monitor the ground water for an additional two years beyond the date of the amended order. Concentrations of PCP in ground water detected during the last sampling event on July 25, 2001, were as follows:

Concentrations of PCP in milligrams per liter (mg/L)

	MCL	RS-1	RS-2	RS-3	RS-4	RS-6	W-11	W-12
PCP Concentration	0.001	0.1050	NS	NS	0.6500	1.075	1.300	<0.010

23. On October 31, 2001, Respondent attempted to remove tank T19, but it was determined that such removal would seriously undermine the stability of an adjacent building and overhead high pressure sawdust collection line supports. Consequently, the tank was abandoned in place and filled with approximately 6,000 gallons of concrete slurry. During the process, an unspecified amount of mineral spirits was forced from a vent pipe and spilled onto soil. As a result of the release, a limited site investigation was conducted in March 2002. Soil samples were collected from four borings around the area. These samples were analyzed for arsenic, chromium, polynuclear aromatic hydrocarbons (PAHs), dioxins, furans, and total extractable hydrocarbons. PCP, ranging in concentration from 0.28 to 4.35 mg/kg, was one of only three chlorinated organics detected in the soil samples. Detected PCP concentrations in soil did exceed the EPA Region 3 Soil Screening Level (SSL) (0.0039 mg/kg), indicating a potential threat to human health and the environment. One dioxin (hexachlorodibenzo-p-dioxin at 0.12 micrograms per kilogram [$\mu\text{g}/\text{kg}$]) and one furan (hexachlorodibenzofuran at 0.39 and 0.06 $\mu\text{g}/\text{kg}$) were also reported in the soil samples. Mineral spirits were also detected in two soil borings at concentrations of 24 and 60.5 mg/kg. The four soil borings advanced

to depths up to 20 feet beneath ground surface (bgs) in the area did not indicate the presence of a perched groundwater layer similar to that observed in the northern portion of the site.

24. The March 2002 site investigation performed by Respondent included installation of a monitoring well (MW-1) just south of Tank T19. This well was screened across the groundwater surface, which was reported at a depth of approximately 11 feet bgs in March 2002. Well MW-1 was completed at a depth of approximately 24 feet bgs, with very wet clay reported at approximately 20 feet bgs. Analytical results from a groundwater sample taken on March 26, 2002, revealed PCP at a concentration of 0.0788 mg/L.

25. In December 2006, EPA completed a RCRA Facility Assessment (RFA) to investigate releases of hazardous wastes and constituents from both RCRA Solid Waste Management Units (SWMUs) and potential Areas of Concern (AOCs). The RFA included a visual site inspection and a summary of all available information on previous releases. The RFA identified 19 SWMUs and 11 AOCs at the Facility that are potential sources of soil and groundwater contamination, including, but not limited to the following:

SWMU/AOC	Description
SWMU 1	Former PCP-Contaminated Wastewater Drum Storage Areas
SWMU 2	Vacuum Treatment System Emergency Tank and Wood Preservative Solution Overflow Tank (Tank 19)
SWMU 3	Solvent USTs T1 through T7
SWMU 4	Underground Miltreat Tanks T8, T9, and T10
SWMU 5	Contaminated Soil Waste Pile from Wood Preservative Spill Soil Removal (AOC 3)
SWMU 6	Wastewater Treatment Systems
SWMU 7	Former Solid Waste Incinerator
SWMU 8	90-Day Hazardous Waste Accumulation Area

SWMU 9	Active Horizontal and Vertical Paint Line Areas
SWMU 10	Fuel Oil USTs (Tanks T11, T12, and T13)
SWMU 11	Glue USTs (Tanks 14 and 15)
SWMU 12	Gasoline UST (Tank 16)
SWMU 13	Diesel Fuel UST (Tank 17)
SWMU 14	Heating, Ventilating, and Air Conditioning UST (Tank T18)
SWMU 15	New Wood Preserving Vacuum Tank
SWMU 16	Old Wood Preserving Vacuum Tank
SWMU 17	Area I Loading Dock (Probable Former Hazardous Waste Storage Area)
SWMU 18	Dip/Dry Wood Preserving Units
SWMU 19	Hazardous Waste Satellite Accumulation Areas
AOC 1	Residual Groundwater Contamination Associated with Miltreat and Solvent USTs
AOC 2	1995 Fuel Oil AST Spill
AOC 3	1992 Wood Preservative Spill
AOC 4	1990 Hydraulic Oil Spill at Building 29 Storm Sewer
AOC 5	1989 Alodine 47 Spill and Decontamination Area
AOC 6	1988 Alodine 4780 Spill
AOC 7	1987 Wood Preservative Spill
AOC 8	2005 Diesel Fuel Spill Area A (2/11/05)
AOC 9	2005 Diesel Fuel Spill Area B (2/16/05)
AOC 10	2006 Wood Preservative Spill Area
AOC 11	Drainage Ditch and Nearby Surface Water

*A map of the SWMU and AOC locations is contained in Attachment III

The RFA report concluded that a variety of hazardous constituents have been released to the soil, groundwater, surface water, and possibly sediment.

26. Hazardous wastes currently generated at the Facility include wood treatment waste (D001), waste paint (D001, D006, D007, F003, and F005), chromium sludge (D007 and F019), spent solvents (D001, D035, F003, and D001), wood preservative waste (D001), parts washing solvent (D006, D008, D018 and D027, still bottoms (D001, D007, F003, F005), glue and sealant wastes, metal finishing chemicals, and waste miltreat.

27. The Pella, Iowa, region is located in the Southern Iowa Drift Plain, a major geomorphic region of Iowa that is characterized by loess over Pre-Illinoian till

stratigraphy in upland areas. Soil types commonly encountered in this region are of only moderate permeability. The region is underlain by surficial and bedrock aquifers. Surficial aquifers in the region consist of unconsolidated materials and include alluvial, glacial drift, and buried channel aquifers. Major bedrock aquifers in the area consist of sedimentary rock and include the Pennsylvanian, Mississippian, Silurian-Devonian, and Cambrian-Ordovician aquifers. Pre-Cambrian crystalline igneous and metamorphic rocks, referred to as the basement complex, are present beneath the surficial and sedimentary rock sequences. The basement complex is not believed to contain groundwater in south-central Iowa.

28. The northern portion of the Facility is located approximately 877 feet above mean sea level. Topography across the area is marked by an abrupt drop in elevation to approximately 850 feet above mean sea level on the south side of the Facility. While the sloping is predominantly naturally occurring, some additional grading has been performed to support building construction and stormwater management. The entire Facility is underlain by a layer of fill, with the exception of the original factory. In various locations across the Facility, this fill layer was observed to contain clay, silty clay, sand, mixed rock, brick chips, and traces of concrete. The fill layer ranges from approximately one foot thick over much of the site to ten feet thick near where the most significant changes in elevation are present. Very dark brown alluvial topsoil and brown and gray loess are present beneath the fill layer, with a combined thickness ranging from approximately two to 16 feet, in inverse proportion to the thickness of the fill layer. The topsoil and loess is underlain by Pre-Illinoian paleosol. Pre-Illinoian glacial till,

consisting of reddish brown sandy clay with traces of gravel, is present beneath the paleosol.

29. A groundwater assessment initiated at the north end of the Facility in 1987 indicated the presence of a perched water table at a depth of 13 to 15 feet. This perched layer was found only in northern end of the Facility, there is no evidence of the presence of the perched water table in the southern portion of the Facility. The perched water layer was found to yield sufficient quantities of groundwater for sampling, and was deemed to be the most likely medium of subsurface contaminant transport. Direction of groundwater flow in the perched layer is variable and greatly influenced by the topography of the underlying confining layer, a gray glacial till. The direction of groundwater flow elsewhere on the Facility has not been determined due to lack of monitoring points.

30. The City of Pella, Iowa ("the City") lies generally to the immediate north of the facility. The City relies on the Des Moines River for public drinking water, and a deep bedrock well adjacent to the City water plant, located approximately one half mile to the northwest of the Facility. Releases from the Facility may migrate toward these receptors.

31. The hazardous wastes or hazardous constituents identified above may pose a threat to human health or the environment. Certain of the organic chemicals may have detrimental health effects in humans and /or may adversely impact the environment such as the following:

A. Pentachlorophenol is extremely toxic to humans from acute (short-term) ingestion and inhalation exposure. Acute inhalation exposures in humans have resulted

in neurological, blood, and liver effects, and eye irritation. Chronic (long-term) exposure to pentachlorophenol by inhalation in humans has resulted in effects on the respiratory tract, blood, kidney, liver, immune system, eyes, nose, and skin. Human studies suggest an association between exposure to pentachlorophenol and cancer. EPA has classified pentachlorophenol as a probable human carcinogen (USEPA <http://www.epa.gov/ttn/uatw/hlthef/pentachl.html>)

B. Acute (short-term) inhalation exposure to toluene adversely affects the human nervous system, the kidneys, the liver, and the heart. Human health effects associated long-term toluene exposure are not known. Repeatedly breathing large amounts of toluene can cause permanent brain damage. As a result, humans can develop problems with speech, hearing, and vision. Humans can also experience loss of muscle control, loss of memory, and decreased mental ability. Exposure to toluene can also adversely affect the kidneys. Laboratory animal studies and, in some cases, human exposure studies show that repeat exposure to large amounts of toluene during pregnancy can adversely affect the developing fetus. <http://www.epa.gov/ncea/iris/subst/0118.htm>

C. Acute (short-term) inhalation exposure to benzene can cause drowsiness, dizziness, and unconsciousness; long-term benzene exposure causes effects on the bone marrow and can cause anemia and leukemia. Chronic (long-term) exposure to high levels of benzene in the air can cause leukemia, particularly acute myelogenous leukemia, often referred to as AML (a cancer of the bloodforming organs). EPA has determined that benzene is carcinogenic to humans. (<http://www.atsdr.cdc.gov/tfacts3.html>)

D. Acute (short-term) inhalation exposure ethylbenzene can cause eye and throat irritation and can result in dizziness. Irreversible damage to the inner ear and

hearing has been observed in animals exposed to relatively low concentrations of ethylbenzene for several days to weeks. Chronic (long-term) exposure to relatively low concentrations of ethylbenzene in air for several months to years causes kidney damage in animals. The International Agency for Research on Cancer (IARC) has determined that ethylbenzene is a possible human carcinogen.

(<http://www.atsdr.cdc.gov/tfacts110.html>)

32. EPA has set Maximum Contaminant Levels under the Safe Drinking Water Act for the following contaminants:

CONTAMINANT	Benzene	Toluene	Xylene	Pentachlorophenol
MCL (µg/L)	0.005	0.1	10	0.001

Sampling at Pella has demonstrated the presence of ground water contamination at the facility above these levels.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

33. Based on the foregoing findings of fact and after consideration of the Administrative Record, the Director, EPA Region 7, has made the following conclusions of law and determinations:

A. Respondent is a "person" within the meaning of Section 1004(15) of RCRA.

B. Respondent is the owner or operator of a Facility that has operated, is operating, should be, or should have been operating under interim status subject to §3005(e) of RCRA.

C. Certain wastes and constituents found at the Facility are hazardous wastes and/or hazardous constituents pursuant to §§1004(5), 3001 of RCRA; 40 C.F.R. Part 261; and, Subpart S, §264.501, 55 Fed. Reg. 30874, July 27, 1990.

D. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.

E. The actions required by this Order are necessary to protect human health and/or the environment.

VII. PROJECT COORDINATORS

34. Within 10 days of the effective date of this Order, EPA and Respondent shall each designate a Project Coordinator and shall notify each other in writing of the Project Coordinator it has selected. Each Project Coordinator shall be responsible for overseeing the implementation of this Order and for designating a person to act in his/her absence. The EPA Project Coordinator will be EPA's designated representative for the Facility. To the maximum extent practicable, all communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Order shall be directed through the Project Coordinators.

35. The parties may change their Project Coordinator but agree to provide at least 30 days written notice prior to changing a Project Coordinator.

36. The absence of the EPA Project Coordinator from the Facility shall not be cause for the stoppage of work.

VIII. WORK TO BE PERFORMED

37. Pursuant to § 3008(h) of RCRA, Respondent agrees to and is hereby ordered to perform the acts specified in this section, in the manner and by the dates specified herein. All work undertaken pursuant to this Order shall be performed in a manner consistent with, at a minimum: the attached SOW; the EPA-approved IM, RFI, CMS, and CMI Work Plans developed under this Order; RCRA and other applicable Federal laws and their implementing regulations; and applicable EPA guidance documents. Guidance may include, but is not limited to, documents listed in Attachment V to this Order, which are incorporated by reference as is fully set forth herein.

