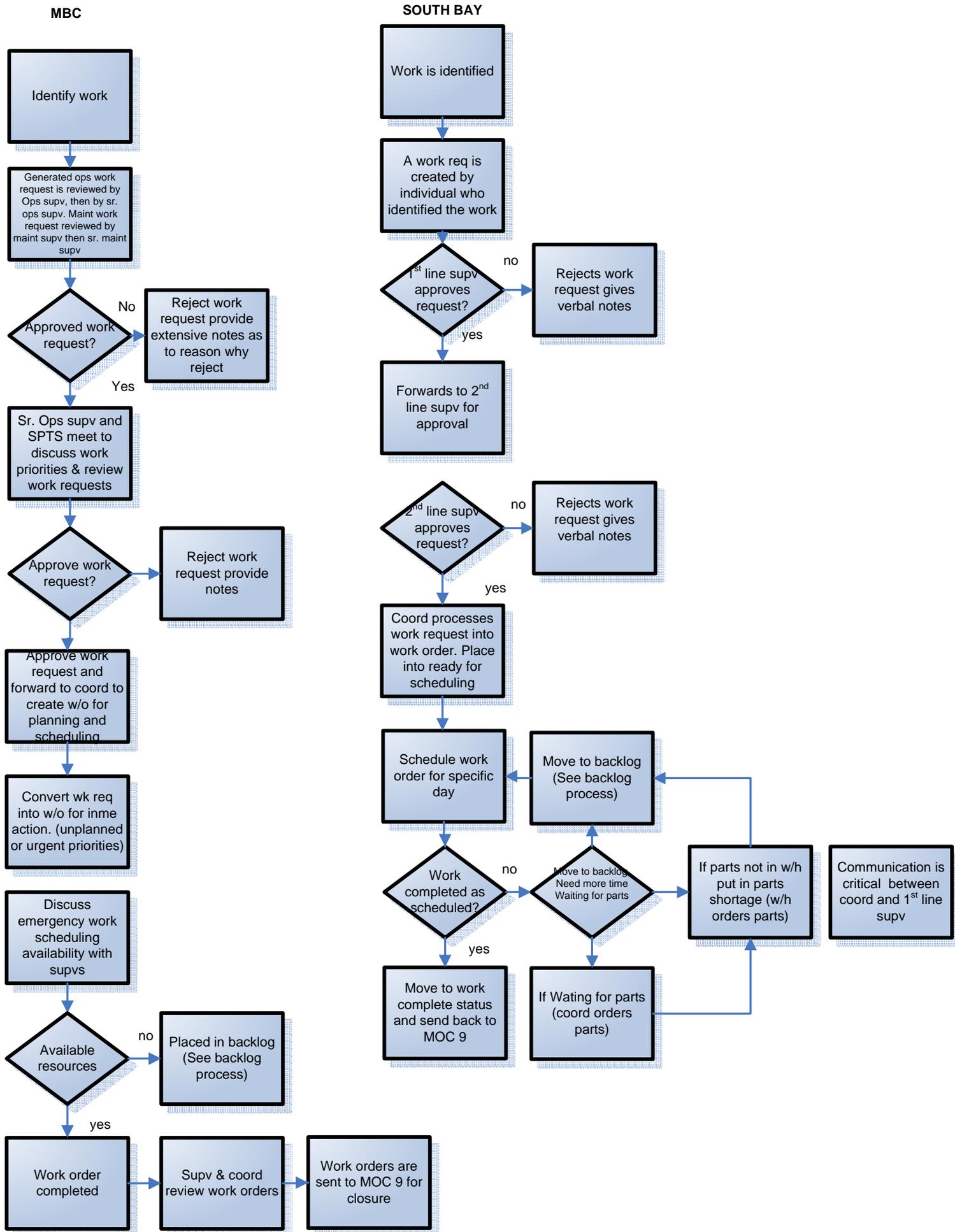


**DRAFT
O & M EMPAC
CORRECTIVE MAINTENANCE**



DRAFT
O & M EMPAC
CORRECTIVE MAINTENANCE

CFS

Work is identified



Reviews by CSF Sr.



Identify CSF crew



Schedule



Contact facility



Complete work



Enter notes



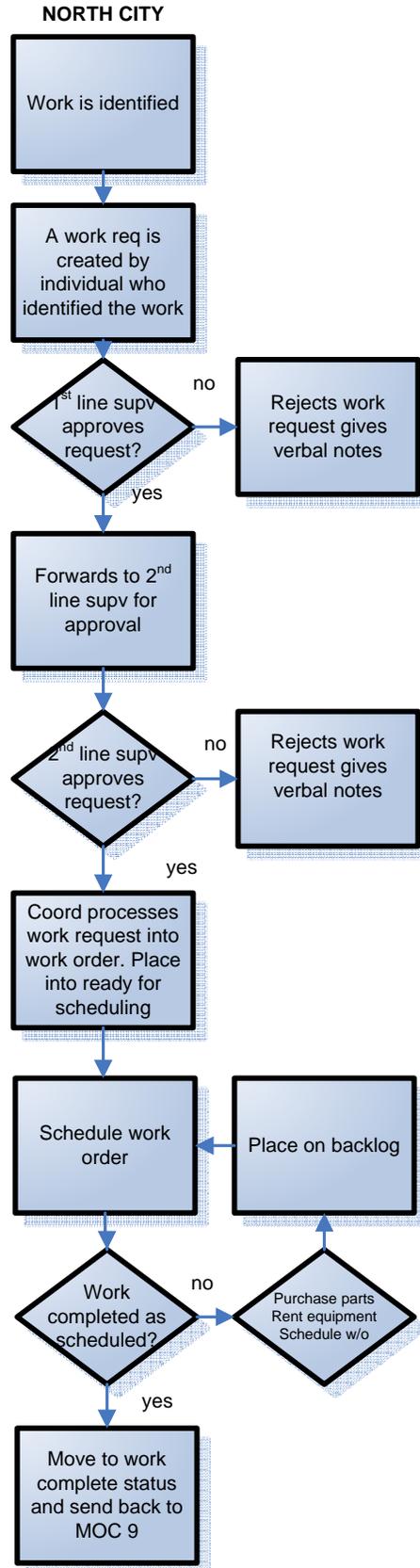
Mail to Sr. to close



Email MOC 9

Communication is critical between coord and 1st line supv

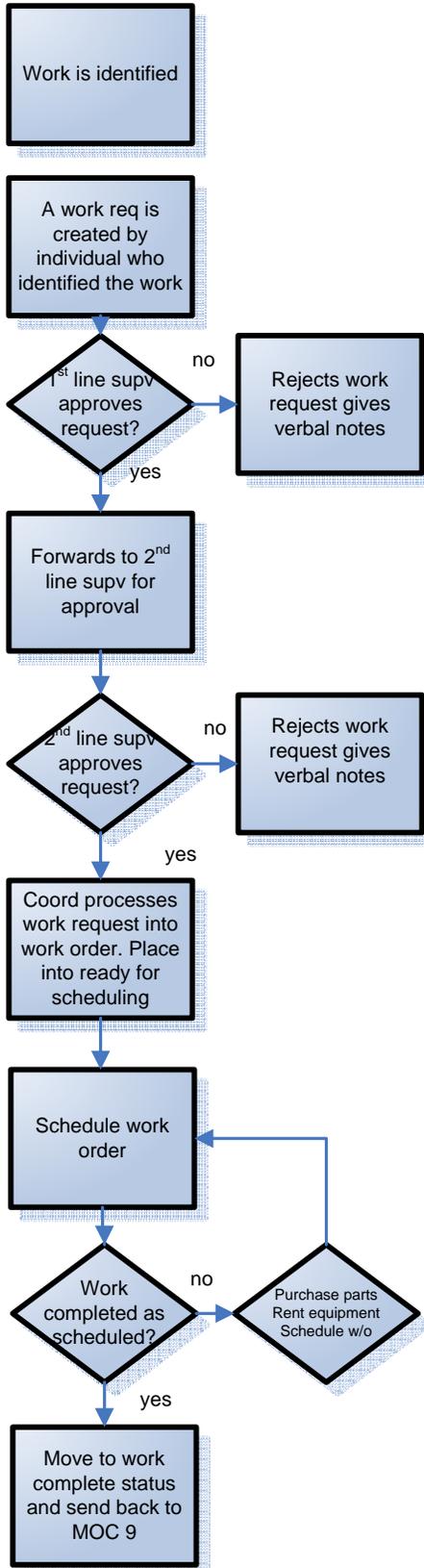
DRAFT
O & M EMPAC
CORRECTIVE MAINTENANCE



