Site Name: United Suppliers, Pacific Junction

Pre-Remedial Initial Site Screening (ISS)

Project Manager: Hylton Jackson

Date: 12/13/2011

CON 12-15 Doc # 26127

Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, S.W. burial, etc)

The 15.5-acre site is an active agricultural fertilizer production/storage facility located 1.5 miles south of Pacific Junction, Iowa. The facility stores liquid, dry, and anhydrous fertilizers and ingredients. The site contains load out facilities, office space, equipment maintenance/storage areas, and earthen secondary containment/storm water control structures. In March of 1997, a one million gallon tank containing 10-34-0 liquid fertilizer ruptured and damaged a nearby one million gallon tank containing liquid 32% nitrogen. The resulting release overwhelmed the dike system. A secondary dike was constructed and the facility recovered as much product as possible. As a result of onsite remedial activities, this secondary dike system was converted to a rubber-lined retention basin (235' X 250' X 5') that has been maintained by the facility. In September 2009, the IDNR visited the site to investigate a complaint. As a result of that visit, the facility was required to develop an Emergency Response Plan, perform an engineering review of the basin's specifications/construction, and conduct an Environmental Site Assessment (ESA) to investigate possible overtopping of the retention basin and investigate an area of observed, disturbed soil.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)

Three soil borings were advanced to 12 feet bgs on the site in January of 2010. All three borings were converted to monitoring wells. Soil samples were collected from each of the borings and the pile of disturbed soil and analyzed for nitrate, nitrite, and ammonia.

Groundwater in the three monitoring wells was encountered at ~ 7 feet bgs. Water samples were collected from each of the monitoring wells, an onsite water supply well, and the retention basin and all were analyzed for nitrate, nitrite, and ammonia. Water from the retention basin was also analyzed for total metals. Well logs for the borings/monitoring wells indicate 3 to 4 feet of silty clay overlies Missouri River alluvium. Hydraulic conductivity was determined to be 32.4 m/day (MW-1) and the aquifer is considered to be a protected groundwater source. The three monitoring wells and the onsite water supply well have been sampled five times since the initial sampling round.

Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.

Soil;

Nitrate was detected in all soil samples with all concentrations well below the Statewide Standard. Nitrite and ammonia were not detected in any soil sample above laboratory detection limits.

Groundwater;

Location	Sample Date	Nitrate	Nitrite	Ammonia
	1/13/2010	98.1	<0.100	<0.200
	12/13/2010	42.0	<0.100	<0.200
MW-1	2/23/2011	17.9	<0.100	1.22
	5/3/2011	30.5	0.118	0.237
	8/2/2011	11.2	0.118	0.212
	10/17/2011	4.08	< 0.0140	0.363
•	1/13/2010	223	<0.100	54.8
	12/13/2010	225	<0.100	14.3
MW-2	2/23/2011	84.4	0.312	10.6
	5/3/2011	84.3	0.364	24:5
	8/2/2011	101	0.101	19.0
	10/17/2011	25.6	0.0187	1.14
	1/13/2010	223	0.537	168
	12/13/2010	112	<0.100	126
MW-3	2/23/2011	51.1	0.173	54.5
	5/3/2011	48.4	0.261	35.1
	8/2/2011	43.1	<0.100	60.2
	10/17/2011	47.5	. 0.322	3.22
	1/13/2010	0.67	<0.100	<0.20
	12/13/2010	1.86	<0.100	0.914
Site Well	2/23/2011	0.26	<0.100	0.875
	5/3/2011	0.27	<0.100	0.855
	8/2/2011	0.77	<0.100	<0.20
	10/17/2011	0.74	<0.100	0.843
Retention Basin	1/13/2010	151	0.278	292
Statewide Standard for	Protected Groundwater			
mg/l		10	1	30
Statewide Standard for Nor	n-Protected Groundwater		1	
mg/l		56	5	150

Retention basin water metals:

<u>Arsenic</u>, <u>cadmium</u>, <u>chromium</u>, and <u>molybdenum</u> were detected in the sample at concentrations that moderately exceeded the respective Statewide Standard.