38. INTERIM MEASURES. In the event EPA or Respondent identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new solid waste management units not previously identified, Respondent shall notify the EPA Project Coordinator, orally within 48 hours of discovery and in writing within seven days of such discovery, summarizing the immediacy and magnitude of the potential threats(s) to human health and/or the environment. Upon written request of EPA, Respondent shall submit to EPA, in accordance with time frames or schedule set by EPA, an IM Work Plan in accordance with Section II, Task I of the SOW, for review and approval that identifies IM which control, abate or mitigate this threat (or such other threat that EPA may identify) and are consistent with and could be integrated into any long-term remediation activities at the Facility. EPA will review and approve, disapprove, or modify this submittal in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work. A report on Respondent's implementation and

effectiveness of IM shall be included in, and submitted on the same schedule as, the quarterly progress reports required by this Order. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize Respondent to act prior to EPA's receipt of the IM Work Plan.

39. RCRA FACILITY INVESTIGATION. The Respondent shall conduct an RFI to determine the nature and three dimensional extent of releases of hazardous wastes or constituents from regulated units, SWMUs, AOCs and other sources at the Facility and to gather all necessary data to support the CMS. The RFI submittals shall be developed in a manner consistent with Section III, Task II of the SOW.

A. Within forty-five (45) days of the effective date of this order, Respondent shall submit to EPA a Work Plan for a RFI ("RFI Work Plan"). EPA will review and approve, disapprove, or modify this submittal in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work.

B. Respondent shall submit a RFI Report to EPA for approval in accordance with the schedule included in the EPA approved RFI Work Plan. EPA will review and approve, disapprove, or modify this submittal in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work.

40. CORRECTIVE MEASURES STUDY. Respondent shall conduct a CMS that shall identify, screen and develop alternatives for removal, containment, treatment and/or other remediation of the contamination to achieve protection of human health and the environment. The scope of the CMS will be identified in EPA's approval of the RFI pursuant to Paragraph 39B of this Order. The CMS submittals shall be developed in a manner consistent with Section IV, Task III in the SOW.

A. Within sixty (60) days of EPA's approval of the Final RFI Report, Respondent shall submit to EPA a CMS Work Plan. EPA will review and approve, disapprove, or modify this submittal in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work.

B. Respondent shall submit a CMS Report to EPA in accordance with the schedule contained in the CMS Work Plan. The CMS is subject to review and approval, disapproval, or modification by EPA in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work.

41. CORRECTIVE MEASURES IMPLEMENTATION. Within sixty (60) days of notification of EPA's selection of the corrective measure(s), Respondent shall submit to EPA for its review and approval a CMI Work Plan. The CMI Work Plan is subject to review and approval, disapproval, or modification by EPA in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work. The CMI Work Plan shall be developed in a manner consistent with Section V, Task IV of the SOW. The CMI Work Plan shall be designed to facilitate the design, construction, operation, maintenance, and monitoring of corrective measures at the Facility. Upon approval by EPA of the CMI Work Plan, Respondent shall implement the corrective measures in the CMI Work Plan in accordance with the schedule therein.

42. Within thirty (30) days after the completion of the construction activities required by the approved CMI Work Plan, Respondent shall submit to EPA for its review and approval a Corrective Measures Construction Completion Report (CMCCR). The CMCCR shall be developed in a manner consistent with Section V, Task IV of the SOW and shall be consistent with the "RCRA Corrective Action Plan" EPA 520-R-94-004,

OSWER Directive 9902.3-2A, May 1994, incorporated herein. The CMCCR is subject to review and approval, disapproval, or modification by EPA in accordance with Section X Agency Approvals/Proposed Contractor/Additional Work.

43. Respondent shall submit to EPA for its review and approval a Corrective Measures Completion Report (CMCR) within one hundred twenty (120) days of the completion of all remedial activities required by this Order. The CMCR shall be developed in a manner consistent with Section V, Task IV of the SOW and generally conform to the "RCRA Corrective Action Plan" EPA 520-R-94-004, OSWER Directive 9902.3-2A, May 1994. The purpose of the CMCR is to fully document how the corrective measure completion criteria have been satisfied and to justify why the corrective measure and/or monitoring may cease.

IX. PUBLIC PARTICIPATION AND COMMENT IN CORRECTIVE MEASURES SELECTION

44. EPA will provide the public with an opportunity to review and comment on EPA's proposed corrective measures, including EPA's justification for proposing such corrective measures (the "Statement of Basis").

45. Following the public comment period and consideration of any comments submitted during that period, EPA will notify Respondent of the final corrective measure(s) selected by EPA in the Final Decision and Response to Comments ("RTC"). The notification will include EPA's reasons for selecting the corrective measure.

**X. AGENCY APPROVALS/PROPOSED CONTRACTOR/ADDITIONAL
WORK**

46. EPA APPROVALS. After submission of any document required by this Order, the EPA will:

- A. Approve the document;
- B. Conditionally approve the document with comments; or
- C. Disapprove the document with comments.

47. If EPA approves the document, EPA will notify the Respondent in writing and the Respondent shall implement all activities required in the document, if any, in accordance with the schedules in the approved document.

48. If EPA conditionally approves the document with comments, the comments shall be considered incorporated into the document. The conditionally approved document with the comments incorporated shall be an enforceable part of this Order. Respondent shall revise the document in accordance with the comments and resubmit within 30 days of Respondent's receipt of conditional approval.

49. If EPA disapproves the document with comments, the Respondent shall revise the document in accordance with EPA's comments within thirty (30) days of receipt of notice of disapproval. EPA will review the resubmitted document in accordance with this section. If approved or conditionally approved with comments upon resubmission, the Respondent shall commence any work required by the document in accordance with the schedules therein.

50. If upon resubmittal of a document, EPA determines at its sole discretion that the Respondent has failed to adequately incorporate EPA's comments, such failure

shall be considered a violation of this Order and subject to the provisions of Section XIV (Delay in Performance/Stipulated Penalties) of this Order. EPA may unilaterally revise the document in accordance with EPA's comments, and the unilaterally modified document shall be considered the approved document. The Respondent shall commence any work required by the unilaterally modified document in accordance with the schedules therein.

51. If the Respondent takes exception to the comments and/or modifications made by EPA, the Respondent shall follow the procedures outlined in this Order for dispute resolution.

52. PROPOSED CONTRACTOR/CONSULTANT. All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer, hydrologist, geologist, or environmental scientist, with expertise in hazardous waste investigation and cleanup. Respondent's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which it is responsible. Within ten days of the effective date of this Order, Respondent shall notify the EPA Project Coordinator in writing of the name, title, and qualifications of the engineer, hydrologist, geologist, or environmental scientist and of any contractors or consultants and their personnel to be used in carrying out the terms of this Order. Respondent shall identify whether any contractor is on the List of Parties Excluded from Federal Procurement or Non-Procurement Programs. EPA reserves the right to disapprove Respondent's contractor and/or consultant at any time during the period that this Order is effective. If EPA disapproves a contractor or consultant, then Respondent must, within twenty (20) days of receipt from EPA of written notice of disapproval,

notify EPA, in writing, of the name, title, and qualifications of any replacement. EPA's disapproval shall not be subject to review under Section XVII Dispute Resolution.

53. **ADDITIONAL WORK.** If at any time during implementation of corrective action under this Order the EPA determines that additional work is necessary to accomplish the corrective action required under this Order, EPA will provide written notification to the Respondent of the requirement for additional work to be performed by the Respondent. EPA may determine that certain tasks, including, but not limited to, investigatory work or engineering evaluation are necessary in addition to the tasks and deliverables already required under this Order. EPA will specify the basis and reasons for its determination that the additional work is necessary and will request submittal of a draft work plan to perform the additional work. In accordance with the timeframe set by EPA, the Respondent shall submit a draft Work Plan for EPA review and approval as described in Section X Agency Approvals/Proposed Contractor/Additional Work. Upon EPA approval, the Respondent shall perform the additional work according to the EPA-approved Work Plan. The completion of the additional work, as specified in this paragraph, shall be documented by the Respondent in accordance with the approved schedule for the additional work.

IX. QUALITY ASSURANCE

54. Respondent shall follow EPA guidance for sampling and analysis. Work Plans shall contain quality assurance/quality control ("QA/QC") and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the QA/QC and chain of custody procedures in approved Work Plans must be approved

by EPA prior to implementation; must be documented, including reasons for the deviations; and must be reported in the applicable report.

55. The name(s), addresses, and telephone numbers of the analytical laboratories Respondent proposes to use must be specified in the applicable Work Plan(s).

56. All Work Plans required under this Order shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use(s).

57. Respondent shall monitor to ensure that high quality data is obtained by its consultant or contract laboratories. Respondent shall ensure that laboratory methods shall be in accordance with the most current version of the Waste Management System; Testing and Monitoring Activities; Final Rule: Methods Innovation Rule and SW-846, or other methods deemed satisfactory to EPA.

58. If methods other than EPA methods are to be used, Respondent shall specify all such protocols in the applicable Work Plan. EPA may reject any data that does not meet the requirements of the approved Work Plan or EPA analytical methods and may require resampling and additional analysis.

59. Respondent shall ensure that laboratories it uses for analyses participate in a QA/QC program equivalent to that which is followed by EPA. EPA may conduct a performance and QA/QC audit of the laboratories chosen by Respondent before, during, or after sample analyses. Upon request by EPA, Respondent shall have its laboratory perform analyses of samples provided by EPA to demonstrate laboratory performance. If

the audit reveals deficiencies in a laboratory's performance or QA/QC, resampling and additional analysis may be required.

XII. SAMPLING AND DATA/DOCUMENT AVAILABILITY

60. Respondent shall submit to EPA upon request the results of all sampling and/or tests or other data generated by divisions, agents, consultants, or contractors pursuant to this Order.

61. Notwithstanding any other provisions of this Order, the United States retains all of its information gathering and inspection authorities and rights, including the right to bring enforcement actions related thereto, under RCRA, CERCLA, and any other applicable statutes or regulations.

62. Respondent shall notify EPA in writing at least 30 days prior to beginning field work approved under any Work Plan required by this Order. At the request of EPA, Respondent shall provide or allow EPA or its authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Order. Similarly, at the request of Respondent, EPA shall allow Respondent or its authorized representative(s) to take split or duplicate samples of all samples collected by EPA under this Order.

63. Respondent may assert a business confidentiality claim covering all or part of any information submitted to EPA pursuant to this Order. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. §2.204(e)(4) or such claim shall be deemed waived. Information determined by EPA to be confidential shall be disclosed only to the extent permitted by 40 C.F.R. Part 2. If no such confidentiality claim accompanies the information when it is submitted to

EPA, the information may be made available to the public by EPA without further notice to Respondent. Respondent agrees not to assert any confidentiality claim with regard to any physical or analytical data.

XIII. ACCESS

64. EPA, its contractors, employees, and/or any duly designated EPA representatives are authorized to enter and freely move about the Facility pursuant to this Order for the purposes of, inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to the facility; reviewing the progress of Respondent in carrying out the terms of this Order; conducting such tests, sampling, or monitoring as EPA deems necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to EPA by Respondent. Respondent agrees to provide EPA and its representatives access at all reasonable times to the Facility and subject to Paragraph 65 below, to any other property to which access is required for implementation of this Order. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Order and that are within the possession or under the control of Respondent or its contractors or consultants.

65. To the extent that work being performed pursuant to this Order must be done beyond the Facility property boundary, Respondent shall use its best efforts to obtain access agreements necessary to complete work required by this Order from the present owner(s) of such property within 30 days of the date that the need for access becomes known to Respondent. Best efforts as used in this paragraph shall include, at a

minimum, a certified letter from Respondent to the present owner(s) of such property requesting access agreement(s) to permit Respondent and its authorized representatives to access such property, and the payment of reasonable compensation in consideration of granting access. Any such access agreement shall provide for access by EPA and its representatives. Respondent shall insure that EPA's Project Coordinator has a copy of any access agreement(s). In the event that agreements for access are not obtained within 30 days of the date that the need for access became known to Respondent, Respondent shall notify EPA in writing within 14 days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake EPA-approved work on such property.

