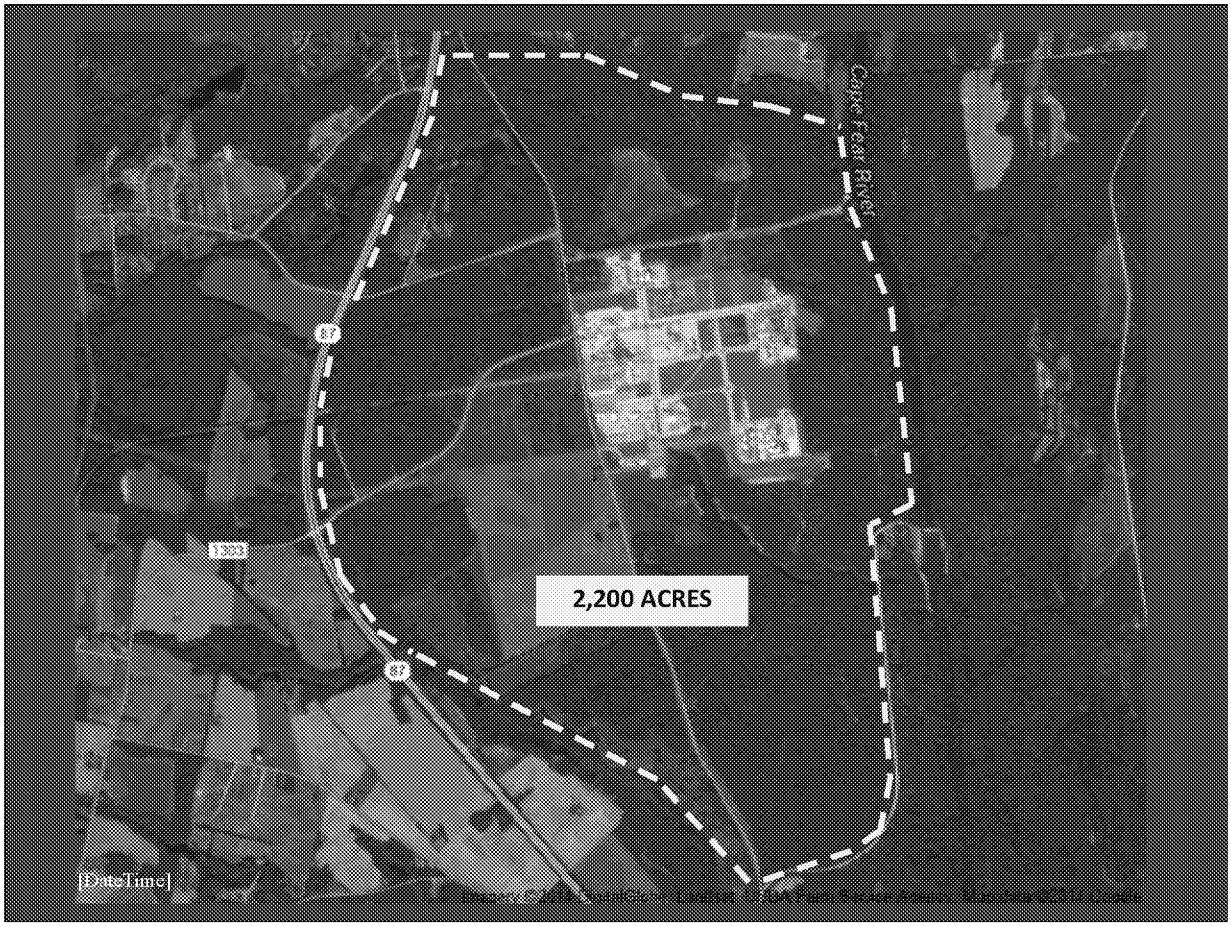
GenX

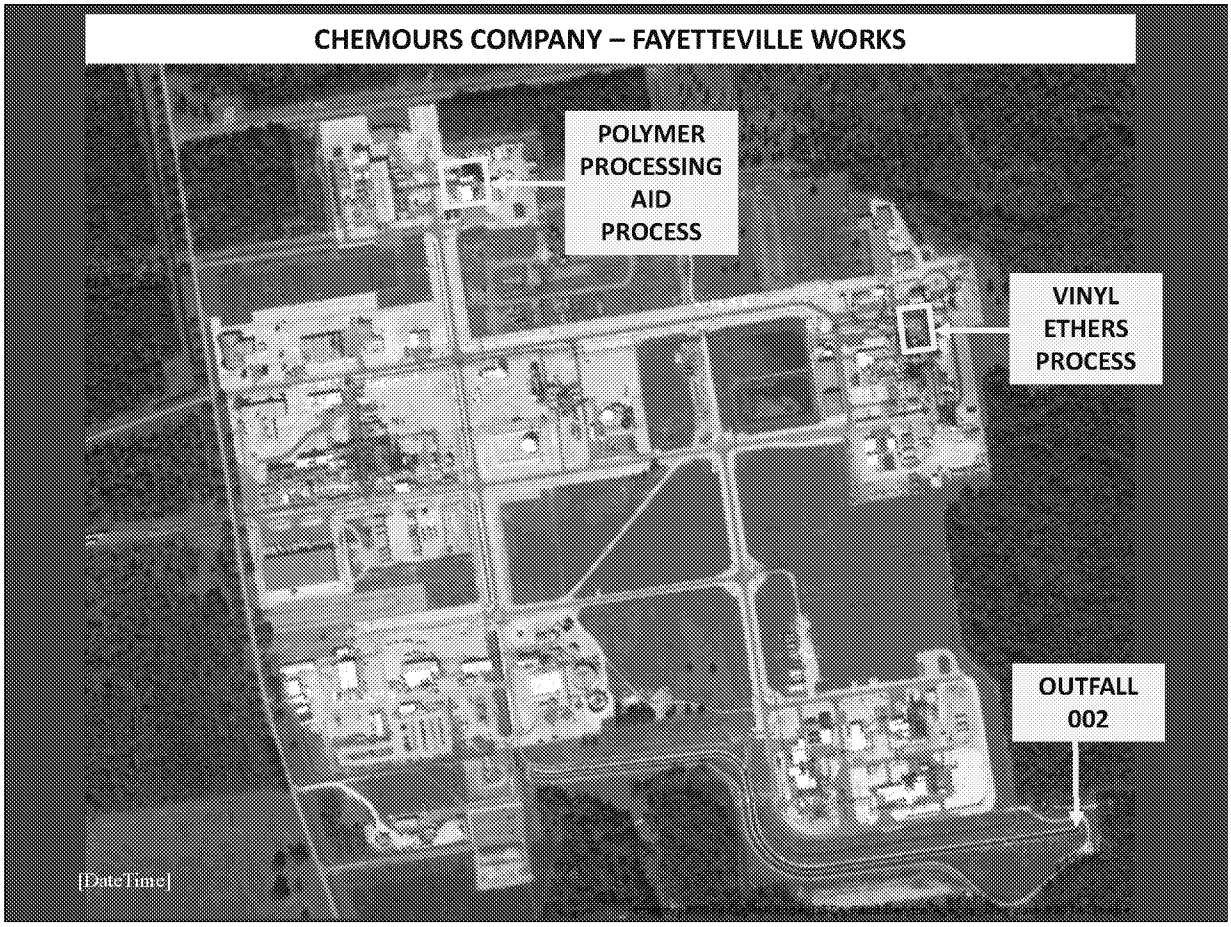
Michael Johnson
Chemours Company
Fayetteville Works

[DateTime]