<u>Barium</u>, <u>copper</u>, <u>lead</u>, <u>mercury</u>, <u>nickel</u>, <u>selenium</u>, and <u>silver</u> were detected a concentrations below applicable Statewide Standards and <u>potassium</u> was detected (no applicable Statewide Standard).

Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

The facility is located 2.35 miles northeast of the Missouri River. The site is not in any source water protection zone. Other than the 100-foot deep onsite, non-drinking water well, the nearest private wells (and residences) are located 2,000 feet west of the site. Records available

for one private well, Flossie Kolbe, indicate it is 67 feet deep. Records for other wells in the area indicate they are finished at depths ranging from 30 to 100 feet deep.

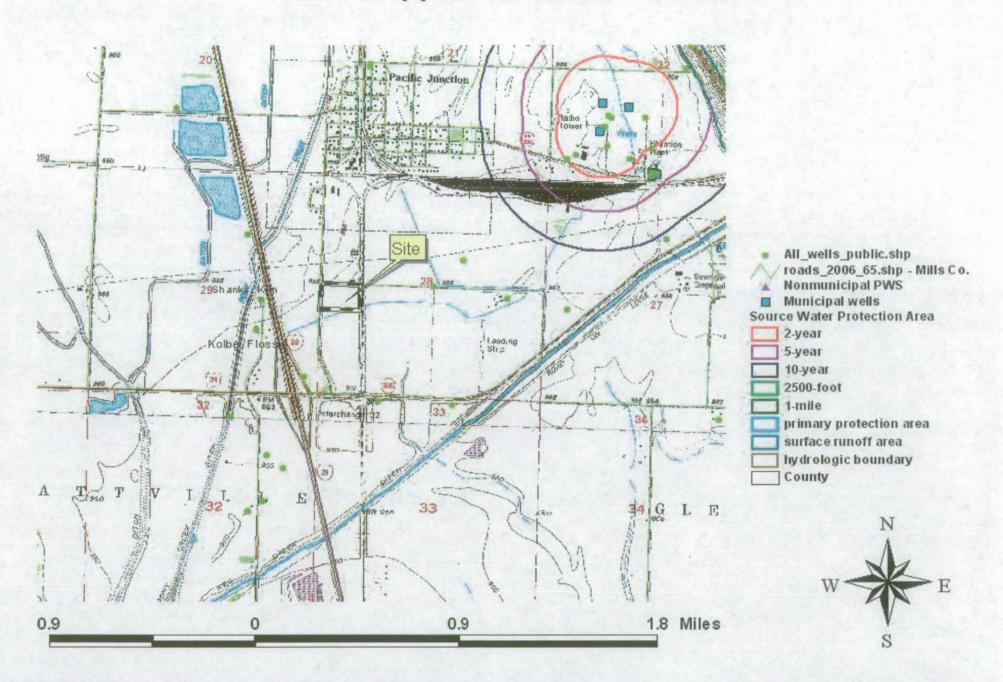
Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