Communication is critical between coord and 1st line supv

DRAFT
O & M EMPAC
CORRECTIVE MAINTENANCE

POINT LOMA

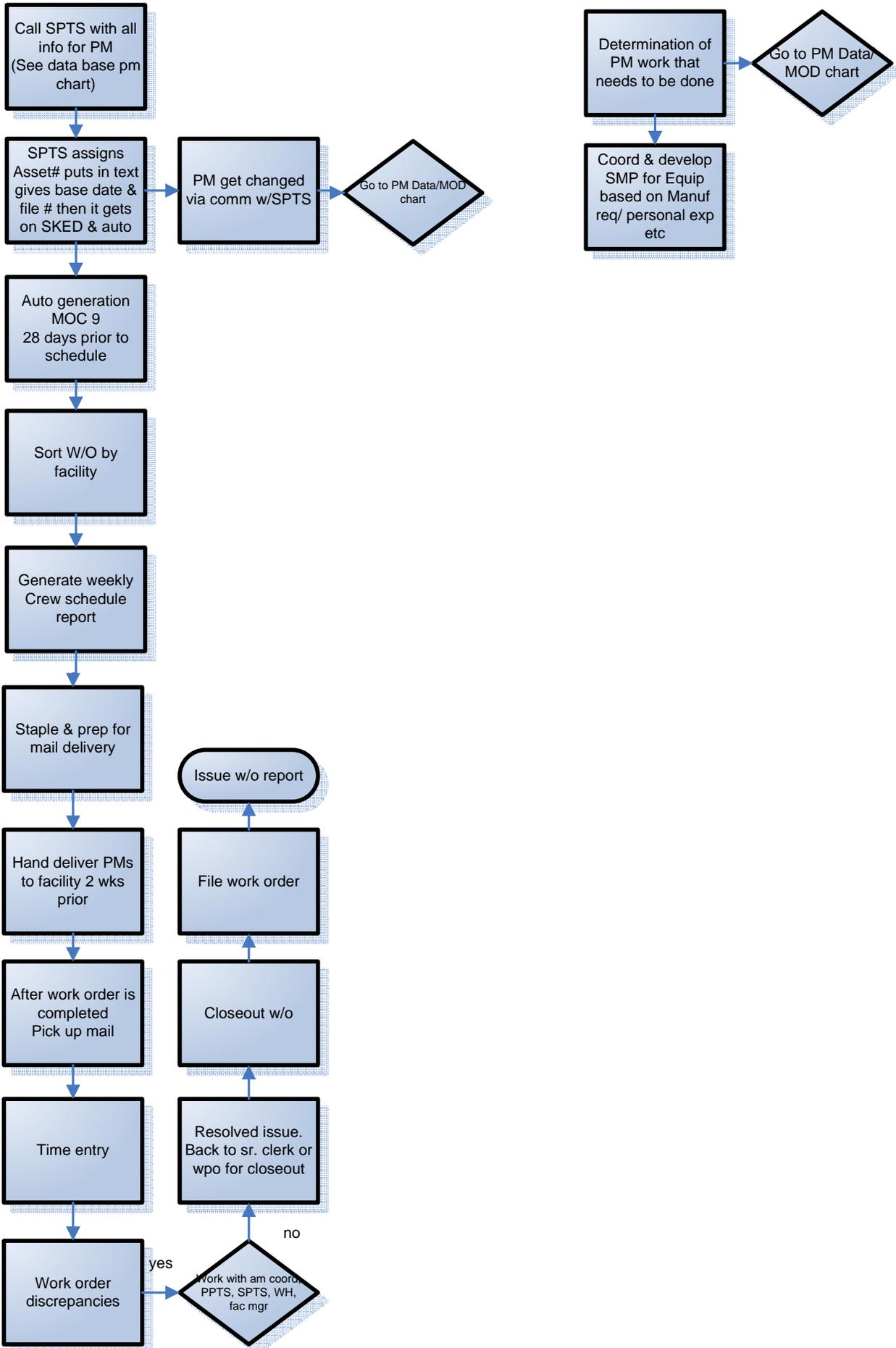


Communication is critical between coord and 1st line supv

**DRAFT
O & M EMPAC
Preventive Maintenance**

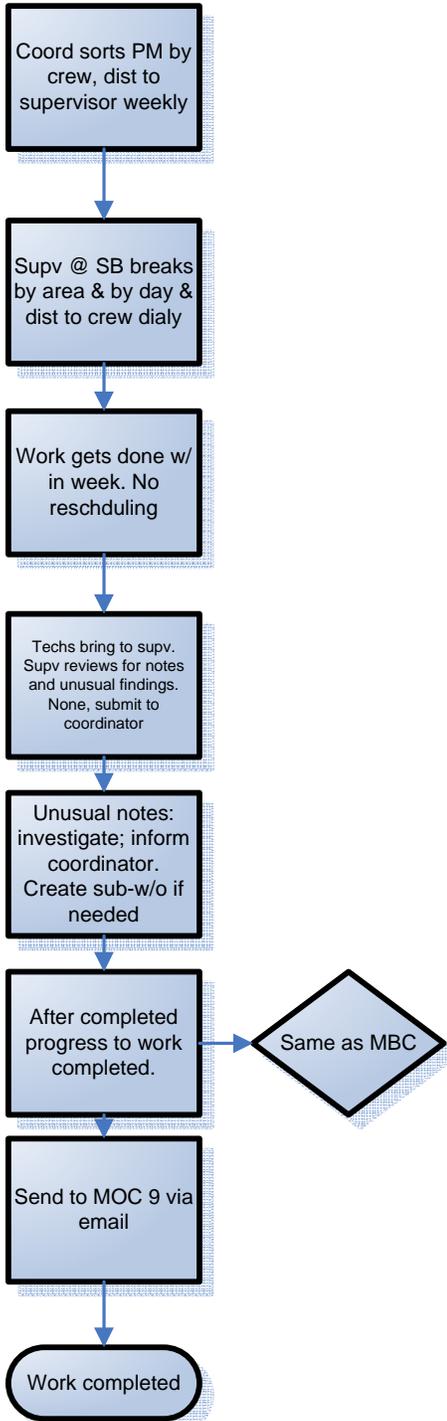
MOC 9

FACILITIES

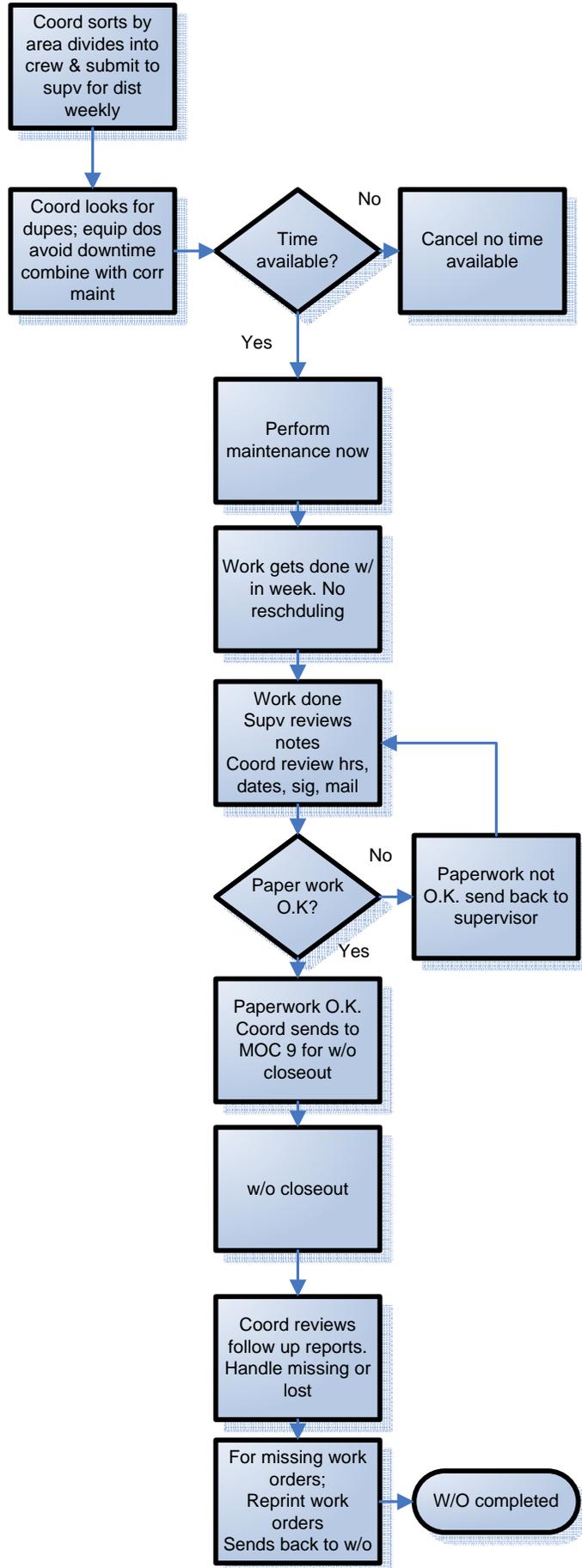


**DRAFT
O & M EMPAC
Preventive Maintenance**

SOUTH BAY

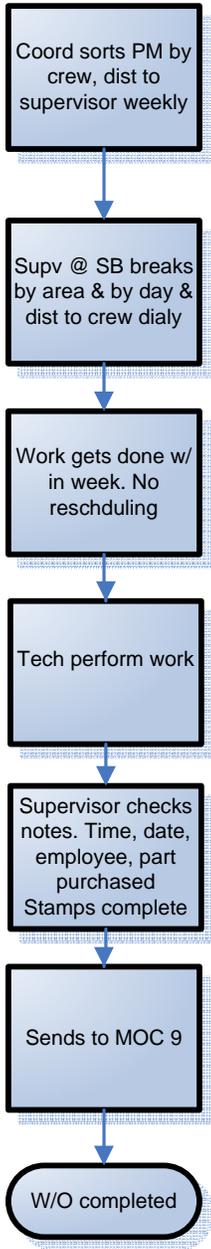


MBC

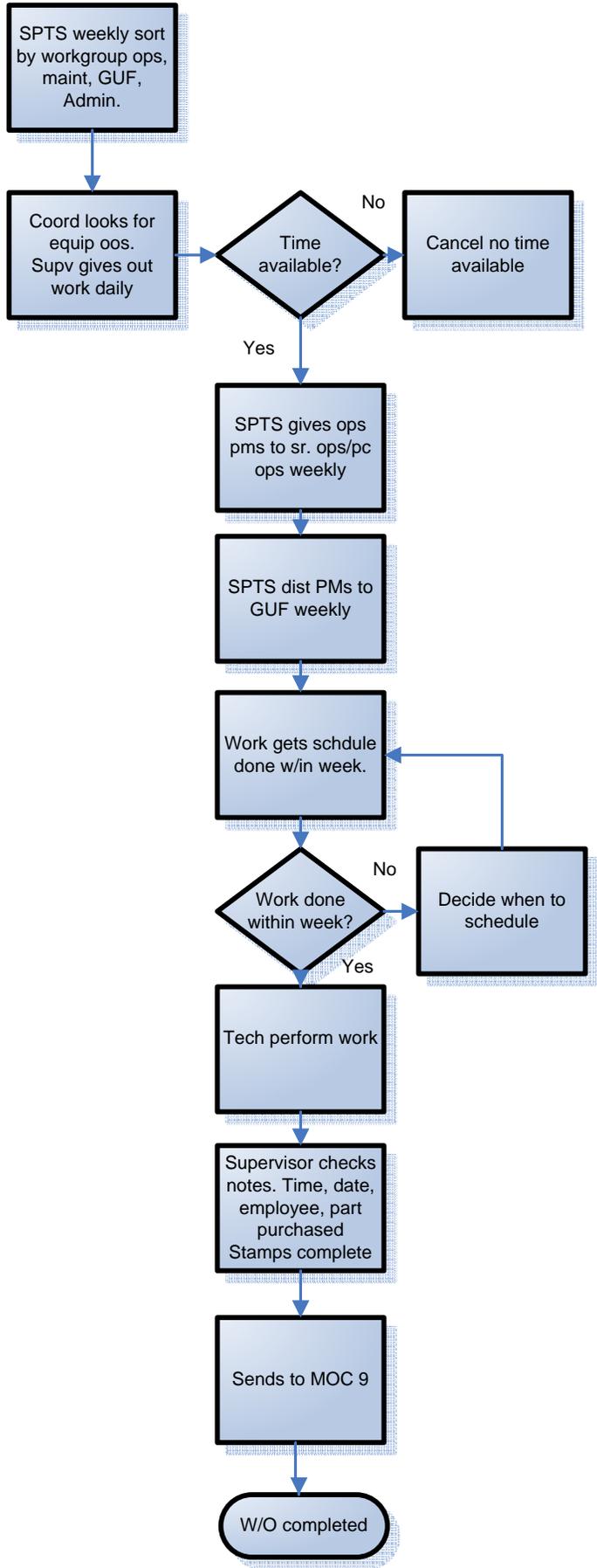


**DRAFT
O & M EMPAC