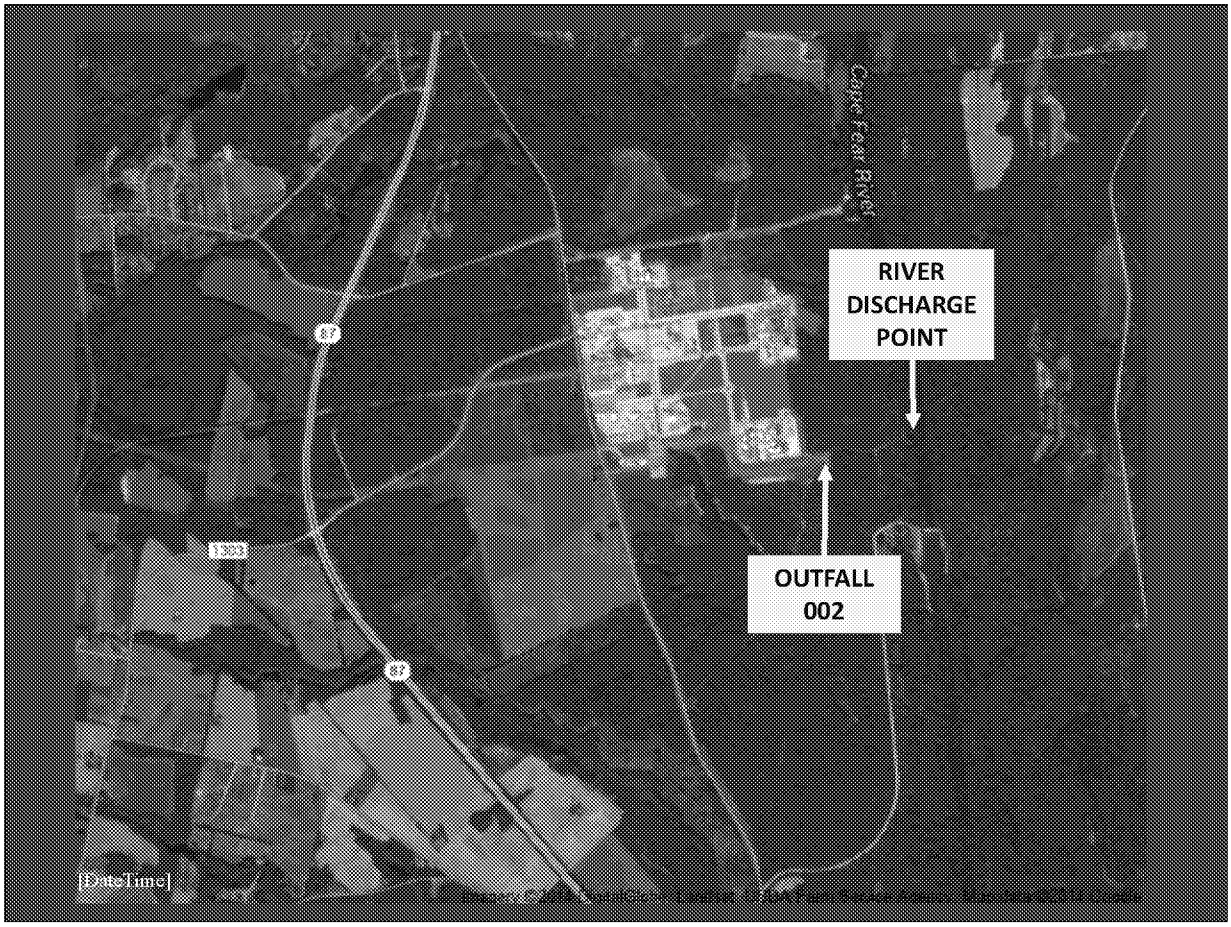
03-07-06



03-07-06


CHEMOURS COMPANY – FAYETTEVILLE WORKS
POLYMER PROCESSING AID PROCESS
VINYL ETHERS PROCESS
OUTFALL 002
[DateTime]

03-07-06


Cape Fear River
RIVER
DISCHARGE
POINT
OUTFALL
002
[DateTime]

03-07-06

Polymer Processing Aid (PPA) Facility

Family of fluorocarbon surfactants used to produce Chemours™ Teflon® and Kalrex® fluoropolymers, as well as sales to outside producers of fluoropolymers.

Newest line of products are called "Generation X" or "GenX" which replaced APFO.

Initial commercial production was under an USEPA TSCA Consent Order.