66. The Respondent agrees to indemnify the United States as provided in Section XXII: Indemnification, for any and all claims arising from activities on such property.

67. Nothing in this section limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.

68. Nothing in this section shall be construed to limit or otherwise affect Respondent's liability and obligation to perform corrective action including corrective action beyond the facility boundary, notwithstanding the lack of access.

XIV. RECORD PRESERVATION

69. Respondent shall retain, during the pendency of this Order and for a minimum of six years after its termination, all data, records, and documents now in its possession or control or which come into its possession or control which relate in any

way to this Order or to hazardous waste management and/or disposal at the facility. Respondent shall notify EPA in writing 90 days prior to the destruction of any such records, and shall provide EPA with the opportunity to take possession of any such records. Such written notification shall reference the effective date, caption, and docket number of this Order and shall be addressed to:

Director
Air and Waste Management Division
US EPA, Region 7
901 North 5th Street
Kansas City, Kansas 66101.

70. Respondent further agrees that within 30 days of retaining or employing any agent, consultant, or contractor for the purpose of carrying out the terms of this Order, Respondent will enter into an agreement with any such agents, consultants, or contractors whereby such agents, consultants, and/or contractors will be required to provide Respondent a copy of all documents produced pursuant to this Order.

71. All documents pertaining to this Order shall be stored by the Respondent in a centralized location at the Facility to afford ease of access by EPA or its representatives.

XV. REPORTING AND DOCUMENT CERTIFICATION

72. Beginning with the first full month following the effective date of this Order, and throughout the period that this Order is effective, Respondent shall provide EPA with quarterly reports. The progress reports shall conform to requirements in the SOW. EPA may adjust the frequency of progress reports to be consistent with site-specific activities.

73. Two (2) copies of all documents submitted pursuant to this Order shall be in writing and shall be hand delivered, sent by certified mail, return receipt requested, or by overnight express mail to:

A. Submittals to EPA:

Lisa Gotto
Air and Waste Management Division
US EPA, Region 7
901 North 5th Street
Kansas City, Kansas 66101.

B. Submittals to Respondent:

Terry A. Noteboom
Environmental Team Leader
Pella Corporation
102 Main Street
Pella, Iowa 50219.

Other addresses can also be designated by the Project Coordinators.

74. Any report or other document submitted by Respondent pursuant to this Order which makes any representation concerning Respondent's compliance or noncompliance with any requirement of this Order shall be certified by a responsible corporate officer of Respondent or a duly authorized representative. A responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

75. The certification required by Paragraph 74 above, shall be in the following form:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Title: _____

Date: _____

XVI. DELAY IN PERFORMANCE/STIPULATED PENALTIES

76. Unless there has been a written modification by EPA of a compliance date, a written modification by EPA of an approved Work Plan condition, or excusable delay as defined in Section XVIII Force Majeure and Excusable Delay, if Respondent fails to comply with any term or condition set forth in this Order in the time or manner

specified herein, Respondent shall pay stipulated penalties as set forth below upon written demand from EPA.

A. For failure to commence, perform, and/or complete field work in a manner acceptable to EPA or at the time required pursuant to this Order: \$1,000 per day for the first fourteen days of such violation, \$2,000 per day for the fifteenth through thirtieth day of such violation, and \$4,000 per day for each day of such violation, thereafter;

B. For failure to complete and submit any Work Plans or reports for the IM, RFI, CMS, or CMI as provided in the respective schedules in the SOW or as developed under this Order (other than progress reports) in a manner acceptable to EPA or at the time required pursuant to this Order, or for failure to notify EPA of immediate or potential threats to human health and/or the environment; new releases of hazardous waste and/or hazardous constituents; and/or new solid waste management units not previously identified, as required by this Order: \$1,000 per day for the first fourteen days of such violation, \$2,000 per day for the fifteenth through thirtieth day of such violation, and \$4,000 per day for each day of such violation, thereafter;

C. For failure to complete and submit other written submittals not included in Paragraph 76B of this section in a manner acceptable to EPA or at the time required pursuant to this Order: \$500 per day for the first fourteen days of such violation, \$1,000 per day for the fifteenth through thirtieth day of such violation, and \$2,000 per day for each day of such violation, thereafter;

D. For failure to comply in a manner acceptable to EPA with any mediation confidentiality requirements under dispute resolution: \$5,000 per occurrence; and

E. For failure to comply with any other provisions of this Order in a manner acceptable to EPA: \$500 per day for the first fourteen days of such violation, \$1,000 per day for the fifteenth through thirtieth day of such violation, and \$2,000 per day for each day of such violation, thereafter.

77. Penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the day of correction of the violation. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Order. Penalties shall continue to accrue regardless of whether EPA has notified the Respondent of a violation.

78. All penalties owed to the United States under this Section shall be due and payable within 30 days of the Respondent's receipt from EPA of a written demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVII Dispute Resolution. Such a written demand will describe the violation and will indicate the amount of penalties due.

79. Interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the thirty-first day after Respondent's receipt of EPA's demand letter. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, an additional penalty of 6% per annum on any unpaid principal shall be assessed for any stipulated penalty payment which is overdue for 90 or more days.

80. All penalties shall be made payable by certified or cashier's check to the "Treasurer of the United States of America" and shall be remitted to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, Missouri 63197-9000.

All such checks shall reference the name of the Facility, the Respondent's name and address, and the EPA docket number of this action. Copies of all such checks and letters forwarding the checks shall be sent simultaneously to the EPA Project Coordinator.

81. Respondent may dispute EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section XVII Dispute Resolution. The stipulated penalties in dispute shall continue to accrue, but need not be paid, during the dispute resolution period. Respondent shall pay stipulated penalties and interest, if any, in accordance with the dispute resolution decision and/or agreement. Respondent shall submit such payment to EPA within seven days of receipt of such resolution in accordance with Paragraph 80 of this Section.

82. Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way Respondent's obligation to comply with the terms and conditions of this Order.

83. The stipulated penalties set forth in this section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the terms and conditions of this Order.

84. No payments under this section shall be tax deductible for federal tax purposes.

XVII. DISPUTE RESOLUTION

85. If the Respondent disagrees, in whole or in part, with any EPA disapproval, conditional approval with comment, modification, or other decision or directive made by EPA pursuant to this Order, the Respondent shall notify EPA in writing of its objections and bases for them within twenty (20) calendar days of receipt of EPA's disapproval, decision, or directive. The notice shall set forth specific points of the dispute, the position the Respondent maintains should be adopted as consistent with the requirements of this Order, the factual and legal basis for the Respondent's position, and all matters the Respondent considers necessary for EPA's determination. EPA and the Respondent shall then have an additional twenty (20) days from EPA's receipt of the Respondent's objection to attempt to resolve the dispute. If agreement is reached, the resolution will be reduced to writing by EPA and shall become part of this Order. If the parties are unable to reach complete agreement within this twenty (20) day period, the matter will be submitted to the Director or his/her designee for resolution. This resolution shall become part of this Order.

86. The existence of a dispute as defined herein and EPA's consideration of such matters as placed in dispute shall not excuse, toll or suspend any obligation or deadline required pursuant to this Order, that is not the subject of dispute, during pendency of the dispute resolution process.

87. No action or decision by EPA, including without limitation decisions of the Director of the Air and Waste Management Division or the RCRA Corrective Action and Permits (RCAP) Branch Chief, pursuant to this Order shall constitute final agency

action giving rise to any rights to judicial review prior to EPA's initiation of judicial action to compel Respondent's compliance with the requirements of this Order.

XVIII. FORCE MAJEURE AND EXCUSABLE DELAY

88. Force majeure, for purposes of this Order, is defined as any event arising from causes not foreseen and beyond the control of Respondent or any person or entity controlled by Respondent, including but not limited to Respondent's contractors, that delays or prevents the timely performance of any obligation under this Order despite Respondent's best efforts to fulfill such obligation. The requirement that Respondent exercise "best efforts to fulfill such obligation" shall include, but not be limited to, best efforts to anticipate any potential force majeure event and address it before, during, and after its occurrence, such that any delay or prevention of performance is minimized to the greatest extent possible. Force majeure does not include increased costs of the work to be performed under this Order, financial inability to complete the work, work stoppages or other labor disputes.

89. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall contact by telephone and communicate orally with EPA's Project Coordinator or, in his or her absence, EPA's alternative Project Coordinator or, in the event both of EPA's designated representatives are unavailable, the RCRA Corrective Action and Permits Branch Chief, EPA Region 7, within 48 hours of when Respondent first knew or should have known that the event might cause a delay. If Respondent wishes to claim a force majeure event, then within five days thereafter, Respondent shall provide to EPA in writing the anticipated duration of the delay; all actions taken or to be taken to prevent or

minimize the delay; all other obligations affected by the event, and what measures, if any, taken or to be taken to minimize the effect of the event on those obligations; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or the environment. Respondent shall include with any notice all available documentation supporting its claim, if any, that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

90. If EPA determines that the delay or anticipated delay is attributable to a force majeure event, the time for performance of such obligation under this Order that is affected by the force majeure event will be extended by EPA for such time as EPA determines is necessary to complete such obligation. An extension of the time for performance of such obligation affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation, unless Respondent can demonstrate that more than one obligation was affected by the force majeure event. If EPA determines that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of such obligations affected by the force majeure event.

91. If EPA disagrees with Respondent's assertion of a force majeure event, EPA will notify Respondent in writing and Respondent may elect to invoke the dispute

resolution provision, and shall follow the time frames set forth in Section XVII Dispute Resolution. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of this Section. If Respondent satisfies this burden, the time for performance of such obligation will be extended by EPA for such time as is necessary to complete such obligation.

XIX. RESERVATION OF RIGHTS

92. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under §3008(h)(2) of RCRA, 42 U.S.C. §6928(h)(2). This Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.

93. EPA reserves the right to disapprove of work performed by Respondent pursuant to this Order and to order that Respondent perform additional tasks.

94. EPA reserves the right to perform any portion of the work consented to herein or any additional site characterization, feasibility study, and remedial work as it deems necessary to protect human health and/or the environment. EPA may exercise its

authority under CERCLA to undertake response actions at any time. In any event, EPA reserves its right to seek reimbursement from Respondent for costs incurred by the United States. Notwithstanding compliance with the terms of this Order, Respondent is not released from liability, if any, for the costs of any response actions taken or authorized by EPA.

95. If EPA determines that activities in compliance or noncompliance with this Order have caused or may cause a release of hazardous waste or hazardous constituent(s), or a threat to human health and/or the environment, or that Respondent is not capable of undertaking any of the work ordered, EPA may order Respondent to stop further implementation of this Order for such period of time as EPA determines may be needed to abate any such release or threat and/or to undertake any action which EPA determines is necessary to abate such release or threat.

96. This Order is not intended to be nor shall it be construed to be a permit. Further, the parties acknowledge and agree that EPA's approval of any final Work Plan or document required under this Order does not constitute a warranty or representation that the Work Plans or documents will achieve the required cleanup or performance standards. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, State, or federal laws and regulations.

97. Notwithstanding any other provision of this Order, no action or decision by EPA pursuant to this Order, including without limitation, decisions of the Regional Administrator, the RCRA Corrective Action and Permits Branch Chief, the Director of the Air and Waste Management Division, or any authorized representative of EPA, shall

constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order.

98. In any action brought by EPA for a violation of this Order, Respondent shall bear the burden of proving that EPA's actions were arbitrary and capricious and not in accordance with law.

99. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the facility, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XX. OTHER CLAIMS

100. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the Facility. Respondent waives any claims or demands for compensation or payment under §§106(b), 111, and 112 of CERCLA against the United States or the Hazardous Substance Superfund established by 26 U.S.C. §9507 for, or arising out of, any activity performed or expense

incurred pursuant to this Order. Additionally, this Order does not constitute any decision on preauthorization of funds under §111(a)(2) of CERCLA.

XXI. OTHER APPLICABLE LAWS

101. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

XXII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

102. Respondent agrees to indemnify and save and hold harmless the United States Government, its agencies, departments, agents, and employees, from any and all claims or causes of action arising solely from or on account of acts or omissions of Respondent or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Order. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Respondent or the United States under their various contracts. Respondent shall not be responsible for indemnifying EPA for claims or causes of action solely from or on account of acts or omissions of EPA.