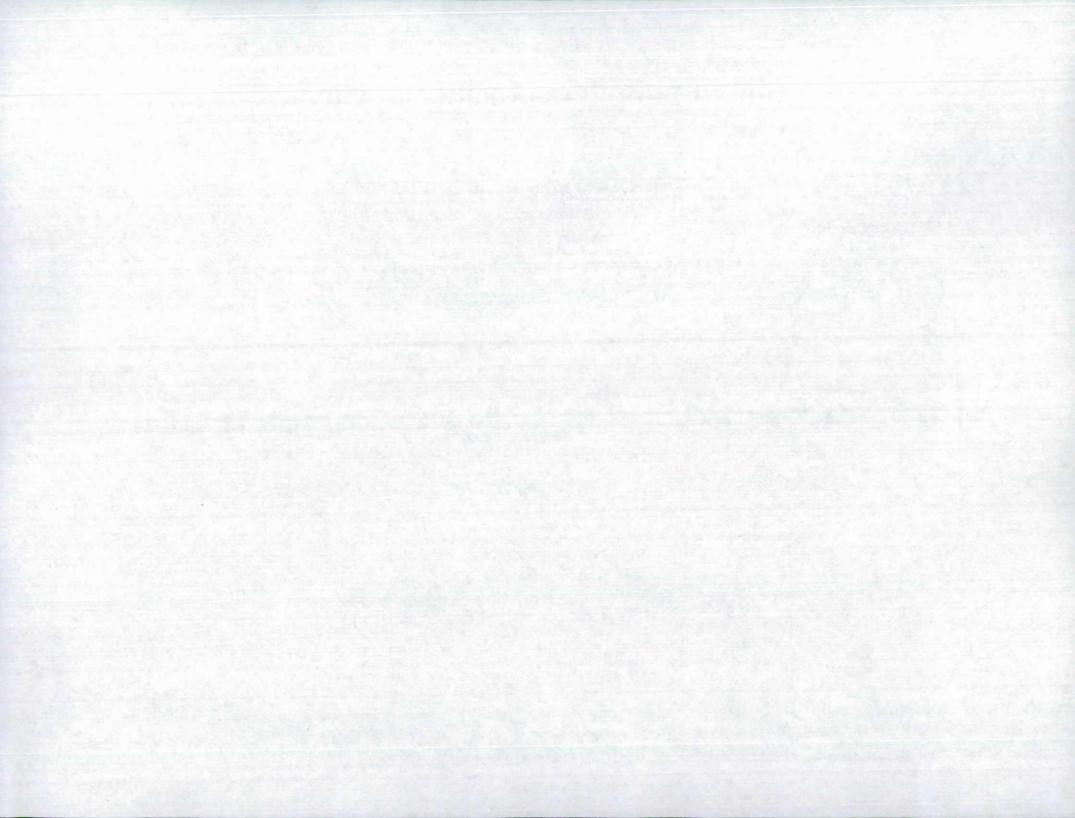
Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

The three monitoring wells and the onsite water supply well have been sampled six times over the last two years (beginning January 2010). The nitrite concentrations have never exceeded the Statewide Standard. Nitrate and ammonia concentrations have been declining and only the nitrate concentrations in MW-2 and MW-3 currently exceed the Statewide Standard. The 100-foot deep onsite well has never shown an impact above a Statewide Standard. In the one water sample collected from the retention basin, nitrate, ammonia, and some metals concentrations modestly exceed their respective standards. The ESA does not indicate that any deficiencies in the retention basin were noted during the engineering evaluation. The information presented in the ESA and subsequent monitoring events does not indicate that a significant threat to the environment or human health currently exists. No further assessment or groundwater monitoring will be required at this time. Please note that, especially as this is an active facility, any future site information may warrant further environmental assessment activities.