Preventive Maintenance**

NORTH CITY



POINT LOMA



DRAFT

O & M Large Scale Operations

THINGS TO TRIGGER

THINGS TO TRIGGER

1.) Peak Flow

AD HOC OUTAGE

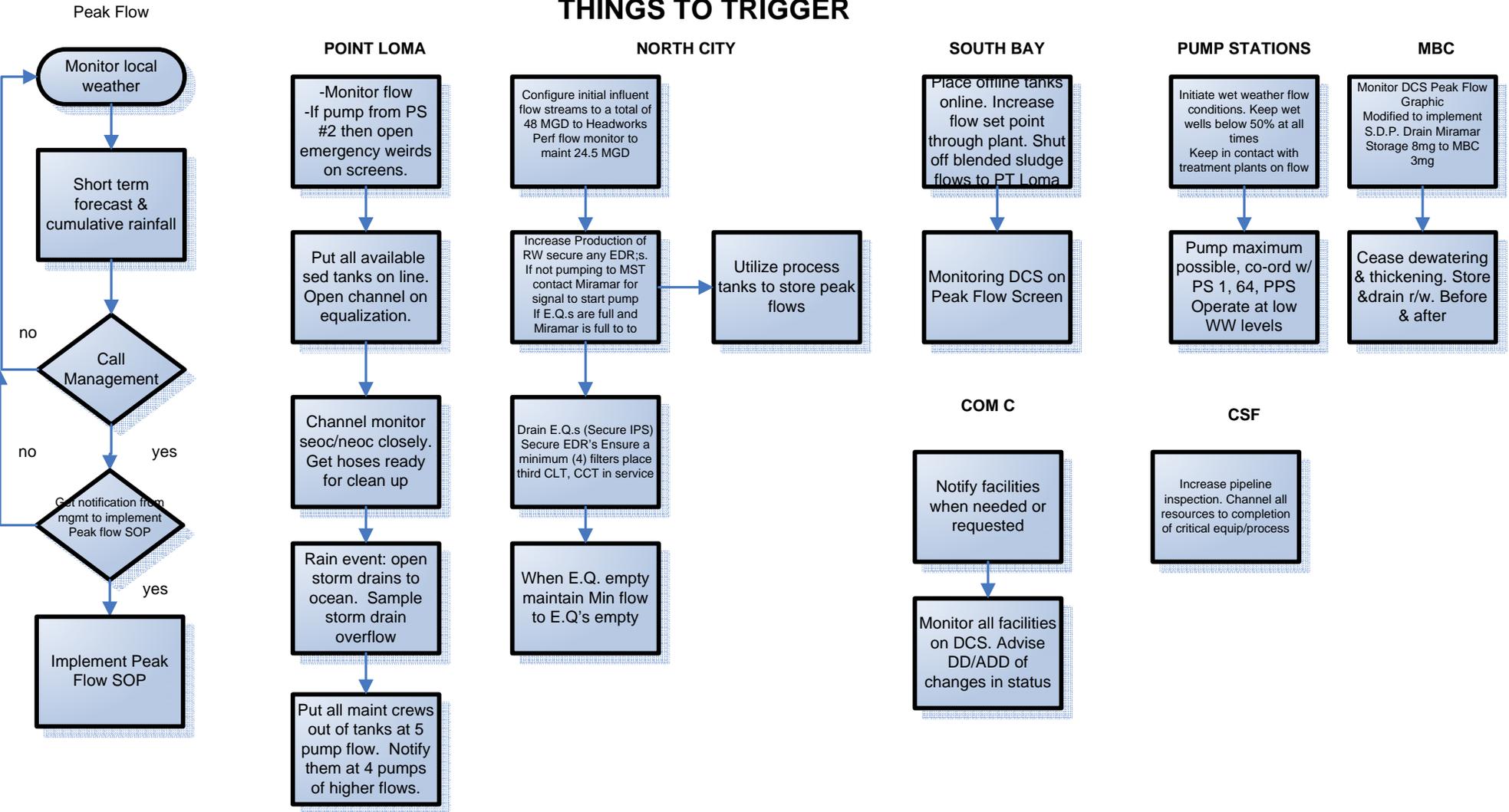
- 2.) No Flow for PS Maint
- 3.) Equipment Breakdown
- 4.) Power outage
- 5.) CIP
- 6.) Pipeline failure
- 7.) Downstream outage
- 8.) Fire alarms
- 9.) National Threat Level
- 10.) Process updates
- 11.) MOC Evaluations/Emerg
- 12.) Permit Violations
- *13.) Natural Disasters/Terrorists
*(Activate DOC)
- 14.) Customer Delivery