XXIII. COST ESTIMATES AND ASSURANCES OF FINANCIAL RESPONSIBILITY FOR COMPLETING THE WORK

103. Estimated Cost of the Work. Respondent shall submit to EPA detailed written estimates, in current dollars, of the cost of hiring a third party to perform all of the Work to be Performed under this Order (hereafter "Estimated Cost of the Work"), as described in the following paragraph. The Estimated Cost of the Work shall account for the total costs of the work activities that they cover, as described in the EPA approved

Work Plans, including any necessary long term costs, such as operation and maintenance costs and monitoring costs. A third party is a party who (i) is neither a parent nor a subsidiary of Respondent and (ii) does not share a common parent or subsidiary with Respondent. The cost estimates shall not incorporate any salvage value that may be realized from the sale of wastes, facility structures or equipment, land or other assets associated with the facility.

104. Within thirty (30) days after EPA has approved any IM Work Plan (and the cost estimates therein) which Respondent shall perform under Paragraph 38 of this Order and Section II Task I of the SOW, and within thirty (30) days after EPA has approved the CMI Work Plan (and the cost estimates therein) which Respondent shall perform under Paragraph 41 of this Order and Section V Task IV of the SOW, Respondent shall submit to EPA for review and approval an initial Estimated Cost of the Work to be Performed for any IM and the CMI and the draft financial assurance instruments and related documents as provided in Paragraphs 109 and 110.

105. Concurrent with the submission of additional Work Plan(s) for IM or CMI required under Section VIII (Work To Be Performed), Respondent shall submit a revised Estimated Cost of the Work.

106. Respondent shall annually adjust the Estimated Cost of the Work for inflation within thirty days after the close of Respondent's fiscal year until any IM and the CMI Work required by this Order is completed. In addition, Respondent shall adjust the Estimated Cost of the Work if EPA determines that any additional IM or CMI Work is required, pursuant to Section X, Subsection C (Additional Work), or if any other condition increases the cost of the IM and CMI Work to be performed under this Order.

107. Respondent shall submit each Estimated Cost of the Work to EPA for review. EPA will review each cost estimate and notify Respondent in writing of EPA's approval, disapproval, or modification of the cost estimate.

108. In order to secure the full and final completion of the IM and CMI Work in accordance with this Order, Respondent shall establish and maintain financial assurance for the benefit of the EPA in the amount of the most recent Estimated Cost of the Work. Respondent may use one or more of the financial assurance forms generally described in Paragraphs a - f below. Any and all financial assurance instruments provided pursuant to this Order shall be satisfactory in form and substance as determined by EPA.

a. A trust fund established for the benefit of EPA, administered by a trustee who has the authority to act as a trustee under Federal or State law and whose trust operations are regulated and examined by a Federal or State agency, and that is acceptable in all respects to the EPA. The trust agreement shall provide that the trustee shall make payments from the fund as the RCRA Corrective Action and Permits Branch Chief shall direct in writing (1) to reimburse Respondent from the fund for expenditures made by Respondent for Work performed in accordance with this Consent Order, or (2) to pay any other person whom the RCRA Corrective Action and Permits Branch Chief determines has performed or will perform the Work in accordance with this Order. The trust agreement shall further provide that the trustee shall not refund to the grantor any amounts from the fund unless and until EPA has advised the trustee that the Work under this Consent Order has been successfully completed.

b. A surety bond unconditionally guaranteeing performance of the Work in accordance with this Consent Order, or guaranteeing payment at the direction of EPA into a standby trust fund that meets the requirements of the trust fund in Paragraph a above. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal Bonds as set forth in Circular 570 of U.S. Department of the Treasury.

c. An irrevocable letter of credit, payable at the direction of the RCRA Corrective Action and Permits Branch Chief, into a standby trust fund that meets the requirements of the trust fund in Paragraph a above. The letter of credit shall be issued by a financial institution (i) that has the authority to issue letters of credit, and (ii) whose letter-of-credit operations are regulated and examined by a Federal or State agency.

d. A policy of insurance that (i) provides EPA with rights as a beneficiary which are acceptable to EPA; and (ii) is issued by an insurance carrier that (a) has the authority to issue insurance policies in the applicable jurisdiction(s), and (b) whose insurance operations are regulated and examined by a Federal or State agency. The insurance policy shall be issued for a face amount at least equal to the current Estimated Cost of the Work to be performed under this Order, except where costs not covered by the insurance policy are covered by another financial assurance instrument, as permitted in Paragraph 112 of this Section. The policy shall provide that the insurer shall make payments as the RCRA Corrective Action and Permits Branch Chief shall direct in writing (i) to

reimburse Respondent for expenditures made by Respondent for Work performed in accordance with this Order, or (ii) to pay any other person whom the RCRA Corrective Action and Permits Branch Chief determines has performed or will perform the Work in accordance with this Order, up to an amount equal to the face amount of the policy. The policy shall also provide that it may not be canceled, terminated or non-renewed and the policy shall remain in full force and effect in the event that (i) the Respondent is named as a debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or (ii) EPA notifies the insurer of Respondent's failure to perform, under Paragraph 118 of this section.

e. A corporate guarantee, executed in favor of the EPA by one or more of the following: (i) a direct or indirect parent company, or (ii) a company that has a "substantial business relationship" with Respondent (as defined in 40 C.F.R. § 264.141(h)), to perform the Work in accordance with this Consent Order or to establish a trust fund as permitted by Paragraph 108a, above; provided, however, that any company providing such a guarantee shall demonstrate to the satisfaction of EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work that it proposes to guarantee; or

f. A demonstration by Respondent that Respondent meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied.

109. For the initial financial assurance under Paragraphs 108a, 108b, 108c, 108d, or 108e, within thirty days after EPA has approved any IM Work Plan or CMI Work Plan (and the cost estimates therein), Respondent shall submit draft financial assurance instruments and related documents to EPA, concurrently with Respondent's submission of the initial Estimated Cost of the Work, for EPA's review and approval. Within twenty (20) days after EPA's approval of both the initial Estimated Cost of the Work, and the draft financial assurance instruments, whichever date is later, Respondent shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the financial assurance documents reviewed and approved by EPA. Respondent shall submit all executed and/or otherwise finalized instruments or other documents to EPA within thirty days after EPA's approval of the initial Estimated Cost of the Work and the draft financial assurance instruments, whichever date is later. For the initial financial assurance pursuant to Paragraphs 108f, within thirty (30) days after EPA has approved any IM Work Plan or CMI Work Plan (and the cost estimates therein), Respondent shall submit to EPA all documentation necessary to demonstrate that Respondent satisfies the financial test criteria pursuant to Paragraphs 108f, concurrently with Respondent's financial submission of the initial Estimated Cost of the Work. Respondent's financial assurance shall be effective immediately upon EPA's approval of the initial Estimated Cost of the Work and Respondent's demonstration that Respondent satisfied the financial test criteria pursuant the preceding paragraph, whichever date is later.

110. If Respondent seeks to establish financial assurance by using a surety bond, a letter of credit, or a corporate guarantee, Respondent shall at the same time establish, and

*In the matter of
Pella Corporation
Docket No: RCRA 07-2010-0014*

thereafter maintain, a standby trust fund, which meets the requirements of Paragraph 108a above, into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by EPA, pursuant to Paragraph 118b.

111. Respondent shall submit all financial assurance instruments and related required documents by certified mail to the EPA Region 7 Financial Management Officer at the address listed below. Copies shall also be sent to the EPA Project Officer.

John Phillips
Region 7 Financial Management Officer
U.S. Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101.

112. If at any time during the effective period of this Consent Order the Respondent provides financial assurance for completion of the Work by means of a corporate guarantee or financial test pursuant to Paragraphs 108e or 108f above, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods, unless otherwise provided in this Consent Order, including, but not limited to, (i) initial submission of required financial reports and statements from the guarantors' chief financial officer and independent certified public accountant; (ii) annual re-submission of such reports and statements within 90 days after the close of each of the guarantors' fiscal years; and (iii) notification of EPA within 90 days after the close of any of the guarantors' fiscal years in which any such guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. Part 264.143(f)(1). Respondent further agrees that if Respondent provides financial assurance by means of a corporate guarantee or financial test, EPA may request additional information (including financial statements and accountant's

reports) from the Respondent or corporate guarantor at any time. For purposes of the regulations cited within this Section, references to "closure" shall mean the EPA approved Estimated Cost of the Work:

113. For purposes of the corporate guarantee or the financial test described in Paragraphs 108e and 108f above, references in 40 CFR § 264.143(f) to "the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates" shall mean "the sum of all environmental remediation obligations" (including obligations under CERCLA, RCRA, UIC, TSCA, and any other state or tribal environmental obligation) guaranteed by such company or for which such company is otherwise financially obligated in addition to the EPA approved Estimated Cost of the Work to be performed in accordance with this Consent Order.

114. Respondent may combine more than one mechanism to demonstrate financial assurance for the Work to be performed in accordance with this Consent Order, except that mechanisms guaranteeing performance rather than payment may not be combined with other instruments.

115. If at any time EPA determines that a financial assurance instrument provided pursuant to this Section is inadequate, or no longer satisfies the requirements set forth or incorporated by reference in this Section, whether due to an increase in the Estimated Cost of Completing the Work or for any other reason, EPA shall so notify Respondent in writing. If at any time Respondent becomes aware of information indicating that any financial assurance instrument provided pursuant to this Section is inadequate or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the Estimated

*In the matter of
Pella Corporation
Docket No: RCRA 07-2010-0014*

Cost of the Work or for any other reason, then Respondent shall notify EPA in writing of such information within ten days. Within 30 days of receipt of notice of EPA's determination, or within 30 days of Respondent's becoming aware of such information, as the case may be, Respondent shall obtain and present to EPA for approval a proposal for a revised or alternative form of financial assurance listed in Paragraph 108 above that satisfies all requirements set forth or incorporated by reference in this Section. The proposal must include a timeline for establishment of the revised or alternate form of financial assurance for EPA approval. In seeking approval for a revised or alternative form of financial assurance, Respondent shall follow the procedures set forth in Paragraph 119b below.

116. Respondent's inability or failure to establish or maintain financial assurance for completion of the Work shall in no way excuse performance of any other requirements of this Order, including, without limitation, the obligation of Respondent to complete the Work in strict accordance with the terms of this Order.

117. Any and all financial assurance instruments provided pursuant to Paragraphs 108b, 108c, 108d, or 108e shall be automatically renewed at the time of their expiration unless the financial assurance provider has notified both the Respondent and the RCRA Corrective Action and Permits Branch Chief at least 120 days prior to expiration, cancellation or termination of the instrument of a decision to cancel, terminate or not renew a financial assurance instrument. Under the terms of the financial assurance instrument, the 120 days will begin to run with the date of receipt of the notice by both the RCRA Corrective Action and Permits Branch Chief and the Respondent. Furthermore, if Respondent has failed to provide alternate financial assurance and obtain written approval for such alternate financial assurance

within 90 days following receipt of such notice by both Respondent and the RCRA Corrective Action and Permits Branch Chief, then the RCRA Corrective Action and Permits Branch Chief will so notify the financial assurance provider in writing prior to the expiration of the instrument, and the financial assurance provider shall immediately deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument for the performance of the Work in accordance with this Order.

118. Performance Failure

a. In the event that EPA determines that Respondent (i) has ceased implementation of any portion of the Work, (ii) is significantly or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both the Respondent and the financial assurance provider of Respondent's failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued and will provide the Respondent with a period of ten days within which to remedy the circumstances giving rise to the issuance of such notice.

b. Failure by the Respondent to remedy the relevant Performance Failure to EPA's satisfaction before the expiration of the ten-day notice period specified in Paragraph 118a shall trigger EPA's right to have immediate access to and benefit of the financial assurance provided pursuant to Paragraphs 108a, 108b, 108c, 108d, or 108e. EPA may at any time thereafter direct the financial

assurance provider to immediately (i) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument or (ii) arrange for performance of the Work in accordance with this Consent Order.

c. If EPA has determined that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 118a have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the Work in accordance with this Order from the financial assurance provider pursuant to this Order, then, upon receiving written notice from EPA, Respondent shall within ten days thereafter deposit into the standby trust fund, or a newly created trust fund approved by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount equal to the estimated cost of the remaining Work to be performed in accordance with this Order as of such date, as determined by EPA.

d. Respondent may invoke the procedures set forth in Section XVII (Dispute Resolution), to dispute EPA's determination that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 118a have occurred. Invoking the dispute resolution provisions shall not excuse, toll or suspend the obligation of the financial assurance provider, under Paragraph 118b of this Section, to fund the trust fund or perform the Work. Furthermore, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion

direct the trustee of such trust fund to make payments from the trust fund to any person that has performed the Work in accordance with this Order until the earlier of (i) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice or (ii) the date that a final decision is rendered in accordance with Section XVII (Dispute Resolution), that Respondent has not failed to perform the Work in accordance with this Order.