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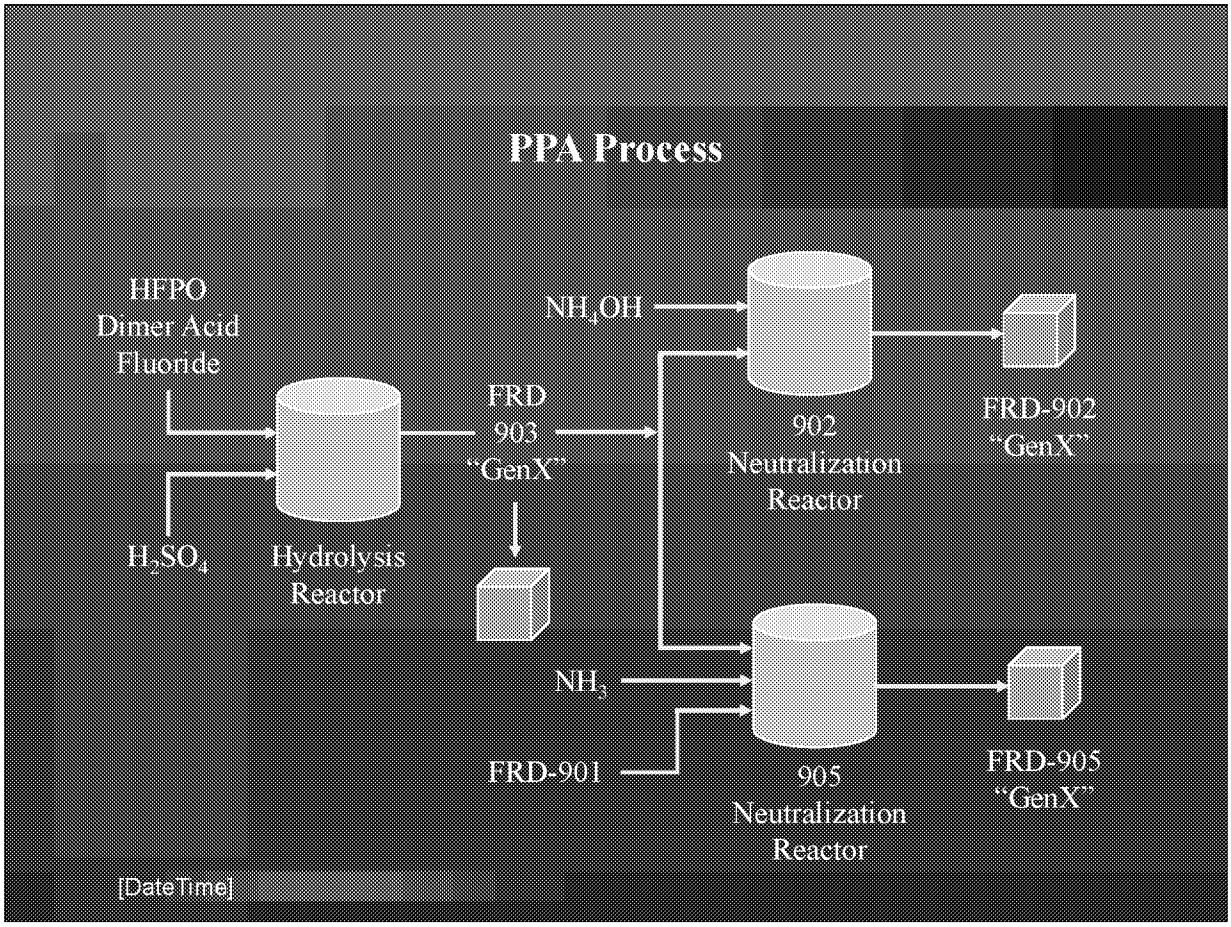
PPA Process
HFPO
Dimer Acid
Fluoride
H_2SO_4
Hydrolysis
Reactor
FRD
903
"GenX"
NH_4OH
902
Neutralization
Reactor
FRD-902
"GenX"
NH_3
FRD-901
905
Neutralization
Reactor
FRD-905
"GenX"
[DateTime]

03-07-06

Fluoromonomers

Family of fluorocarbon compounds used to produce DuPont products such as Nafion® membranes, Teflon®, Kalrez®, Krytox®, and Viton®, as well as sales to outside customers.

- Hexafluoropropylene oxide (HFPO)
- Perfluoronated vinyl ethers - PMVE, PEVE, PPVE, EVE, and PSEPVE
- Precursors - MMF, RSU, and Freon® E-2