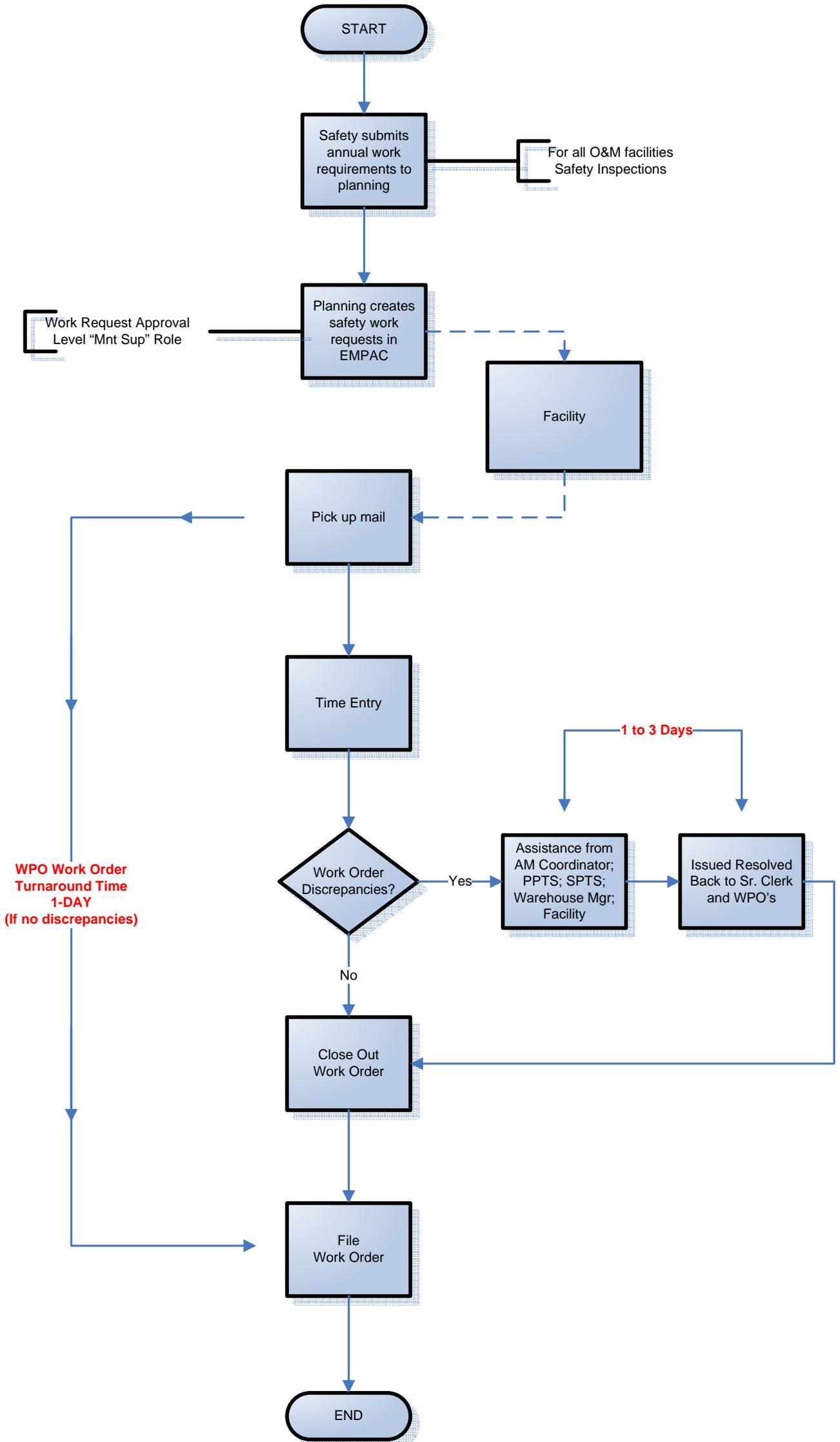
DRAFT

O & M Large Scale Operations

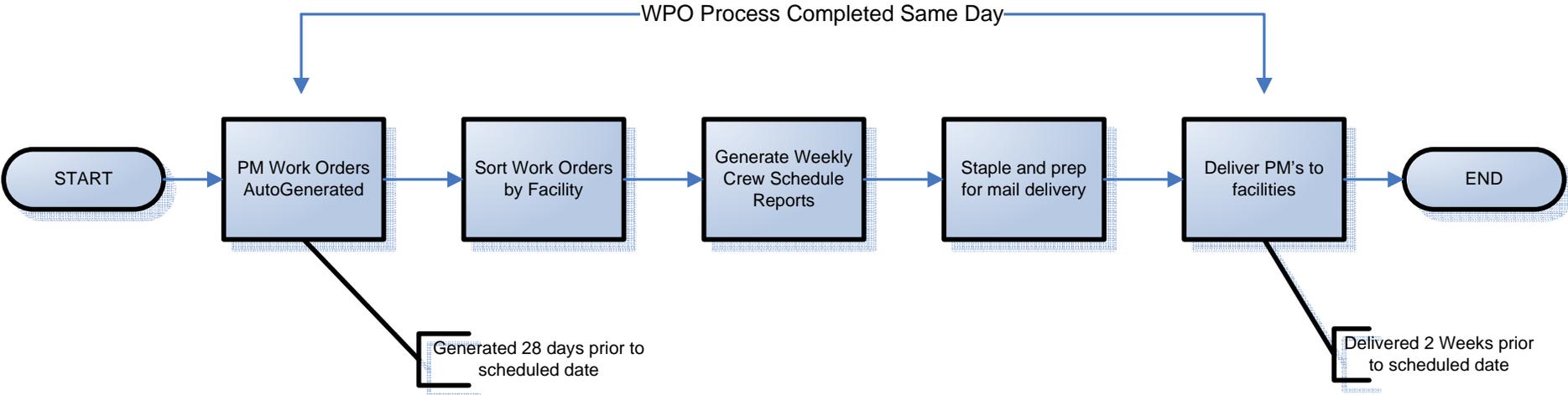
THINGS TO TRIGGER



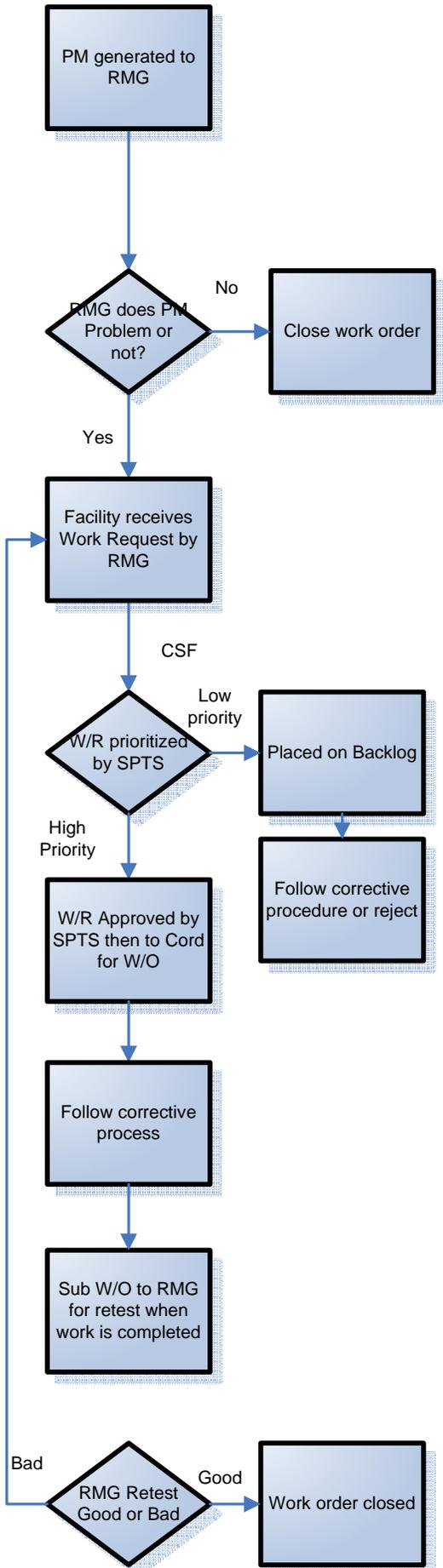
DRAFT IDENTIFY WORK



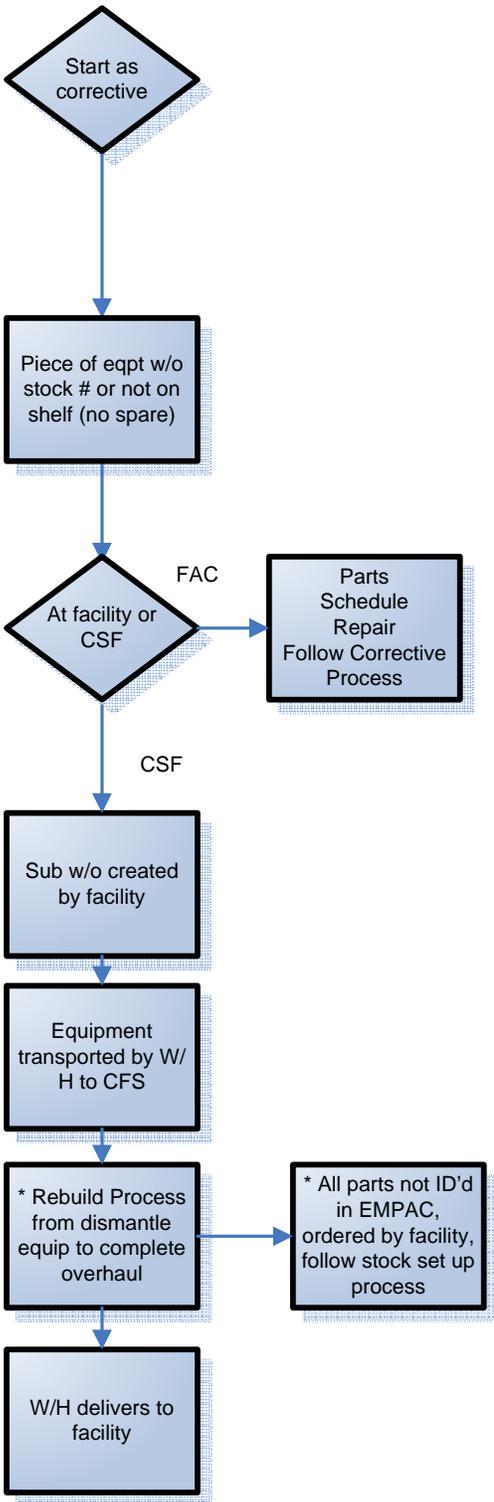
DRAFT
GENERATE PREVENTIVE MAINTENANCE (PM) WORK ORDERS



DRAFT
O & M EMPAC
PREDICTIVE (RMG)



DRAFT
O & M EMPAC
OVERHAULS



DRAFT

O & M Process Monitoring

Operator on board does DCS rounds at all facilities
Treat fac have DCS round sheets

PL: Lab takes samples

PS: Delivers ferric/ferrous samples to PL

NC, SB, MBC takes samples everyday

PS takes RAG samples 3x a week

NC Daily Meter Calibration/CI turbidity, Do conductivity

MBC Cake dryness daily

PL: Turbidity Calibrate meter

SB: Transmittals & Turbidity, Meter within range daily

Remotely operated facility shift pass down from COMC

Non remote operation facilities does shift pass down from night shift

Staff on day shift verifies pass down meeting (non-remote)

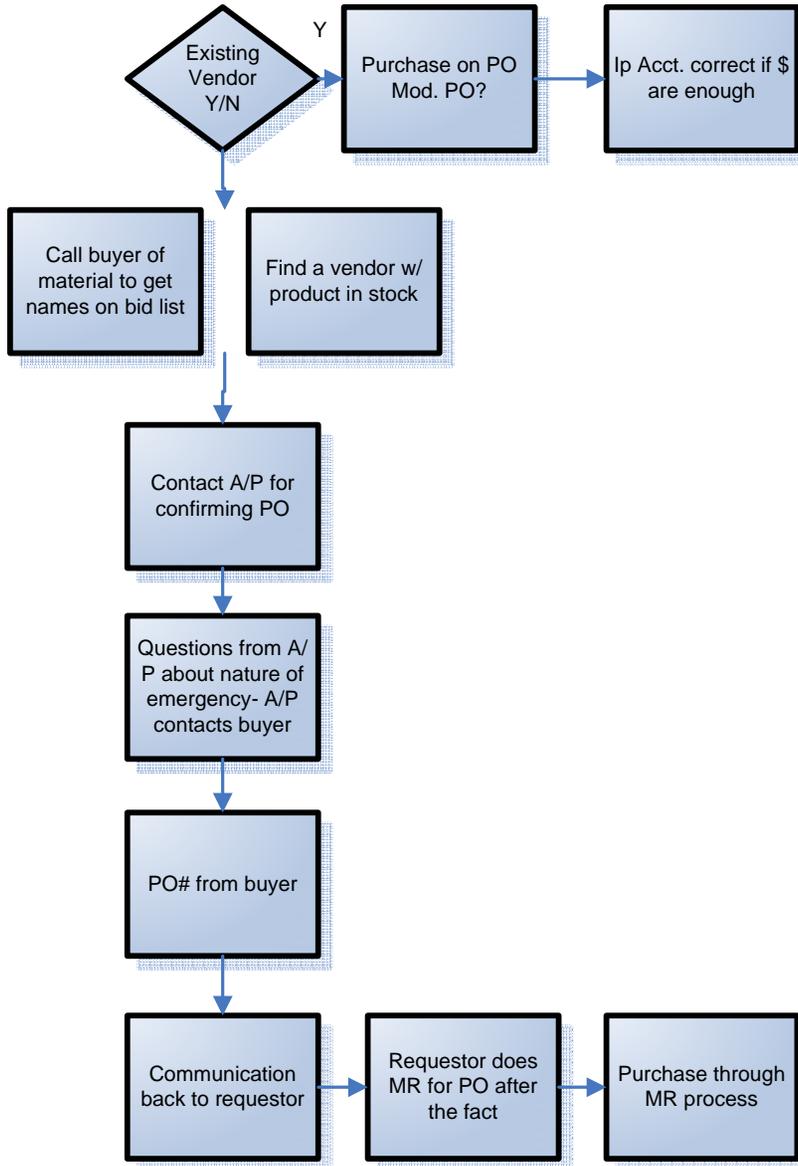
POINT LOMA	PUMP STATIONS	MBC	NORTH CITY	SOUTH BAY	COM C
Morning meeting w/staff to discuss daily work	Pump station supvs contacted by COMC w/ passdown info	Morning meeting w/staff to discuss daily work	Morning meeting w/staff to discuss daily work	Morning meeting w/staff to discuss daily work	Day: Monitor SCADA system, PQPs, GAPS, ORPS, SB, PL, MBC, fire alarms as needed for remove oper of facility
Operator at the control board all day long	Continuous monitoring plant rounds every 2 hrs	Operator at the control board all day long	Plant rounds approx every 2 hrs	Operator at the control board all day long	Verbal passdown w/in COMC staff verbal passdown w/ WWC,PS,facilities
Day shift + possible overlap w/pass down	Oper leaves BD to perform duties in plant as needed; WW level, pumps screens can be monitored in plant. Audio alarms	Every 2 hrs centrifuge & silo rounds physically in plant. Every 6 hrs entire plant rounds Continuous DCS process	Supv does periodic DCS rounds then goes into facility and uses remote wkstns and does other work	Plant rounds am/pm, people in area all day	Monitors flow meter alarms for WWC on off hours
	Passdown verbally+/- in night order book	Day shift pass down to night shift. Night shift on monitor or shutdown mode; unusual events	Passdown internally+/- to come verbally	Ops go to assigned area to do plant round	Controls SB influent PS & filling of EQ tanks
				Passdown internally+/- to come verbally	CCTV Security Call outs as needed follow written facility guidelines
			On-going		
			Process information captured in EDORS continuously		All facilities unusual events captured in email