119. Modification of Amount and/or Form of Performance Guarantee.

a. Reduction of Amount of Financial Assurance. If Respondent believes that the Estimated Cost to complete the remaining Work has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may, at the same time that Respondent submits the annual cost adjustment, pursuant to Paragraph 105, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining Work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining Work to be performed and the basis upon which such cost was calculated. In seeking approval of a revised financial assurance amount, Respondent shall follow the procedures set forth in Paragraph 119b(ii) of this Section. If EPA decides to accept such a proposal, EPA shall notify Respondent of its decision in writing. After receiving EPA's written decision, Respondent may reduce the amount of the

financial assurance only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondent may reduce the amount of the financial assurance required hereunder only in accordance with the final EPA Dispute Decision resolving such dispute. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided in Paragraph 119b below.

b. Change of Form of Financial Assurance.

i. If Respondent desires to change the form or terms of financial assurance, Respondent may, at the same time that Respondent submits the annual cost adjustment, pursuant to Paragraph 105, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided in Paragraph ii, below. The decision whether to approve a proposal submitted under this Paragraph 119 shall be made in EPA's sole and unreviewable discretion and such decision shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Consent Order or in any other forum.

ii. A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated, and the proposed revised form of financial assurance,

including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify Respondent in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this paragraph. Within ten days after receiving a written decision approving the proposed revised or alternative financial assurance, Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal, and such financial assurance shall be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the EPA Regional Financial Management Officer within 30 days of receiving a written decision approving the proposed revised or alternative financial assurance, with a copy to the EPA Project Officer. EPA shall release, cancel, or terminate the prior existing financial assurance instruments only after Respondent has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.

c. Release of Financial Assurance. Respondent may submit a written request to the RCRA Corrective Action and Permits Branch Chief that EPA release Respondent from the requirement to maintain financial assurance under this Section at such time as EPA and Respondent have both executed an “Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right” pursuant to Section XXVII (Termination and Satisfaction) of the Order. The RCRA Corrective Action and Permits Branch Chief shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order. Respondent shall not release, cancel, or terminate any financial assurance provided pursuant to this Section except as provided in this paragraph or Paragraph 119b(ii). In the event of a dispute, Respondent may release, cancel, or terminate the financial assurance required hereunder only in accordance with the Director’s final decision.

120. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS (40 CFR 264.148). The Respondent shall notify the RCRA Corrective Action and Permits Branch Chief by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Respondent as debtor, within ten days after commencement of the proceeding, in accordance with 40 CFR § 264.148. A guarantor or a corporate guarantee as specified in 40 CFR § 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (40 CFR § 264.151(h)). A Respondent who fulfills

the requirements of 40 CFR § 264.143 or 40 CFR § 264.147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The Respondent must establish other financial assurance or liability coverage within 60 days after such an event.

XXV. MODIFICATION

121. This Order may only be modified by mutual agreement of EPA and Respondent. Any agreed modifications shall be in writing, be signed by both parties, shall have as their effective date the date on which they are signed by EPA, and shall be incorporated into this Order.

122. Any requests for a compliance date modification or revision of an approved Work Plan requirement must be made in writing. Such requests must be timely and provide justification for any proposed compliance date modification or Work Plan revision. EPA has no obligation to approve such requests, but if it does so, such approval must be in writing. Any approved compliance date or Work Plan modification shall be incorporated by reference into the Order.

123. This section shall not apply to any EPA dispute decision, EPA approved report, Work Plan, specification and schedule which are deemed to be incorporated into this Order.

XXVI. SEVERABILITY

124. If any provision or authority of this Order or the application of this Order to any party or circumstances is held by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the remainder of the Order shall remain in force and shall not be affected thereby.

XXVII. TERMINATION AND SATISFACTION

125. The provisions of this Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment"). EPA will prepare the Acknowledgment for Respondent's signature. The Acknowledgment will specify that Respondent has demonstrated to the satisfaction of EPA that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. Respondent's execution of the Acknowledgment will affirm Respondent's continuing obligation (1) to preserve all records as required in Section XIV: Record Preservation and (2) to recognize EPA's reservation of rights as required in Section XIX: Reservation of Rights, after all other requirements of the Order are satisfied.

XXVIII. SURVIVABILITY/PERMIT INTEGRATION

126. Except as otherwise expressly provided in this section, this Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, Respondent shall continue to be liable for the performance of obligations under this Order notwithstanding the issuance or denial of such permit. If the Facility is issued a RCRA permit and that permit

*In the matter of
Pella Corporation
Docket No: RCRA 07-2010-0014*

expressly incorporates all or a part of the requirements of this Order, or expressly states that its requirements are intended to replace some or all of the requirements of this Order, Respondent may request a modification of this Order and shall, with EPA approval, be relieved of liability under this Order for those specific obligations.

XXX. WAIVER OF HEARING

127. Respondent waives its right to request a public hearing pursuant to Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), relating to this Order.

XXXI. EFFECTIVE DATE

128. This Order shall be effective upon the signature of the Order by the Director of the Air and Waste Management Division of EPA (Director), Region 7.

129. Except as specifically provided in this Order, all times for performance and compliance begin to run from the effective date of this Order.

In the matter of
Pella Corporation
Docket No: RCRA 07-2010-0014

IT IS SO AGREED AND ORDERED.

For Pella Corporation:

2/18/10
Date

Name: Deuz Van Gant
Title: Corp VP - Pella Corp.

For the United States Environmental Protection Agency:

2/19/10
Date

Robert W. Richards
Robert W. Richards
Assistant Regional Counsel

IT IS SO ORDERED:

2/24/10
Date

Becky Weber
Becky Weber
Director
Air and Waste Management Division

ATTACHMENT I SCOPE OF WORK

I. INTRODUCTION: The purpose of this Scope of Work (SOW) for the Pella Corporation (hereinafter "Respondent") facility located at 102 Main Street in Pella, Iowa (hereinafter "Facility") is to define the requirements, standards, and guidelines that shall be followed by the Respondent to accomplish the following Tasks:

Task I: Upon written request of EPA, Respondent shall conduct Interim Measures (IMs) to prevent, mitigate, and/or remediate any migration or release of hazardous wastes and/or hazardous constituents from the facility to prevent immediate or potential threat to human health and/or the environment.

Task II: The Respondent shall conduct a RCRA Facility Investigation (RFI) that provides a complete investigation and characterization of the source(s) of contamination and releases of hazardous waste and/or hazardous constituents that have been or are likely to be released into the environment from the Facility, to support the development of a Corrective Measures Study (CMS).

Task III: The Respondent shall prepare a CMS, which shall provide sufficient information to support the selection of an appropriate remedy and to support the implementation of corrective measures.

Task IV: The Respondent shall perform the Corrective Measures Implementation (CMI) that implements the remedy selected by EPA to prevent, mitigate, and/or remediate any migration or release of solid and/or hazardous wastes and/or hazardous constituents at, and/or from, the Facility.

Task V: Any other activities necessary to correct or evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of solid and/or hazardous waste or hazardous constituents at or from the Facility.

In accomplishing the above Tasks, the Respondent shall comply with the provisions of the corresponding Administrative Order on Consent (Order) between the United States Environmental Protection Agency (EPA) and the Respondent; this SOW; the *RCRA Corrective Action Plan*, EPA/520-R-94-004, OSWER Directive 9902.3-2A, May 1994; and all applicable EPA guidance, (including, but not limited to, the guidance documents referenced in the Order and this SOW). The SOW for currently identified work to be performed under the Order is set forth below.

II. TASK I: INTERIM MEASURES

- A. Interim Measures Work Plan.** Upon EPA request, Respondent shall submit an IM Work Plan to prevent, mitigate, and/or remediate any migration or release of hazardous wastes and/or hazardous constituents from the facility to prevent immediate or potential threat to human health and/or the environment.

The Work Plan shall provide a brief evaluation of IM alternatives, comparing and contrasting the short- and long-term effectiveness, reliability, implementability, and cost estimates of the individual alternatives, as well as a description of the design and schedule to implement the proposed IM. The cost estimates shall include operation and maintenance for the IM alternatives for an implementation period of five years. Upon EPA approval, Respondent shall implement the IM Work Plan in accordance with the schedule contained therein.

IMs must be consistent with and integrated into any long-term remediation activities at the Facility.

- B. Interim Measures Report.** In accordance with the schedule included in the EPA-approved IM Work Plan, Respondent shall submit to EPA an IM Report that details the design and construction of the interim measures implemented at the facility. The report shall provide documentation of the system design "as-built," information on the expected operational life of the system, a recommendation for the frequency for monitoring and maintaining the system, criteria for determining its effectiveness, a schedule for system replacement in whole or in part (as appropriate), the frequency of system inspection by the Respondent, and any deviations from the approved Work Plan.
- C. Quarterly Progress Reports.** Detailed reports on the effectiveness of Respondent's Interim Measures, using the EPA approved criteria for determining its effectiveness, shall be included in, and submitted on the same schedule as, the quarterly progress reports, as described in Section VI of this SOW.

III. TASK II: RCRA FACILITY INVESTIGATION (RFI)

- A. Purpose –** The Respondent shall conduct an RFI to provide data of sufficient quality (i.e. quality assurance procedures have been followed and these procedures are documented) and quantity to describe the three-dimensional nature and extent of releases of hazardous waste and/or hazardous constituents from regulated units (defined in 40 CFR 264.90), Solid Waste Management Units (SWMUs), Areas of Concern (AOCs) and other areas; the potential threat to human health and/or the environment; and to support the development of a CMS. EPA and the Respondent understand that the 2006 RFA identifies SWMUs and AOCs to be addressed in the RFI, but that consistent with RCRA and the protection of human health and the environment the scope of the RFI may be expanded from the 2006 RFA to include

additional SWMUs and AOCs. This process shall conform to EPA's *RCRA Corrective Action Plan* and other applicable EPA guidance.

B. Scope – The RFI shall consist of four subtasks:

1. **RFI Work Plan**
2. **Facility Investigation Phase**
3. **RFI Report**
4. **Quarterly Progress Reports**

C. RFI Work Plan – Within the timeframes specified in the Order, the Respondent shall prepare an RFI Work Plan to support and guide the work necessary to characterize the nature and extent of contamination. During the RFI, it may be necessary to revise the approved RFI Work Plan to increase the detail of information collected to accommodate facility-specific situations or to perform subsequent phases of the RFI. EPA will review and approve or modify this submittal in accordance with Section X of the Order. The RFI Work Plan shall include the following plans:

1. **Quality Assurance Project Plan (QAPP)** - To ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented, the Respondent shall prepare a Sampling and Analysis Plan (SAP) and QAPP to document all monitoring procedures, sampling, field measurements and sample analysis performed during the investigation to characterize the environmental setting, source(s), and contamination. The Respondent shall use quality assurance, quality control, and chain-of-custody procedures approved by EPA. The QAPP should be prepared in accordance with the EPA *Requirements for Quality Assurance Project Plans* [EPA QA/R-5, EPA/240/B-01/003, March 2001] and following EPA *Guidance for Preparing Quality Assurance Project Plans* [EPA QA/G-5, EPA/240/R-02/009, December 2002] and EPA *Guidance on Choosing a Sampling Design for Environmental Data Collection* [EPA QA/G-5S, EPA/240/R-02/005, December 2002]. The minimum elements of Respondent's quality assurance program for data collection activities are in Chapter One of EPA publication SW-846, entitled *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. Additional requirements are included in the Order. Standard operating procedures (SOPs) shall be included as an attachment to the plan(s) if SOPs are cited in the text.
2. **Sampling and Analysis Plan (SAP)** The SAP shall outline the field investigation activities which will be conducted to determine the nature and extent of contamination associated with the Facility, and fulfill the purpose and objectives of the RFI. The SAP at a minimum should include the following:

- a. A description of the site, its regulatory status;
 - b. Clearly stated objectives for the specific sampling event, including the ultimate goal and/or use of the sampling data and the techniques which will ensure that the samples will provide the required data;
 - c. A discussion of sampling procedures which shall include: sampling locations, field quality assurance samples, analyses to be conducted including analytical method numbers, sample containers, sample preservation and shipment, and chain-of-custody procedures;
 - d. A discussion of sample analytical methodologies and procedures which shall include: identification of the contracted laboratory, sample storage and preparation procedures, sample matrix, analytical methods, method detection limits, precision and accuracy of the methodology and potential interferences;
 - e. Monitoring well and soil boring location, construction, installation, development and sampling procedures; and
 - f. A discussion of laboratory internal quality control checks, laboratory performance and system audits and frequency including: method blanks, laboratory control sample, calibration check samples, replicate samples, matrix-spiked samples, "blind" quality control samples, surrogate samples, preventative maintenance procedures and schedules, laboratory corrective actions, and sample turnaround time.
3. **Health and Safety Plan (HASP)** - The Respondent shall submit a site-specific HASP for all field activity. This document may be subject to review and comment, but not approval, by EPA.
 4. **Public Involvement Plan** - The Respondent shall submit a Public Involvement Plan to detail the Respondent's public information and notification activities. This plan shall conform to EPA's *RCRA Public Participation Manual*, EPA/530-R-96-007, September 1996. All Public Involvement Plans prepared by the Respondent shall be submitted to the implementing agency for comment and approval prior to use. Respondents must never appear to represent or speak for the implementing agency before the public, other government officials or the media. A schedule for community relations activities shall be included in the Public Involvement Plan.
 5. **Schedule for Facility Investigation.** Schedules should be as detailed as possible, but can be represented as a series of contingent activities (e.g., sampling beginning within 30 days of RFI Work Plan approval).