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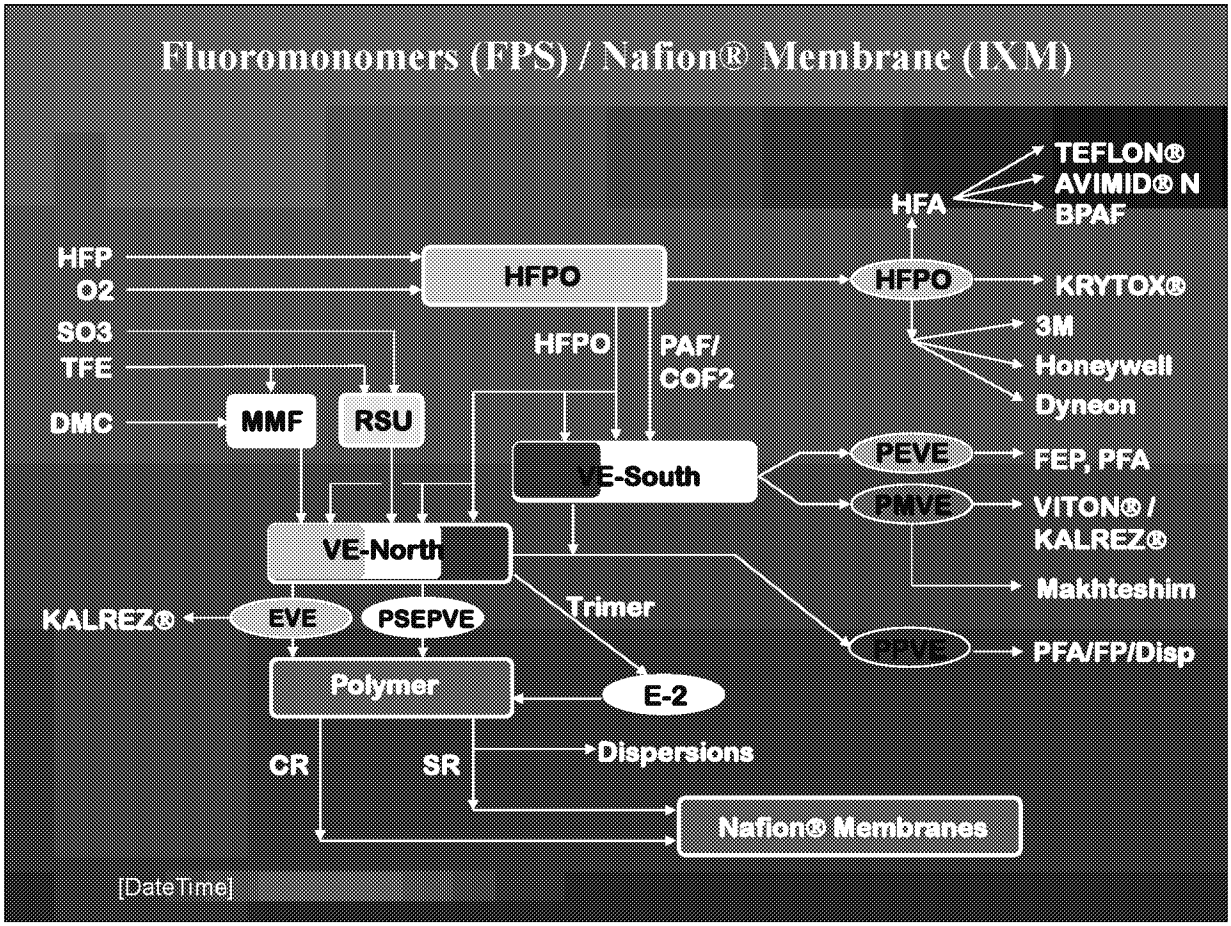
Fluoromonomers (FPS) / Nafion® Membrane (IXM)
HFP
O2
SO3
TFE
DMC
HFPO
MMF
RSU
HFPO
PAF/
COF2
VE-South
VE-North
KALREZ®
EVE
PSEPVE
Polymer
Trimer
E-2
CR
SR
Dispersions
Nafion® Membranes
HFA
TEFLON®
AVIMID® N
BPAF
HFPO
KRYTOX®
3M
Honeywell
Dyneon
PEVE
FEP, PFA
PMVE
VITON® /
KALREZ®
Makhteshim
PPVE
PFA/FP/Disp
[DateTime]

03-07-06

Fluoromonomers

- Vinyl Ethers Process generates HFPO Dimer Acid during the PPVE campaign.
- HFPO Dimer Acid (FRD-902) is the raw material used to produce the GenX products.
- HFPO Dimer Acid abatement system was installed/started in November 2013.
- Since that start-up it is estimated the HFPO Dimer Acid concentration during normal PPVE operation to be 100 ppt at Lock & Dam No. 1

[DateTime]

03-07-06

Questions?

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