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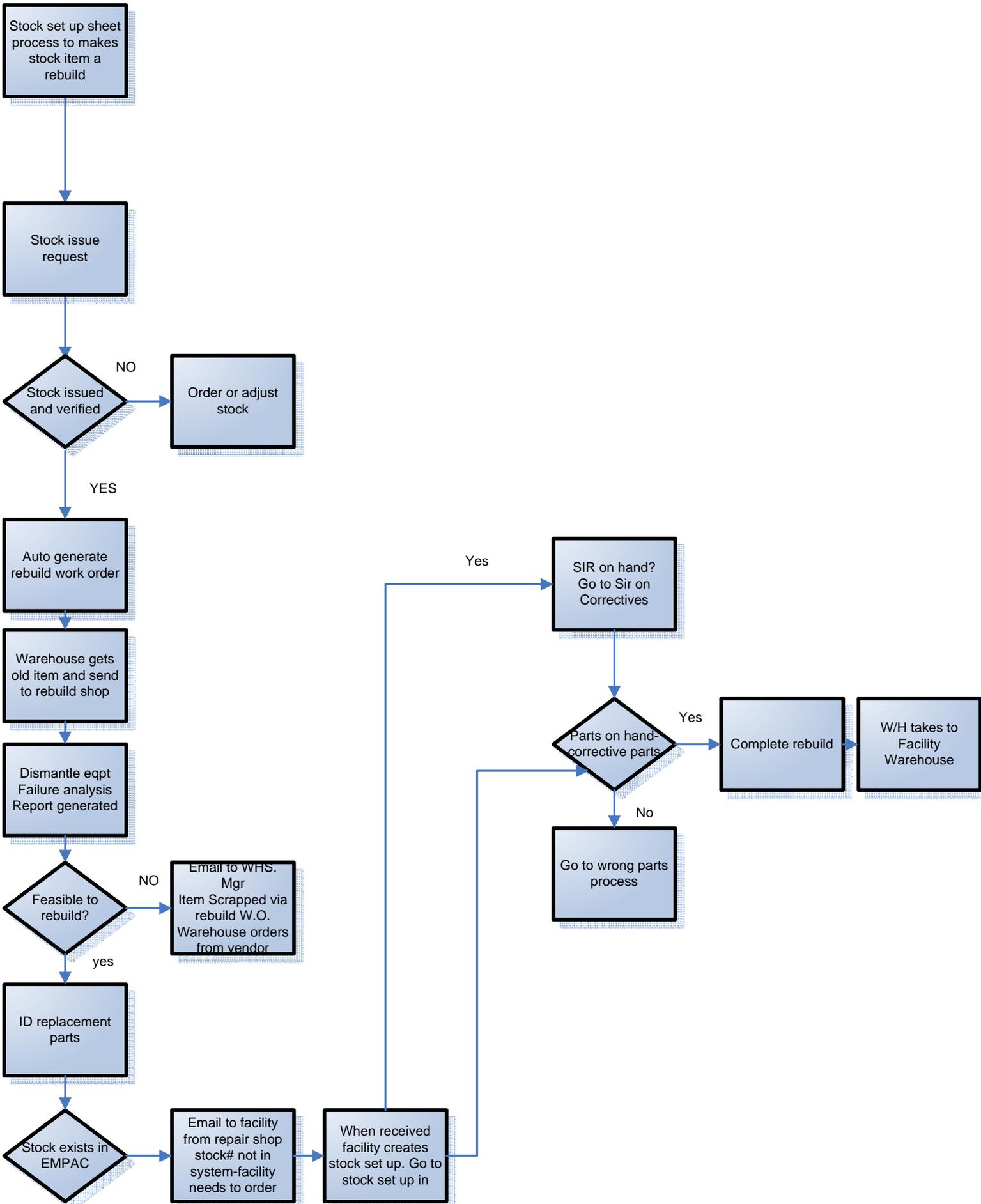
O & M Procurement Contracts

Reasons to Procure

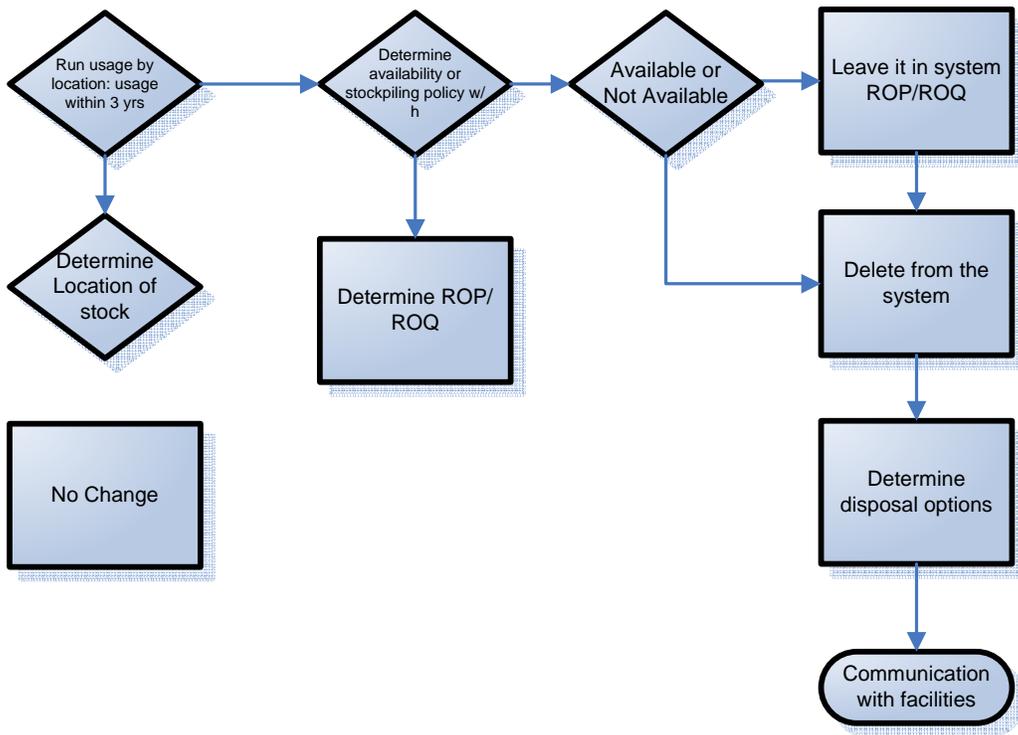
Reasons to Procure
Electronic Reorder in
EMPAC
Emergency Event
Routine Maint/OPS
ID Need
Contract Change Order
Eqpt/Process Modification