- D. RCRA Facility Investigation (RFI)** - The site investigation activities shall follow the plans set forth in the EPA approved RFI Work Plan in accordance with timelines specified by the project schedule therein.
- E. RFI Report** – In accordance with timelines specified by the project schedule in the approved RFI Work Plan, the Respondent shall submit to EPA an RFI Report. The RFI Report shall include an analysis and summary of all results obtained during the RFI. This data shall be sufficient to define the three-dimensional extent, origin, direction, and rate of movement of contaminants on-site and off-site. EPA may require the Respondent to collect and present additional information beyond the scope of the approved RFI Work Plan and the following list to accomplish the purpose and objectives of the RFI. EPA will review and approve or modify this submittal in accordance with Section X of the Order. The following information, at a minimum, must be included in the RFI Report:
- 1. Facility Background** - The RFI Report shall summarize the facility's regional location, adjacent land use, general facility physiography, hydrogeology, and historical use of the facility for the treatment, storage or disposal of solid and hazardous waste. The data gathered during any previous investigations or inspections and other relevant data shall be included. The RFI Report shall at a minimum include:
 - a. Operational History**
 - b. Release History**
 - c. Permit & Enforcement History**
 - d. Maps** – The Draft RFI Report shall include maps depicting the following information. All maps shall be of sufficient detail and accuracy to locate and report all current and future work performed at the site:
 - i. General geographic location;**
 - ii. Property boundaries, with the owners of all adjacent property clearly indicated;**
 - iii. Topography (with a contour interval sufficient to depict the following features), and surface drainage depicting all waterways, wetlands, flood plains, recharge areas, water features, drainage patterns, and surface water containment areas on or adjacent to the facility;**
 - iv. All tanks, buildings, landfills, piles, utilities, paved areas, easements, rights-of way, and other features;**
 - v. All SWMUs and AOCs at the facility, including both those areas which are currently in use and those used in the past;**

- vi. All underground tanks and piping at the facility used for product, water or waste, including both those tanks and piping which are currently being used and those used in the past;
- vii. Surrounding land uses (i.e., residential, commercial, agricultural, etc.); and
- viii. The location of all production and ground water monitoring wells on the facility and within a 2-mile radius of the facility boundary. These wells shall be clearly labeled and ground and top of casing elevations and construction details included.

2. **Hydrogeology** - the RFI Report shall include an evaluation of the hydrogeologic conditions at the Facility and provide the following information:

- a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground water flow beneath the Facility, including:
 - i. Regional and Facility-specific stratigraphy;
 - ii. Structural geology: description of local and regional structural features;
 - iii. Depositional history;
 - iv. Characterization of areas and amounts of recharge and discharge;
 - v. Regional and facility specific ground water flow patterns; and
 - vi. Seasonal variations in the ground water flow regime.
- b. An analysis of any topographic features that might influence the ground water flow system.
- c. A description of the physical and chemical properties of ground water observed in monitoring wells and borings at the facility.
- d. Based on field data, test, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:
 - i. Hydraulic conductivity, and porosity (total and effective);
 - ii. Lithology, grain size, sorting, degree of cementation; and
 - iii. An interpretation of hydraulic interconnections between saturated zones.
- e. Based on field studies and cores, structural geology and hydrogeologic cross-sections showing the extent (depth, thickness, lateral extent) of hydrogeologic units which may be part of the migration pathways identifying:
 - i. Sand and gravel in unconsolidated deposits;
 - ii. Zones of fracturing or channeling in consolidated or unconsolidated deposits;

- iii. Zones of higher or lower permeability that might direct and restrict the flow of contaminants;
 - iv. The uppermost aquifer and water-bearing zones above the first confining layer that may serve as a pathway for contaminant migration including perched zones of saturation; and
 - v. All other geologic formations, or parts thereof, yielding a significant amount of ground water.
- f. Based on data obtained from ground water monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, a representative description of water level monitoring including:
- i. Water level contour and/or potentiometric maps for each hydrogeologic unit;
 - ii. Hydrologic cross-sections showing vertical gradients;
 - iii. The flow system, including the vertical and horizontal components of flow;
 - iv. Any temporal changes in hydraulic gradients, (e.g., seasonal influences); and
 - v. The location of all ground water monitoring wells, agricultural and residential ground water wells within a one-mile radius of the Facility. The location of all such wells shall be clearly identified on the map and information provided as to the elevations of the ground level at the well and the top of the casing.
- g. A description of man-made influences that may affect the hydrogeology of the site.
3. Soils - the RFI Report shall characterize the soil and rock units potentially affected by releases. Such characterization may include but not be limited to, the following information:
- a. The extent of contamination;
 - b. Depth to ground water;
 - c. Depth to bedrock and the characteristics of the bedrock including discontinuities such as faults, fissures, joints, fractures and sinkholes, etc.;
 - d. Hydraulic conductivity (saturated and unsaturated);
 - e. Porosity;
 - f. Particle size and distribution; and

- g. Moisture and mineral content.
4. **Surface Water and Sediment** - The RFI Report shall characterize the surface water bodies in the vicinity of the facility. Such characterization shall include, but not be limited to, the following information:
 - a. Description of the temporal and permanent surface water bodies;
 - b. Description of the chemistry of the natural surface water and sediments; and
 - c. Description of sediment characteristics including, channel width and depth, thickness profile, physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.).
 5. **Source Characterization** - The Respondent shall collect and report analytical data to characterize the wastes and the areas where wastes have been placed, collected, released or removed including: type; quality; physical form; disposition (containment or nature of disposal); and any facility characteristics that may affect or have affected a release (e.g., facility security, engineered barriers). This shall include quantification of the following specific characteristics, at each source area:
 - a. Unit/disposal area characteristics, including location of unit/disposal area, type of unit/disposal area, design features, operating practices (past and present), period of operation, age of unit/disposal area, general physical condition, and method used to close the unit/disposal area (if applicable); and
 - b. Waste characteristics, including the type of waste placed in the unit, hazardous waste classification (e.g. ignitable, corrosive, reactive, characteristic, and/or listed), physical and chemical characteristics, and quantity of waste per unit or disposal area.
 6. **Contamination Characterization** - The RFI Report shall present and analyze all information on ground water, soils, surface water, and sediment contamination in the vicinity of the Facility. This data shall be sufficient to define the extent, origin, direction, and rate of movement of contaminants on-site and off-site. The RFI Report shall address the following media which may be impacted by contamination at the Facility:
 - a. **Ground Water Contamination** - The RFI Report shall characterize any plumes of contamination at the Facility. This investigation at a minimum will provide the following information:

- i. A description of the horizontal and vertical extent of any potential ground water contamination (immiscible or dissolved) originating from the Facility;
 - ii. The direction (horizontal and vertical) and velocity of contaminant movement;
 - iii. The horizontal and vertical concentration profiles of Appendix IX constituents in the plume(s);
 - iv. An evaluation of factors influencing contaminant migration in the subsurface; and
 - v. An extrapolation of potential future contaminant movement.
 - b. **Soil Contamination** - The RFI Report shall characterize the contamination of soil and rock units above the water table in the vicinity of the contaminant release. The investigation shall provide the following information:
 - i. A description of the horizontal and vertical extent of contamination;
 - ii. Specific contaminant concentrations;
 - iii. A description of contaminant and soil chemical properties which affect contaminant migration;
 - iv. The velocity and direction of contaminant movement;
 - v. Background soil contaminant levels; and
 - vi. An extrapolation of potential future contaminant migration.
 - c. **Surface Water and Sediment Contamination** - The RFI Report shall characterize contamination in surface water bodies in the area of the Facility resulting from contaminant releases at the Facility. The Respondent will also be required to characterize contamination from storm water runoff.
7. **Data Analysis** - The RFI Report shall include analyses and summary of all facility investigations and their results. This analysis shall include a description of the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area and the level of certainty of its conclusions.
8. **Interim Measures** – The RFI Report shall report on any interim measures/additional work conducted or planned pursuant to this SOW or the Order.
- F. **Quarterly Progress Reports** – The Respondent will, at a minimum, provide the implementing agency with signed quarterly progress reports, as described in Section VI of this SOW.

IV. TASK III: CORRECTIVE MEASURES STUDY (CMS)

- A. Purpose** - Respondent shall conduct a CMS that identifies, compares, and recommends alternative potential remedies to address the contamination at and/or originating from Respondent's Facility to protect human health and the environment, which shall provide sufficient information to support the selection of an appropriate remedy and to support the implementation of corrective measures. This process shall conform to EPA's *RCRA Corrective Action Plan* and other applicable EPA guidance.
- B. Scope** – The CMS shall consist of the following components:
1. CMS Work Plan;
 2. CMS Report;
 - a. Introduction/Purpose;
 - b. Description of Current Conditions;
 - c. Corrective Action Objectives;
 - d. Identification, Screening and Development of Corrective Measures Alternatives;
 - e. Evaluation of a Final Corrective Measure Alternative;
 - f. Recommendation by Respondent for a Final Corrective Measures Alternative;
and
 - g. Public Involvement Plan.
 3. Progress Reports.
- C. CMS Work Plan** – Within the timeframes specified in the Order, the Respondent shall prepare a CMS Work Plan which includes the following elements:
1. A site-specific description of the overall purpose of the CMS;
 2. A description of the corrective measure objectives, including proposed target media cleanup standards (e.g., promulgated federal and state standards, risk derived standards) and points of compliance or a description of how a risk assessment will be performed (e.g., guidance documents);
 3. A description of the specific corrective measure technologies and/or corrective measure alternatives which will be studied;

4. A description of the general approach to investigating and evaluating potential corrective measures;
 5. A detailed description of any proposed pilot, laboratory and/or bench scale studies; and
 6. A proposed outline for the CMS Report including a description of how information will be presented.
 7. A schedule for completion of the CMS Report.
- D. CMS Report** - Within the time frames specified in the Order, Respondent shall submit to EPA for approval a CMS Report. The CMS report shall address, without limitation, all items set forth in this Task, below. EPA will review and approve or modify this submittal in accordance with Section X of the Order. Irrespective of an approved CMS Work Plan, EPA may require the Respondent to collect, present and/or analyze additional information beyond the scope of the approved CMS Work Plan and the following list to accomplish the purpose and objectives of the CMS. The following information must be included in the CMS Report:
1. **Statement of Purpose** - The CMS Report shall describe the purpose of the document and provide a summary description of the project;
 2. **Description of Current Conditions** - The CMS Report shall include a brief discussion of any new information that has been developed since the RFI.
 3. **Corrective Action Objectives** - The CMS Report shall describe and propose Respondent's corrective action objectives. Specifically, Respondent shall propose applicable media cleanup standards for each medium where Facility-related contamination poses an unacceptable risk to human health and the environment. The CMS Report shall explain how these objectives are protective of human health and the environment and are consistent with EPA guidance and the requirements of applicable federal statutes. Final corrective action objectives will be determined by EPA when the final corrective action remedy is selected.
 - i. **Ground Water Protection Standards** - The CMS Report shall provide information to support the Agency's selection/development of Ground Water Protection Standards for all of the constituents found in the ground water during the RFI.
 - ii. **Soil Cleanup Standards** - The CMS Report shall provide information to support the Agency's selection/development of Soil Cleanup standards.

iii. **Risk Assessment (Optional)** - Respondents may submit a work plan for conducting a site-wide Human Health and Screening Level Ecological Risk Assessment. The work plan shall outline the procedures and schedule for completing a risk assessment in accordance with EPA's *Risk Assessment Guidance for Superfund*, EPA/540/1-89/002, December 1989, and the *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments*, EPA-540-R-97-006, July 1997, and any subsequent updates or amendments. The Risk Assessment work plan must include:

- a site-specific exposure conceptual model, which either graphically illustrates or states the impacted media and all the primary and secondary exposure pathways; and
- lists all contaminants of concern, standard exposure parameters, land use, methodologies for determining reasonable maximum exposure point concentrations, proxy determinations, and other statistical considerations.