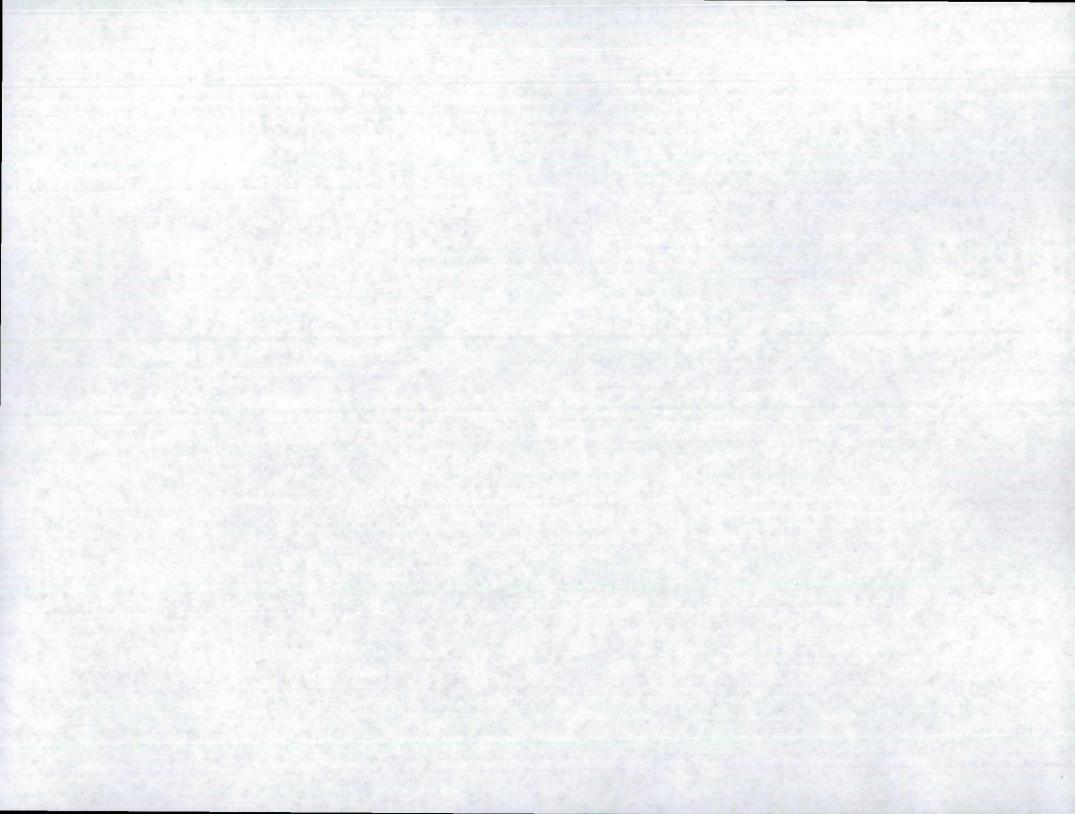
Site recomm	nended for: ther action	
Addition	onal investigation under state progran onal investigation under CERCLA (E	xtended Site Screening)
<u>==</u>	onal investigation by responsible part er to LUST/UST	у
	Part of	, ,
Form Reviewed:	(hl ymdhe	Date Reviewed: <u>/2//5//</u>

United Suppliers, Pacific Junction









PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer:	011				
	(Name/Title) (Date)				
	502 East 9 th Street, Des Moines, IA 50319 515 242	5084			
	(Address) (Phone)				
	Hylton.Jackson@dnr.iowa.gov				
•	(E-mail Address)				
Site Name:	United Supplers, Pacific Junction				
Previous Names (if any):					
Site Location:	60597 195 th Street				
	Pacific Junction IA 51561				
•	(City) (ST) (Zip)				
Latitude:	41.0079 Longitude: 95.8018				
	<u> </u>				
Compare the following	g checklist. If "yes" is marked, please explain below.	YES	NO		
Does the site already		<u> </u>	Ø		
	products that are part of the structure of, and result in exposure within,				
	businesses or community structures?		$ \boxtimes $		
3. Does the site consist	st of a release of a naturally occurring substance in its unaltered form,				
	h naturally occurring processes or phenomena, from a location where		$\mid oxtimes \mid$		
it is naturally found?		igwdot			
	a public or private drinking water supply due to deterioration of				
the system through or					
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal					
program)? 6 Are the hazardous si	substances potentially released at the site regulated under a statutory				
	m, natural gas, natural gas liquids, synthetic gas usable for fuel,		<u></u>		
	rtilizer, release located in a workplace, naturally occurring, or				
regulated by the NRC, U	UMTRCA, or OSHA)?				
	substances potentially released at the site excluded by policy		\boxtimes		
	eferral to RCRA Corrective Action)?				
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance release have occurred, EPA approved risk assessment completed)?					
Please explain all "yes	s" answer(s), attach additional sheets if necessary:				
•					