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REBUILDS



DRAFT
O & M EMPAC
Setting/Deleting Items in W/H



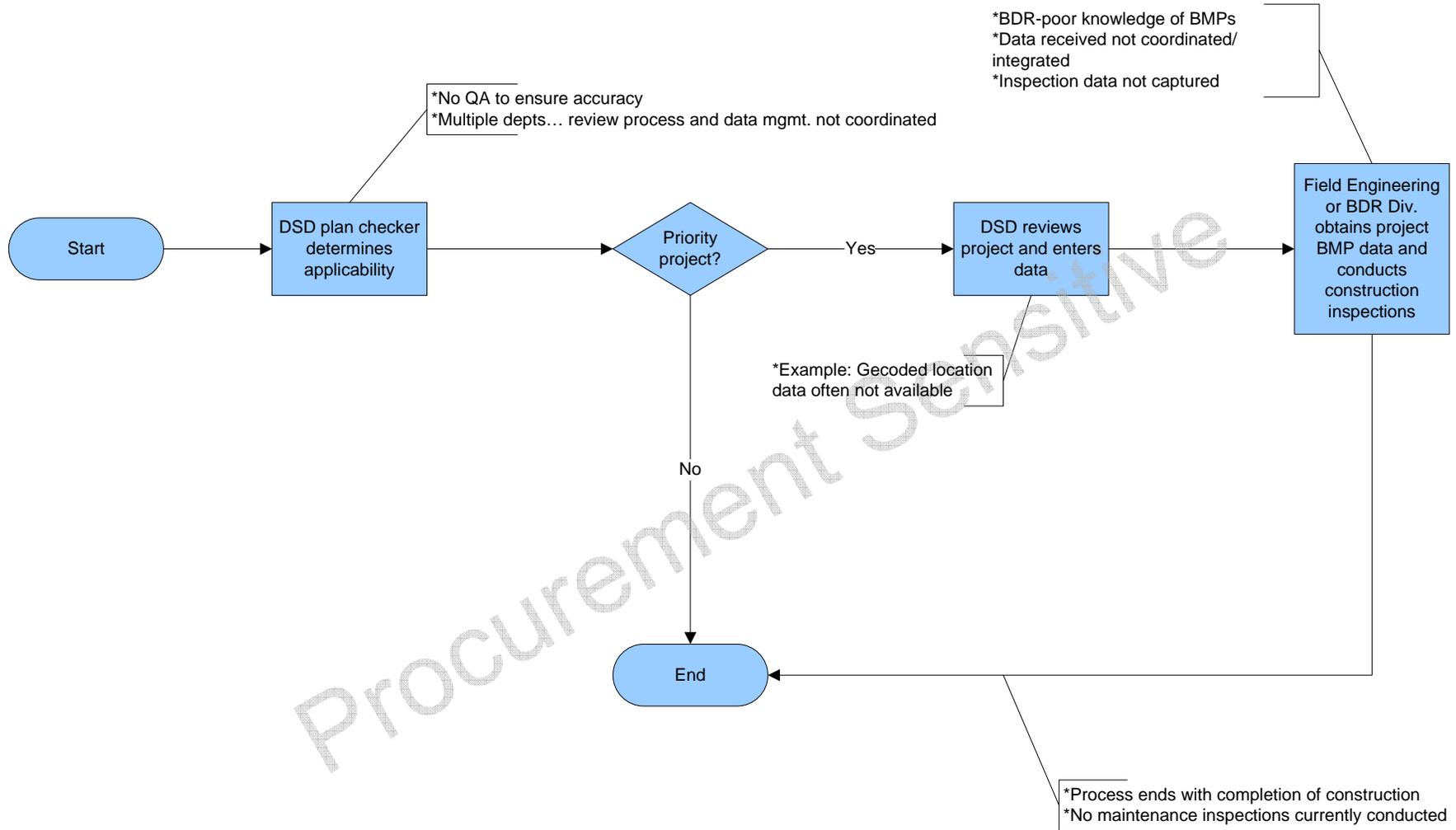
DRAFT

O & M Technical Training

PT/I&C techs/Electricians/PPCE/Maint Coordinators/Supervisory staff

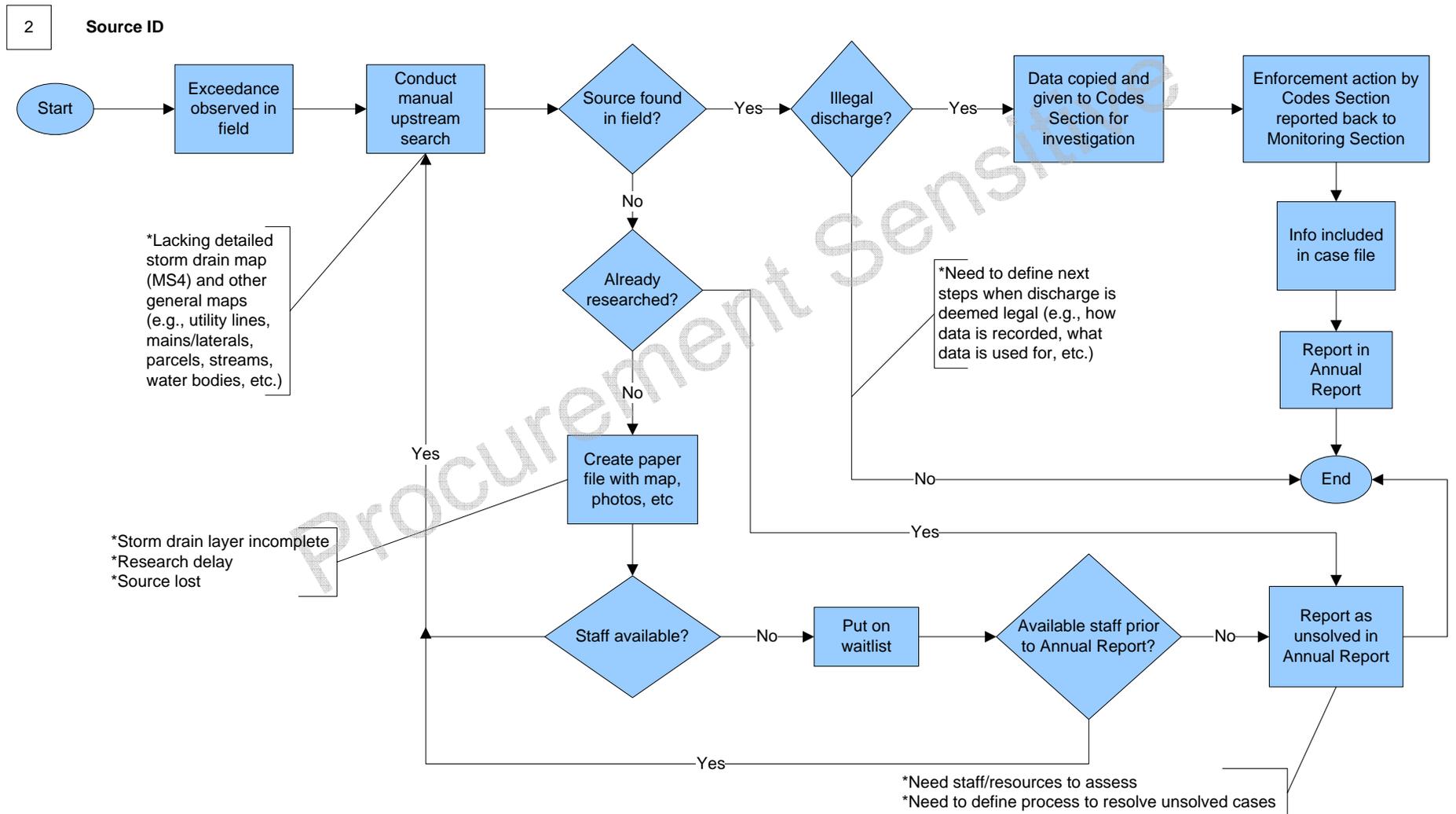
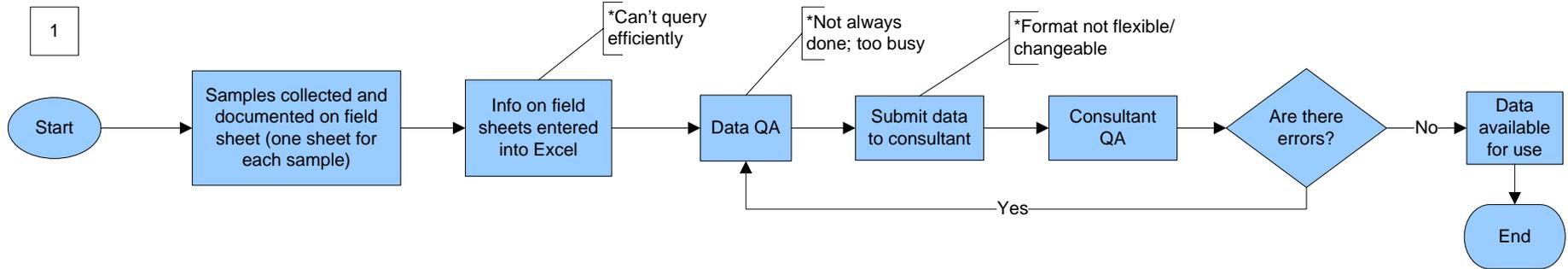
Starting Point
Directed by
Management
Conduct survey of
personnel
Request from
employees
Review from CPARS
Review Work Orders
repetition
Critical process, new
equipment
New Equipment vendor
training
New employee training-
Transfer, promotion,
OIT
Refresher training
NOV follow up training
Needs assessment
training need
discovered
Change in process
operations
Change in standard
operating procedure
Finding in Internal audit
Finding in External audit
Regulatory finding
Cross over trng

	OPERATIONS	MECHANICAL	I&C ELECTRICAL	COMPUTER APPS	CERT TRAINING	
	Mentor Student Study Guide Library	Vendor Training for new Eqpt/new System	Same as Mechanical	PLC Training Done by pitsode vemdprs	Operations	Maintenance
OIT always under supervision of operator until Grade II Cert	Check list by area Oper/Sup/ Sr.Superv.	Outside training requested by employee/approval by Division mgmnt.	Check list for PPCE	EDORS On line help OJY EDORS working Group Training	Ken Kerri Work books paid by Dept.	CWEA Study Guides/apply to take test
Career Advancement to Operator	After list have been checked off- can do rounds or be in charge of area	Mentor/learn as you go	NFPA70E Arcflash Protection/other regs.	DCS Training WDPF on line Ovation on line Formalized trng. Not given often Warren Brown	WWT-paid by Dept.	ISA Cert. PGM rarely used
	Check in all areas	Manuals vendors trade assoc. other facilities		CMMS/EMPAC Training	Community colleges Tuition reimbursement	CWEA In-house math class 2X/ year
	Train on specific strategies in an area	Resistance to new ideas & techniques			Employee has to take & pass State test-2 yrs. To get Grade II	CWEA Take & pass test for cert.
	Competent in all plant areas					CWEA Req. 'D every 2 years to maintain cert.
		Performance evaluations applies to all training				CWEA Local & State training



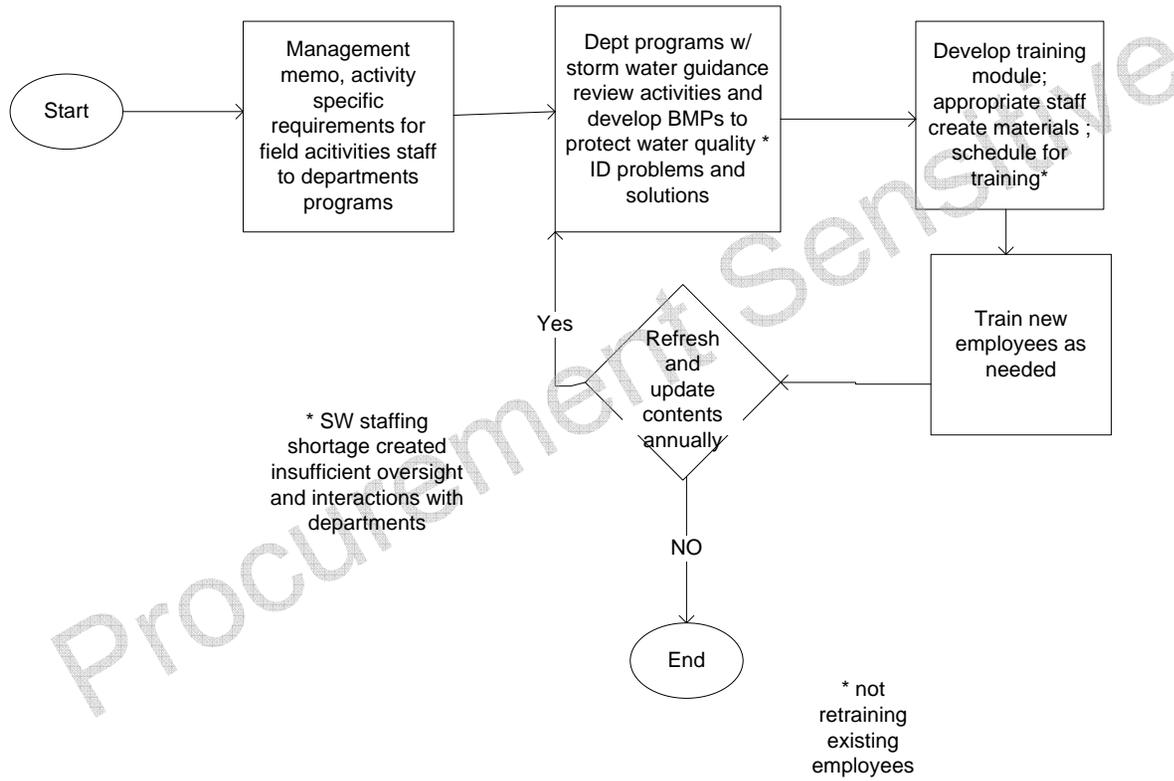
Ability to Analyze Water Quality Data to Track Water Pollution As-Is