Only information and environmental data that has been validated as representative of facility conditions may be used to describe the potential excess human health and/or ecological risk posed by the site.

In lieu of performing a site-specific Risk Assessment to evaluate risk and arrive at cleanup goals for this site, respondent may elect, with the concurrence of the EPA project manager, to defer to EPA for completion of a quantitative risk assessment.

Coordination with EPA is required throughout the risk characterization process.

iv. **Other Relevant Protection Standards** - The CMS shall identify all relevant and applicable standards for the protection of human health and the environment (e.g., National Ambient Air Quality Standards, Federally-approved state water quality standards, site specific risk-based media cleanup standards, surface water and sediment cleanup standards, air cleanup standards, etc.). All standards shall be developed in accordance with EPA guidance and the requirements of applicable federal statutes.

4. **Potential Receptors** - The CMS Report shall collect data describing the human populations and environmental systems that currently or potentially are at risk of contaminant exposure from the Facility.

5. Identification, Screening, and Development of Corrective Measure Alternatives

- a. The CMS Report shall list and describe potentially applicable technologies for each affected media that may be used to achieve the corrective action objectives proposed by Respondent. The CMS Report shall include a table that summarizes the available technologies; and
- b. Screening of Technologies - the CMS Report shall present a screening of corrective measures technologies to demonstrate why certain corrective measures technologies may not prove feasible to implement given the existing set of waste and site-specific conditions. This screening process must use consistent, defensible, and quantitative evaluation criteria to the extent possible.

6. Corrective Measure Development

- a. The CMS Report shall assemble the technologies that pass the screening step into specific alternatives that have the potential to meet the corrective action objectives for all media; and
- b. Each alternative proposed in the CMS Report shall consist of an individual technology or a combination of technologies used in parallel or in sequence (i.e., a treatment train). Different alternatives may be considered for separate areas of the Facility. The developed alternatives shall be carried forward for evaluation using the EPA's four Screening Criteria and five Balancing Criteria.

7. Screening Criteria - For each remedy which warrants a more detailed evaluation, the CMS Report shall provide detailed documentation of how the potential remedy will comply with each of the Screening Criteria listed below:

- a. **Be protective of human health and the environment;**
- b. **Attain media cleanup standards set by the EPA;**
- c. **Control the source(s) of releases so as to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment; and**
- d. **Comply with any applicable standards for management of wastes.**

Any corrective measure alternative proposed by Respondent in the CMS Report must satisfy the four Screening Criteria in order to be carried forward for evaluation using the Balancing Criteria. In evaluating the selected corrective

measure alternative or alternatives, the Respondent shall prepare and submit information that documents that the specific remedy will meet the standards listed above. A detailed explanation of the Screening Criteria is set forth in the *RCRA Corrective Action Plan*.

8. Balancing Criteria - Any remedy proposed by Respondent which meets the four Screening Criteria shall also be evaluated according to the five Balancing Criteria. These criteria represent a combination of technical measures and management controls for addressing the environmental problems at the Facility. The five criteria are:

- a. Long-term reliability and effectiveness;
- b. Reduction in the toxicity, mobility or volume of wastes;
- c. Short-term effectiveness;
- d. Implementability; and
- e. Cost.

The CMS Report shall discuss and provide information on these criteria in the evaluation of corrective action alternatives. A detailed explanation of the Balancing Criteria is set forth in the *RCRA Corrective Action Plan*.

9. If the CMS Report proposes corrective measures that leave contamination onsite at a level that does not allow for unrestricted use and unlimited exposure, Respondent shall include as a component of such corrective measures a plan to implement institutional controls to prevent unacceptable exposures to human health and the environment. Such a plan shall be consistent with EPA guidance including but not limited to "*Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*," EPA 540-F-00-005, OSWER 9355.0-74FS-P, September 2000 and the draft "*Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Brownfields, Federal Facility, UST and RCRA Corrective Action Cleanups*" February 2003.

10. Public Involvement Plan – Additional public involvement activities may be necessary, based on facility specific circumstances.

E. Quarterly Progress Reports – The Respondent will, at a minimum, provide the implementing agency with signed quarterly progress reports, as described in Section VI of this SOW.

V. **TASK IV: CORRECTIVE MEASURES IMPLEMENTATION (CMI)**

- A. **Purpose** - The Respondent shall perform the CMI that implements the remedy selected by EPA to prevent, mitigate, and/or remediate any migration or release of solid and/or hazardous wastes and/or hazardous constituents at, and/or from, the Facility. This process shall conform to EPA's *RCRA Corrective Action Plan* and other applicable EPA guidance.
- B. **Scope** - The CMI shall consist of the remedy and elements therein selected by EPA for the Facility, and as specified in the CMI Work Plan.
- C. **CMI Work Plan** - Within the timeframe specified in the Order, Respondent shall submit a CMI Work Plan to EPA. The required CMI Work Plan shall specify the work required for the design, construction, implementation, and continued performance monitoring of EPA's selected final corrective action(s) at the Facility. EPA will review and approve or modify this submittal in accordance with Section X of the Order. The CMI Work Plan shall include, at a minimum, the following elements:
1. **Introduction/Purpose:** The CMI Work Plan shall contain a description of the purpose of the document and a summary description of the project;
 2. **Summary of corrective action objectives;**
 3. **Description of the final corrective measure(s) selected by EPA and the rationale for the remedy selection, including institutional controls, if any;**
 4. **Performance expectations;**
 5. **Preliminary design criteria and rationale;**
 6. **General O&M requirements;**
 7. **Startup Procedures, including all applicable system startup procedures, including operational testing;**
 8. **Long-term monitoring requirements;**
 9. **Design and implementation considerations to implement the selected remedy, to include, but not be limited to:**
 - a. **Anticipated technical problems;**
 - b. **Additional engineering data that may be required;**

- c. A description of any permits and regulatory requirements; and
- d. Access, easements and right-of-way.

10. Cost estimates, including the capital and O&M costs for implementing the entire corrective action.

D. Project Schedule - The CMI Work Plan shall also specify a schedule for key elements of the bidding and construction process, and for the initiation of all major corrective action construction tasks.

E. Updated Quality Assurance Project Plan (QAPP) and Health and Safety Plans (HSP) - The CMI Work Plan also shall include updates of the referenced plans, either as amendments, or stand alone documents. The updated Plans shall be revised as appropriate to address the requirements of implementing the final corrective actions for the Facility. The EPA will review and/or approve and/or modify all updates to the QAPP in accordance with Section X of the Order. The HSP shall be submitted to EPA for documentation; however, EPA will not review and approve this submittal.

F. Operation and Maintenance (O&M) Plan - Within the CMI Work Plan Respondent shall also submit to EPA an O&M Plan that outlines procedures for performing operations, long-term maintenance and monitoring of the final corrective action required by this SOW. The O&M component of the CMI Work Plan shall address all elements set forth below, including but not limited to, Project Management, Data Collection, Waste Management Procedures and Contingency Procedures.

G. EPA will review and approve or modify this submittal in accordance with Section X of the Order. The O&M Plan shall, at a minimum, include the following elements:

1. **Project Management** - The O&M Plan shall describe the management approach including levels of personnel authority and responsibility (including an organizational chart), lines of communication and the qualifications of key personnel who will operate and maintain the corrective action (including contractor personnel);
2. **System description** - The O&M Plan shall describe the corrective action components and identify significant equipment, as applicable to each selected corrective action alternative. Provide schematics or process diagrams to illustrate system design and operation;
3. **Personnel Training** - The O&M Plan shall describe the training process for O&M personnel, as applicable. Respondents shall prepare, and include the technical specifications governing the operation and on-going maintenance of contaminant mitigation systems, and the support requirements for the following:

- a. Appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up and operation of contaminant mitigation systems; and
- b. Training covering appropriate operational procedures once the start-up has been successfully accomplished.
- c. Start-Up Procedures - The O&M Plan shall describe all applicable system start-up procedures including any operational testing;
- d. O&M Procedures - The O&M Plan shall describe all normal operation and maintenance procedures including:
 - i. A description of tasks for operation;
 - ii. A description of tasks for maintenance;
 - iii. A description of prescribed treatment or operation conditions; and
 - iv. A schedule showing the frequency of each O&M task.
- e. Data Management and Documentation Requirements - The O&M Plan shall specify that Respondents shall collect and maintain the following information:
 - i. Progress Report Information;
 - ii. Monitoring and Laboratory data;
 - iii. Records of operating costs; and
 - iv. Personnel, maintenance and inspection.
- f. Application of QAPP - The O&M Plan shall reference the approved updates to the QAPP and describe actions necessary to apply the QAPP to ensure that all information, data and resulting decisions are technically sound, statistically valid and properly documented.
- g. The O&M Plan shall specify a replacement schedule for equipment and installed components;
- h. Waste Management Practices - The O&M Plan shall describe any solid wastes/hazardous wastes which may be generated by the operation of the corrective measures components and describe how they will be managed;
- i. Contingency Procedures - The O&M Plan shall describe, as applicable, the following types of contingency procedures necessary to ensure system operation in a manner protective of human health and the environment:
 - i. Procedures to address system breakdowns and operational problems including a list of redundant and emergency back-up equipment and

- procedures;
- ii. Alternative procedures to be implemented if the corrective measure systems suffer complete failure. The alternative procedures must be able to achieve the performance standards for the corrective measures until system operations are restored;
- iii. The O&M Plan shall specify that, in the event of a major breakdown and/or the failure of the corrective measures, Respondents shall notify EPA and MDNR within 24 hours of the event; and
- iv. The O&M Plan shall specify the procedures to be implemented in the event that the Interim Measures are experiencing major operational problems, are not performing to design specifications, and/or will not achieve the corrective action objectives.

H. Corrective Measures Completion Criteria - The CMI Work Plan shall propose the process and criteria for determining when the implemented corrective measures have achieved the corrective action objectives. The CMI Work Plan shall also describe the process and criteria for determining when maintenance and monitoring may cease.

I. Corrective Measures Construction Completion Report (CMCCR) – within the timeframes specified in the Order, respondent shall submit a Corrective Measures Construction Completion Report, which shall include at a minimum, the following elements:

1. A statement of the purpose of the Report;
2. A synopsis of the corrective measures, design criteria, and a certification that the corrective measure was constructed and implemented in accordance with the approved CMI Work Plan;
3. An explanation and description of any modifications to the approved CMI Work Plan and design specifications, and why such modifications were necessary and appropriate;
4. Copies of any sampling/test results for operational testing and/or monitoring that documents how initial operation of the corrective measure compares to design criteria;
5. A summary of significant activities that occurred during the implementation/construction, including a discussion of any problems encountered and how such problems were addressed;
6. A summary of all inspection findings (including copies of inspection reports, documents and appendices); and
7. Copies of as-built drawings and photographs.