12/13/11

Site Determination:	$\hfill \Box$ Enter the site into CERCLIS. Further assessment is recommended (Explain below).
	☑ The site is not recommended for placement into CERCLIS (Explain below).
	☐ Further assessment is recommended under PRE-CERCLA (Explain below).
the last two years (beging the Statewide Standard nitrate concentrations in foot deep onsite well has ample collected from the modestly exceed their rethe retention basin were the ESA and subsequent environment or human I monitoring will be require	ells and the onsite water supply well have been sampled six times over aning January 2010). The nitrite concentrations have never exceeded. Nitrate and ammonia concentrations have been declining and only the MW-2 and MW-3 currently exceed the Statewide Standard. The 100-s never shown an impact above a Statewide Standard. In the one water ne retention basin, nitrate, ammonia, and some metals concentrations espective standards. The ESA does not indicate that any deficiencies in a noted during the engineering evaluation. The information presented in an international monitoring events does not indicate that a significant threat to the nealth currently exists. No further assessment or groundwater and at this time. Please note that, especially as this is an active facility, non may warrant further environmental assessment activities.
Regional EPA Reviewer:	Print Name/Signature Date
State Agency/Tribe:	Print Name/Signature Date 12/15/11



PRE-CERCLIS INITIATION FORM NPL Status = O-NOT A VALID SITE OR INCIDENT

Site Name: <u>United Suppliers</u> , Pacific Junction	Identified By:	☐ Removal ☑ Site Ass ☐ Other Federal Agency	ressment Federal Facilities States Check if: FUD Site
Address: 60597 195 th Street	County Name: Mills		•
	State ID (if one exists):Facility Indicator: Federal	Congressional Dis	
Section: C-(STAR) SPFD Technical Assistance/Re-	Use Branch \(\times \text{L-(EFLR) Enf} \) \[\sqrt{I-(IANE) IA/NE} \]		F-(FFSE) Federal Facilities/Special Emphasis Branch O-(ER&R) Emergency Response & RV Branch
List Site Alias Name (s):			·
Directions to Site: From I 29 west of Pacific Juction, take side of road.	the Iowa Highway 978 exit, pro	ceed east .1 mi. Turn north o	n 195 th Street proceed .4 mi. Arrive at site on east
Site Description: Agricultural fertilizer formulation and s		T (01 11 1	
USGS Quadrant: Pacific Juntion 7.5' USGS Hydr main	o Unit:		ly - for every main category chosen in bold one sub- category must be selected; if more than one
Latitude: 41.0079 Longitude: 95.8018 (Decimal Degree format) (with release of 3.17 see attached rec	quired location data form)	Primary Designation:	selected indicate which is primary): _ rocessing/Maintenance - Applicable sub-categories:
·	Feet Kilometers Meters	CA-Chemicals and CG-Coal gasificati CP-Coke production	allied products on on
Owner Bank/Loan Company Operator County Owned Type District Owned Federally-Owned Former Federally Owned or Operated Former Federally Owned or Operated Government Owned/Contractor Operated Privately Owned/Government Operated Property Defaulted Back to Government Brownfields/Public	Municipality Other Private Mixed Ownership State Owned Trustee, Federal Trustee, State Unknown	FT-Fabrics/textiles EE-Electronic/elec LW-Lumber and w WP-Lumber and w MF-Metal fabricat OR-Oil and gas ref OP-Ordnance prod PR-Plastics and rul PM-Primary metals RA-Radioactive pr	trical equipment ood products/pulp and paper ood products/wood preserving/preserving/treatment on/finishing/coating and allied industries ining uction ober products s/mineral processing
Operational Status: Active Inactive Native American Interest: Yes No	Unknown 🗌 Blank	☐ TS-Trucks/ships/tr ☐ MI-Mining - Applicable ☐ CO-Coal ☐ ME-l	ains/aircraft and related components
Non-NPL Status (Choose one):		WM-Waste Manageme	nt - Applicable sub-categories adfill (municipal and industrial)
Not a Valid Site or Incident: RCRA Lead Not a Valid Si	ite or Incident: NRC Lead te or Incident: State Lead ite or Incident: Tribal Lead	☐ ID-Illegal disposal. ☐ IF-Industrial waste ☐ MD-Mine tailings ☐ ML-Municipal soli	open dump facility (non-generator) disposal OT-Other-Desc.(needed): d waste landfill
Add Action: OU 00 PRE-CERCLIS SCREENING: Planned Complete	:: <u>12/13/2011</u>	OT-Other - Applicable su AG-Agricultural (e. CS-Contaminated	<u> </u>
Actual Complete: Lead code (choose one) F-EPA Fund Financed FF - Federal Facility	•	GP-Ground water plu: MO-Military/Other PS-Product Storage	me site with no identifiable source Ordinance /distribution opment, and testing facility
SCAP Note:		SE-Spill or other or TP-Transportation	ne-time event (e.g., railroad yards, airport, barge docking, site)
Add below Action (if No Further Action): OU_00 Lead: EP PRE-CERCLIS ARCHIVE Actual Complete: SCAP Note: Comments: Site or Action:		RE-Recycling - Applic AT-Automobiles/ti BS-Batteries/scrap	res DT-Drums/tanks WO-Waste/used o metals/secondary smelting/precious metal recovery emical waste (e.g., solvent recovery)
States: Of Sandle	Date: /2//5/// RPM/OSC/	SAM:	Date / /