Monday, October 23, 2006



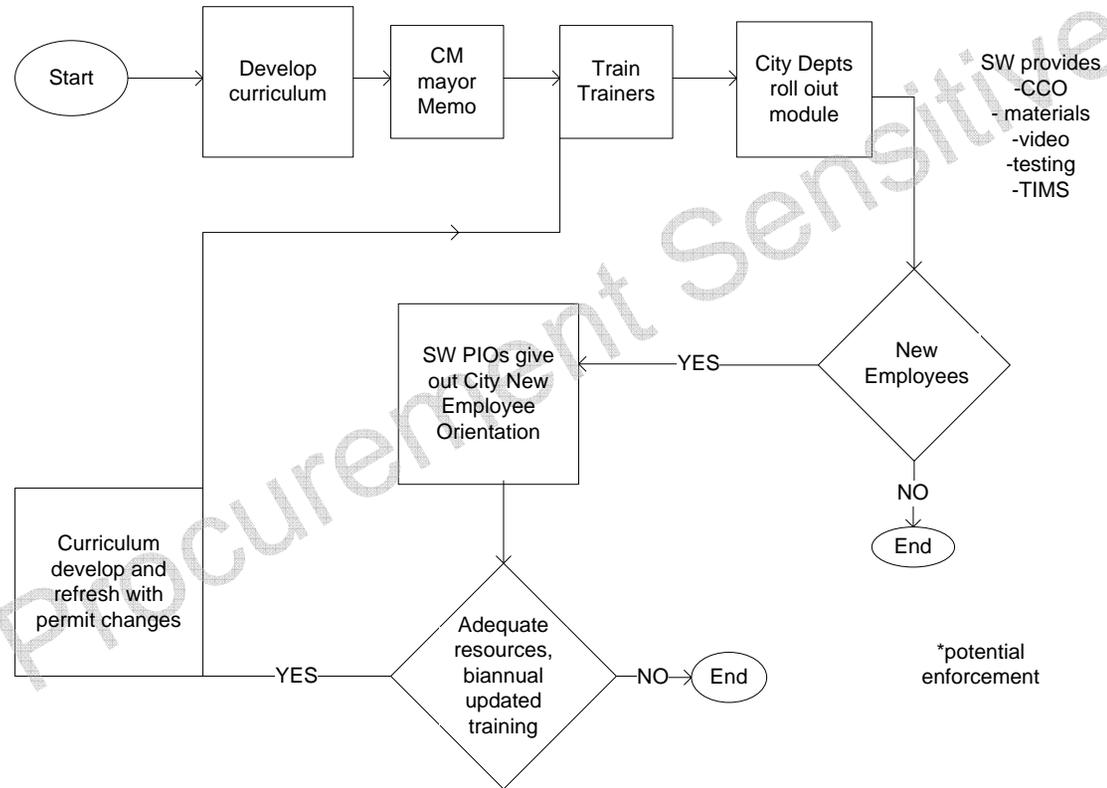
SWPP Activity Specific Training As-Is

Monday, October 23, 2006



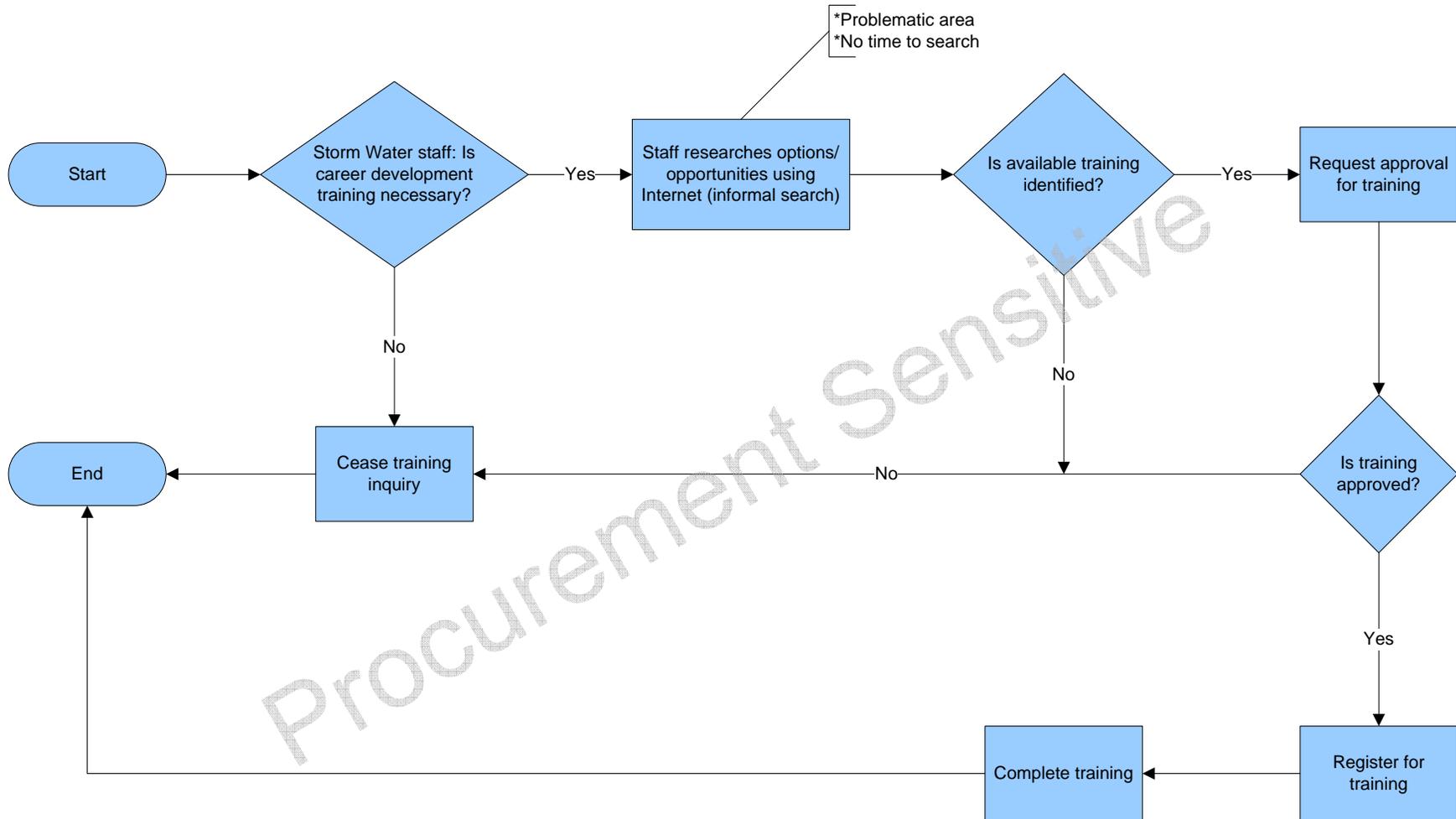
SWPP As is Employee Training

Monday, October 23, 2006



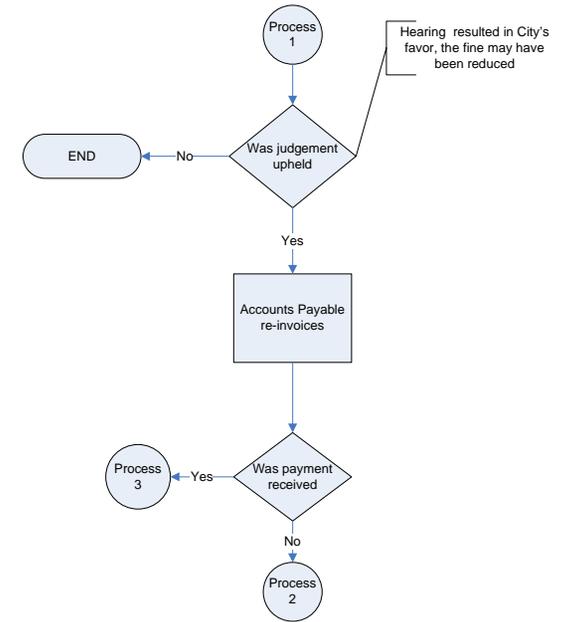
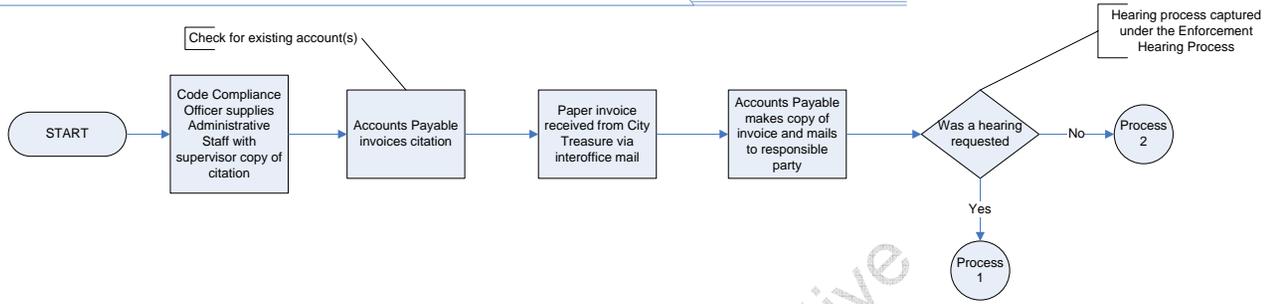
Career Development Training As-Is