J. Corrective Measures Completion Report (CMCR) - within the timeframes specified in the Order and satisfaction of the EPA approved completion criteria, Respondents shall submit to EPA a CMCR. EPA will review and approve or modify this submittal in accordance with Section X of the Order. The CMCR shall fully document how the corrective action objectives and corrective measures completion criteria have been satisfied, and shall justify why the corrective measure and/or monitoring may cease. The CMCR shall, at a minimum, include the following elements:

1. A synopsis of the corrective measures;
2. Corrective Measures Completion Criteria - the CMCR shall include the process and criteria used to determine, and recommend, that the corrective measures maintenance and monitoring may cease;
3. A demonstration that the corrective action objectives and corrective measure completion criteria have been met. The CMCR shall include results of tests and/or monitoring that documents how operation of the corrective measures compares to, and satisfies, the corrective action objectives and completion criteria;
4. A summary of work accomplishments (e.g. performance levels achieved, total hours of operation, total volume treated and/or excavated volumes of media, nature and volume of wastes generated, etc.);
5. A summary of significant activities that occurred during operation of the corrective measures, including a discussion of any problems encountered and how such problems were addressed;
6. A summary of inspection findings (including copies of key inspection documents in appendices); and
7. A summary of total O & M costs.

K. Quarterly Progress Reports – The Respondent will, at a minimum, provide the implementing agency with signed quarterly progress reports, as described in Section VI of this SOW.

VI. Quarterly Progress Reports - Quarterly Progress Reports must be submitted as required by the Order. The Respondent shall include the following information in the Quarterly Progress Reports:

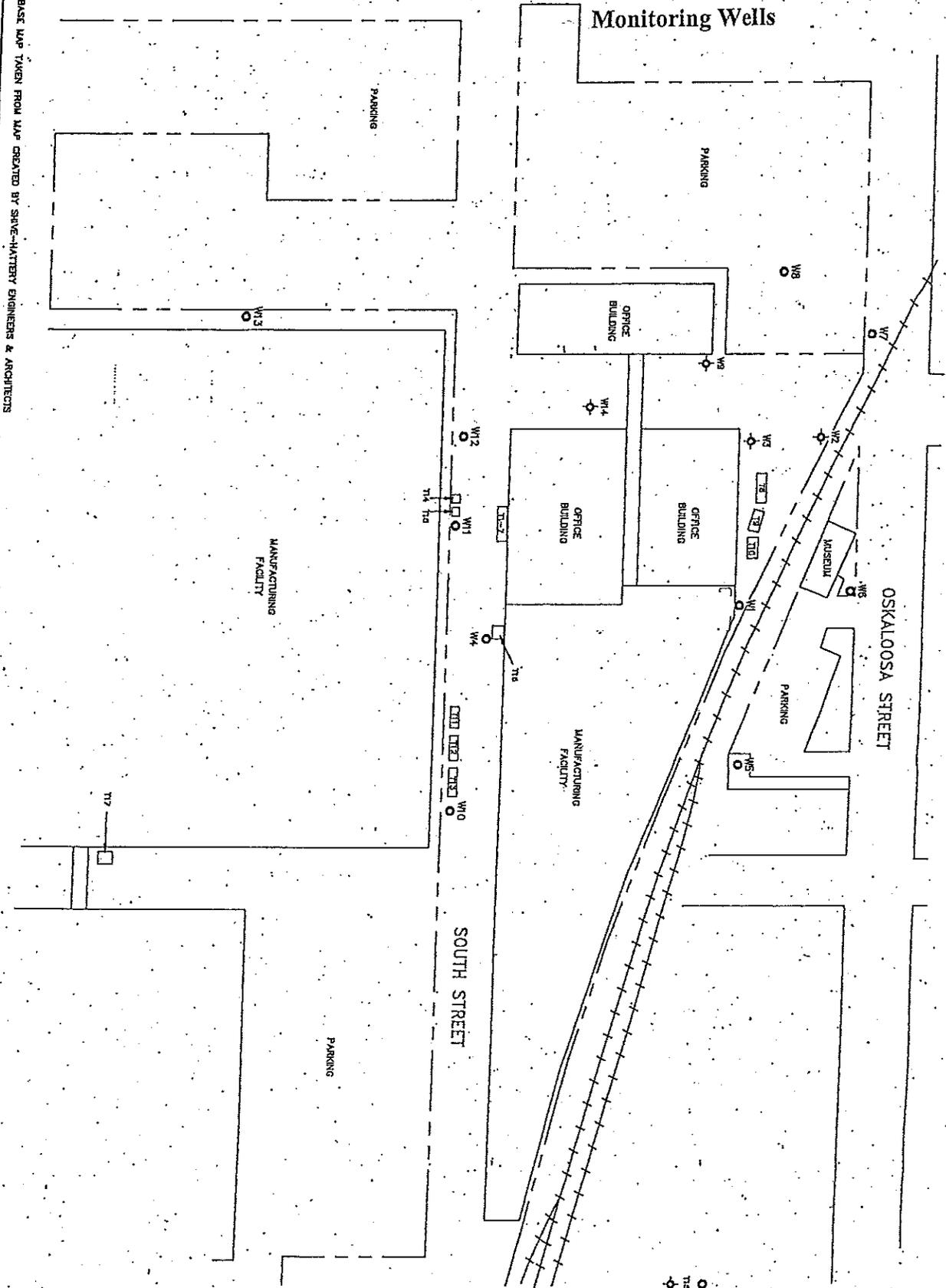
1. A description of all of the IM, RFI, CMS, or CMI activities, as appropriate, completed during the reporting period;

2. A description of all changes made to the IM, RFI, CMS, or CMI during the reporting period;
3. Summaries of all contacts, during the reporting period, with representatives of the local community, public interest groups or State government concerning activities at the site;
4. Summaries of all problems or potential problems encountered during the reporting period;
5. Actions being taken to rectify problems;
6. Changes in project coordinator, principal contractor, laboratory, and/or consultant during the reporting period;
7. Projected work for the next reporting period;
8. Other relevant documentation, including, but not limited to copies of laboratory/monitoring data received and/or generated during the reporting period;
9. Other activities conducted by the facility (e.g., Project Specific Reporting Requirements); and
10. Conclusions and Recommendations.

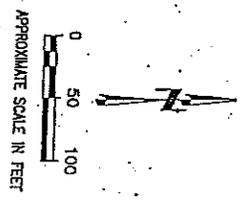
B. EPA may direct a different frequency of progress reports as necessary to efficiently and effectively oversee and document the work.

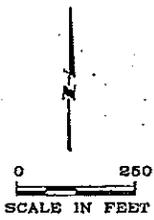
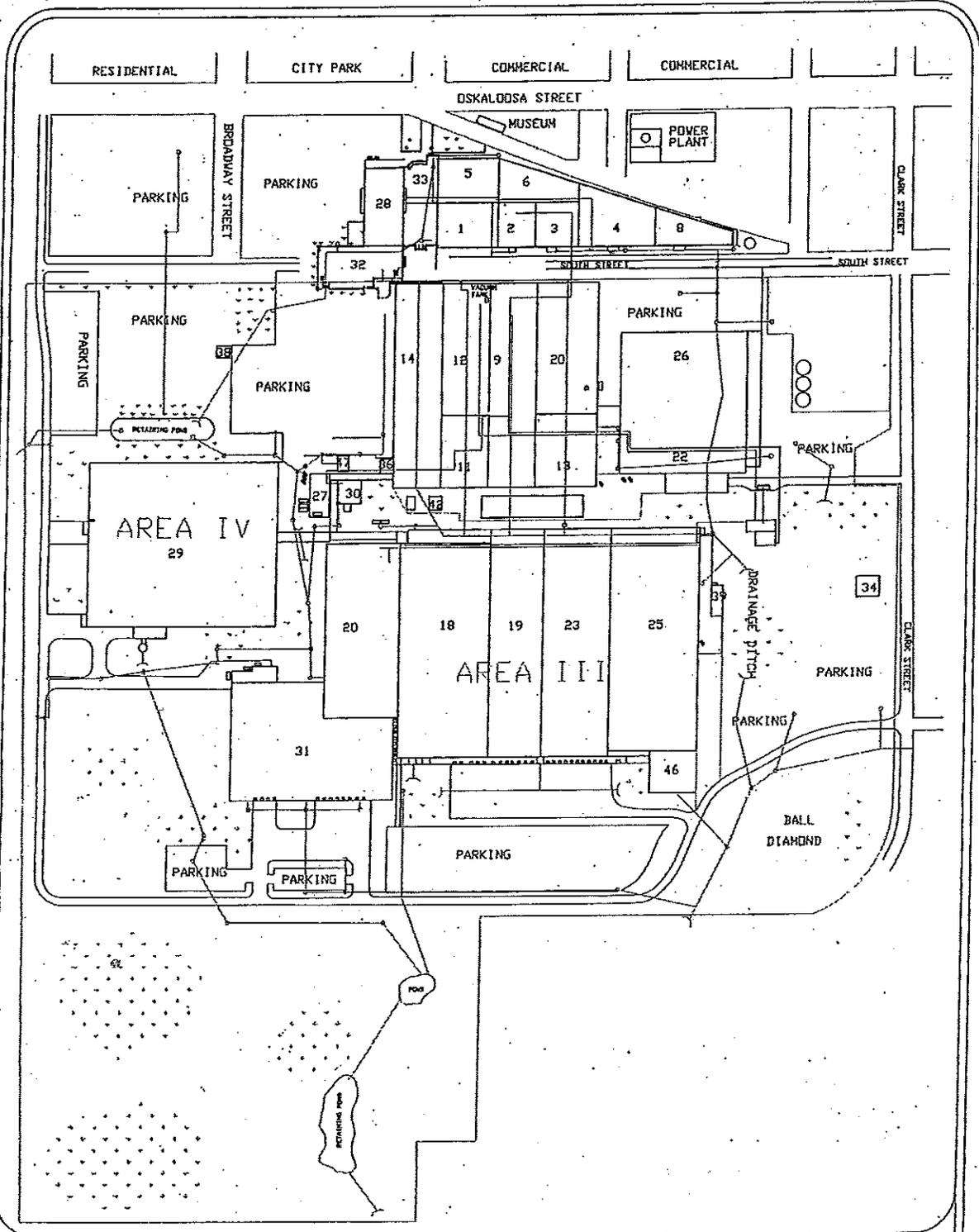
Location of Monitoring Wells

BASE MAP TAKEN FROM MAP CREATED BY SHAW-HATTERY ENGINEERS & ARCHITECTS



LEGEND
 ○ MONITORING WELL
 ◻ FORMER TANK (REMOVED)
 ◻ ABANDONED / DESTROYED MONITORING WELL





LEGEND

- STORM SEWER
- PROPERTY LINE
- PAVEMENT
- RECREATION PATH
- MINERAL SPIRITS
- FUEL OIL
- RAILROAD TRACKS
- STORM SEWER INLET
- STORM SEWER BUTLET
- GRASS
- GRAVEL



PELLA CORPORATION
PELLA, IOWA

MAP SOURCE: U. S. G. S. TOPOGRAPHIC QUADRANGLE
PELLA, IOWA

SITE LOCATION: 41° 23' 26" N
92° 54' 20" W

Figure 2
Facility Map

Attachment IV

"RCRA Facility Investigation Guidance" EPA 530/SW-89-031, OSWER Directive Number 9502.00-6D, May 1989.

"Guidance on Systematic Planning Using the Data Quality Objectives Process" EPA QA/G-4, EPA/240/B-06/001, February 2006.

"Guidance for Developing Quality Systems for Environmental Programs" EPA QA/G-1, EPA/240/R-008, November 2002.

"RCRA Corrective Action Plan" EPA/520-R-94-004, OSWER Directive Number 9902.3-2A, May 1994.

"Risk Assessment Guidance for Superfund; Volume 1, Human Health Evaluation Manual, Parts A-D - Interim Final (1989 & 1991)", EPA 540/1-89/002, OSWER Directive Number 9285 6-03.

"Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments Interim Final (1997)" EPA 540-R-97-006, OSWER Directive 9285.7-25.

"EPA Requirements for Quality Assurance Project Plans" EPA QA/R-5, March 2001.

"Guidance for Quality Assurance Project Plans" EPA QA/G-5, December 2002.

"Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups," EPA 540-F-00-005, OSWER 9355.0-74FS-P, September 2000.

IN THE MATTER OF Pella Corporation, Respondent
Docket No. RCRA-07-2010-0014

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Administrative Order on Consent was sent this day in the following manner to the addressees:

Copy hand delivered to
Attorney for Complainant:

Robert W. Richards
Assistant Regional Counsel
Region VII
United States Environmental Protection Agency
901 N. 5th Street
Kansas City, Kansas 66101

Copy by Certified Mail Return Receipt to:

Terry Noteboom
Corporate Environmental Engineer
Pella Corporation
102 Main Street
Pella, Iowa 50219

Dated: 3/3/10


Kathy Robinson
Hearing Clerk, Region 7