LOCATION FORM - (Required information highlighted in red)

SITE NAME: United Suppliers, Pacific Junction		EPA ID:		
Latitude: 41.0079	Longitude: <u>95.8018</u> nat)	Measurement Sequence:	(See Comment A)	
Lat/Long Source:	Contractor Dun & Bradstreet EPA Region 7 Geograph Other Federal Agency Regulated Entity State	☐ EPA Headquarters ☐ Epic ☐ Other ☑ Private ☐ SNAP ☐ Tribe ☐ Unknown	☐ (Blank) Designate Lat/Long: ☑ Primar	ry NPL Coordinate
Address Matchii Address Matchii Census Block/T GPS Carrier Phi GPS Code (Pse GPS Code (Pse Interpolation-TM	ng -Nearest Intersection ng - Other fract - 1990 - Centroid ase Static Relative Position eudo Range) Differential eudo Range) Standard Position ap Interpolation -Ms	SS Interpolation -Photo Interpo	Address Matchin Census Block/Gi Census - Other ive Position GPS, with Canad sition GPS Code (Pseudo Ra ified Interpolation-Digital Ma	roup 1990-Centroid dian Active Control System ange) Standard Position (SA-Off) p Source (TIGER) Interpolation - SPOT Public Land Survey-Footing
☐ Atmos. Emission☐ Intake Point☐ Monitoring Point☐ Plant Entrance (☐ Solid Waste Sto	☐ Administrative Building ns Trtmnt Unit ☐ Boundary ☐ Lagoon or Settling Ponce t ☐ NE Corner of Land Parce (General) ☐ Plant Entrance orage Area ☐ Solid Waste Tr g Station ☐ Water Release	Liquid Waste Treatment United NW Corner of Land Parcel (Personnel) Process Unit Area Centernt/Disp. Unit Storage Tank	Facility/Centroid Cent it Loading Area Centroid Other troid Process Unit SW Corner of Land Parcel	Air Release Vent Facility/Station Bldg Entrance Loading Facility Plant Entrance (Freight) SE Corner of Land Parcel Unknown Treatment/Storage Plant
Reference Datum:	☐ NAD27 ⊠ NAD83	Other Unknown	☐ WGS84	
Accuracy Meters	+/-: 🔀 Accui	racy Unknown Coll	lection Date: <u>12/13/2011</u>	
Verification Method:	Ground Truth Conducted Point in Polygon (Zip) Proximity to Polygon Centure Verified Relative to Map For Verified Relative to Map For Proximity to Polygon Centure	roid(Other) Proximity to eatures (1:100K/Tiger) Verified Relateatures (Other) Verified, Unkn	Alternative Facility Coordinate) Polygon Centroid (Zip Code) tive to Map Features (1:24K) nown Method	☐ Blank ☑ Not Verified .
Point/ Line/ Area:	☐ AREA ☐ LINE ☐	POINT REGION ROUTE	(BLANK)	
Source Map Scale 1.62,500 OTHER	e:			1:50,000 E ⊠ UNKNOWN
COMMENTS:	-			
Signatures:				
RPM/OSC:		Date:// BRANCH C	HIEF:	Date://
	mber to indicate the order in wl ure is polygonal or linear 3 num	hich points on a line or area are connecte eric.	ed. For an area, the maximum po	int is connected to the first.