Monday, October 23, 2006

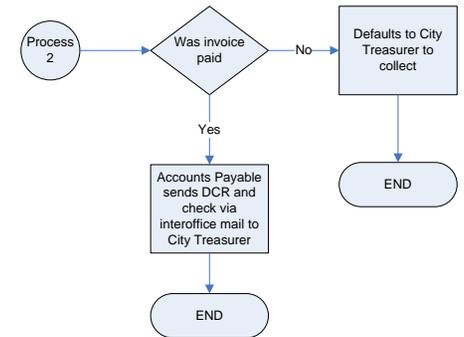
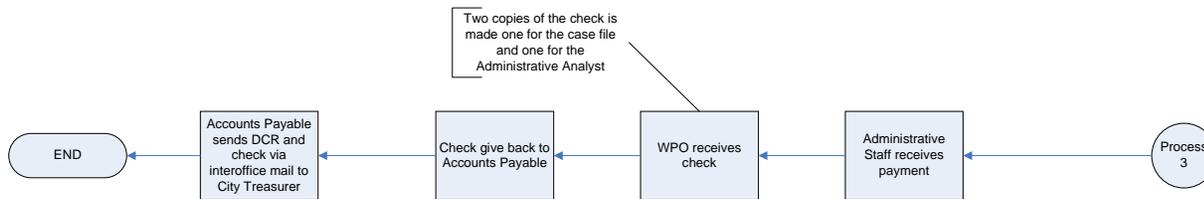
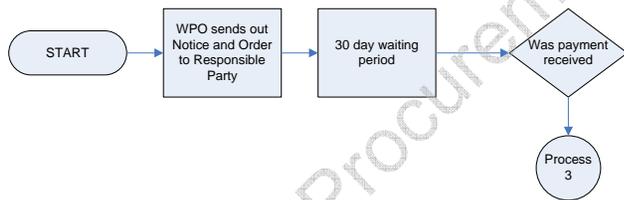


ADMINISTRATION CITATION INVOICING PROCESS

Monday, October 23, 2006

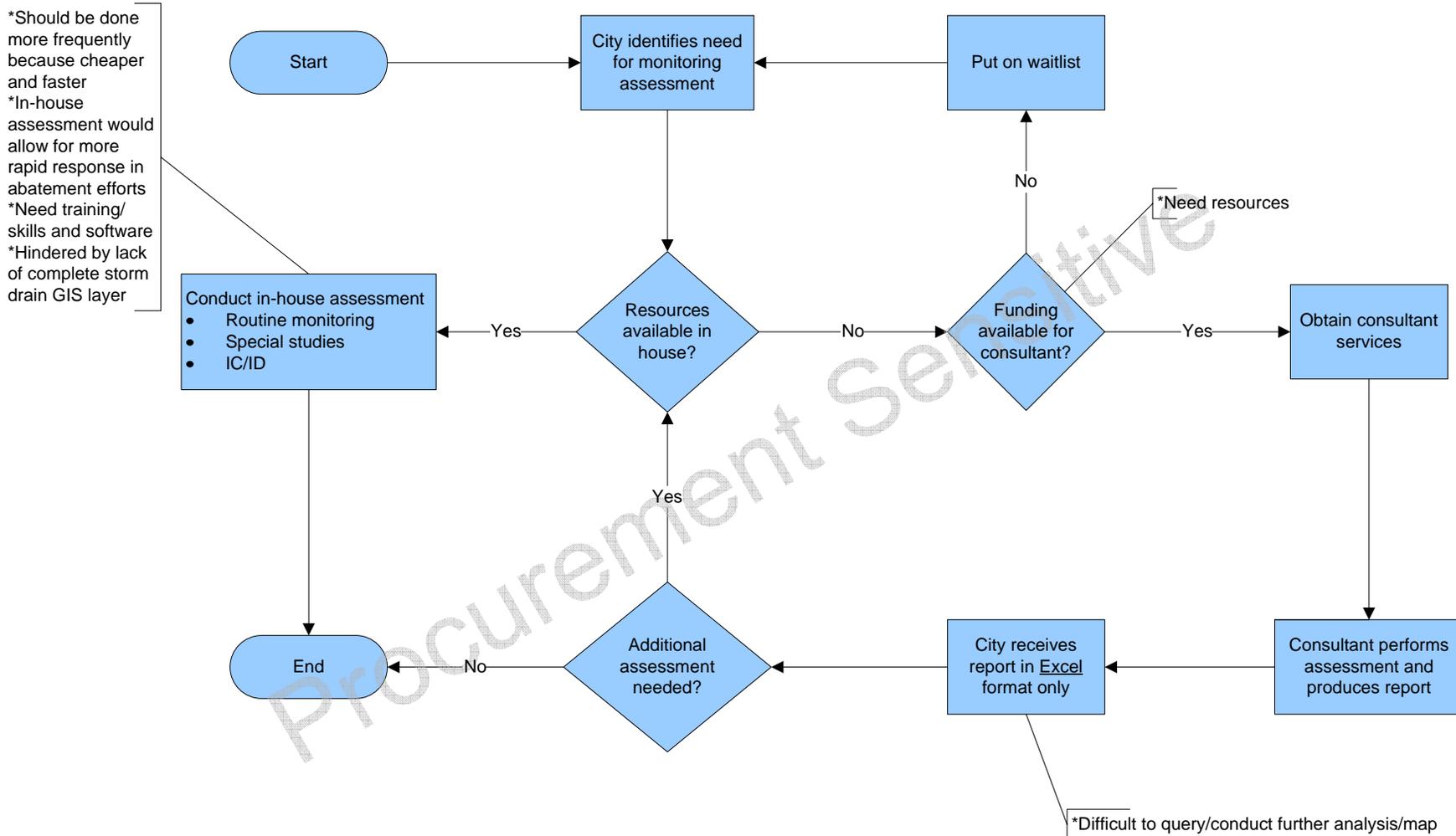


CIVIL PENALTY INVOICING AND DCR PROCESS



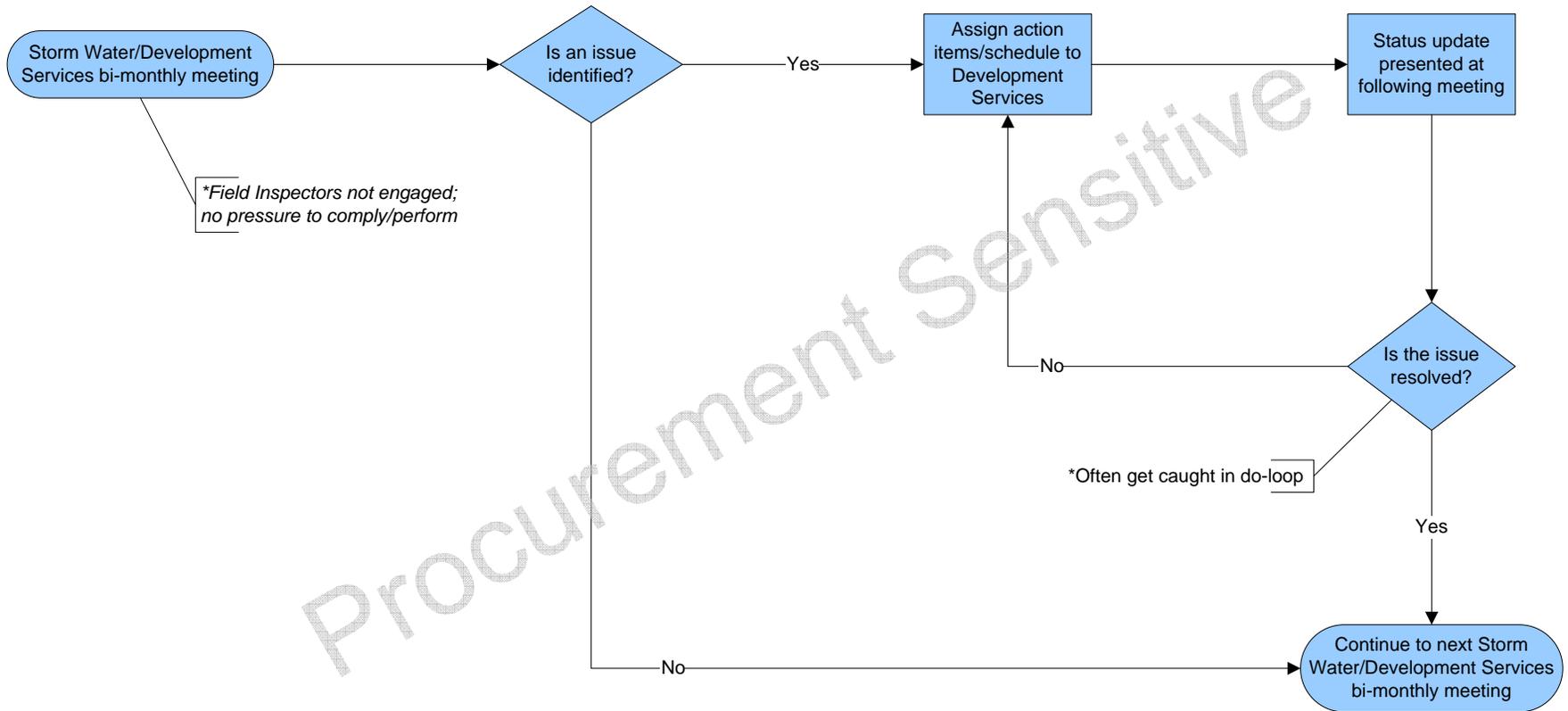
Assessment of Monitoring Data for Special Projects As-Is

Monday, October 23, 2006



Storm Water and Development Services Coordination As-Is

Monday, October 23, 2006



Enforcement PIR Reporting As-Is

Monday, October 23, 2006

