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RCRA RECORDS CENTER
FACILITY Pratt & Whitney-Main St
I.D. NO. CTD990672081
FILE LOC. B-1B
OTHER RDMS #2745

Pratt & Whitney
Main St.
E. Hartford.

Waste Descriptions

pg 11-19 - need more detailed analysis of wastes
ei - percentages of components
- yearly volumes
- of each chemical
- in specific form (liquid/solid/sludge)
pg 22 - why do you list a sampling procedure for liquid waste in pits, ponds and lagoons.

Waste Analysis
pg 23 - It is stated that all wastes @ P&W are of constant composition, yet, it was never mentioned what that composition was.
pg 24 - Specify methods for testing parameters.

Security

Inspection
pg 28 - will the pallets be checked in barrel storage area? If so, include this on form M-566.
- how will sumps be cleaned? Elaborate. (hazard to workers?)

Contingency Plan

pg 39 - when will PA system be installed? (At present vocal evacuation order will be given)
pg 39 - need map of evacuation plan.
pg 42 (and Appendix B) Exactly what incompatables does P&W have? Specify.
pg 44-46 - Need description of emergency equipment capabilities
- Need map showing location of equip.
pg 44 - Is there any kind of alarm system (fire etc.) accessable @ possible site of emergency (in work area)

Hazardous Waste Facilities Procedures.

pg 39 - Will equipment be shut down in an emergency?
pg 55 - What does "signs posted where applicable" mean? Elaborate with numbers and location
pg 55 - What are the travel routes once off I-84 or RT 2.
- Need procedure to amend contingency plan
- who will amend it.

Personnel Training

Closure Plan & Cost Estimate

— need trackable intervening closure activities (timetable)

TANKS

pg 67 - step 4 - where will wastewater be drained to?
pg 68 - Step 8 - what is "appropriate manner" of disposal of water.
- Elaborate on partial vs. total closure for tank storage (since you have stated that either is possible on pg 65)

INCINERATOR

pg 69 - Can you be sure all waste is gone from interior of incinerator when stack products are equal to those from auxiliary fuel incineration? Will walls of refractory or ash be tested for hazardous characteristics? Will incinerator be dismantled?

— need plan to amend closure plan (ie. after partial closure of tanks - if that happens)
— who will amend closure plan.

Cost Estimate
— Itemize where costs come from (ie. manpower / decontamination / equipment / transport etc.)

Financial Assurance

where the 264.151 wording says:	Substitute:
US	CT.
Regions	State of CT
EPA	DEP
Regional Administrator	Director
~~RCRA of 1976~~	

Storage of Containers

— aisle space?

pg 99A — document that drums are 60% liquid/40% solid

pg 99A — (Exhibit DD) Computer printout did not total up drums or make special notation for drums of free liquid — How does this help avoid exceeding Maximums of those volumes?

— Containment volume is exactly 10% of expected capacity - However, the volume taken up by the pallets and drums is not accounted for. This consideration will result in less capacity.

Transporter Storage

pg 100 — are 3 areas designated Acid/Alkali/Cyanides to avoid incompatables stored in same area

Ignitable Wastes

pg 101 — "Incompatables are stored in non-adjacent compartments of the storage building." However, this is not possible in the transporter storage pad —

Alkali / Acid incompatable
Acid / Cyanide incompatable

pg 102 – Need more aisle space in Barrel/Transporter storage area

Incinerator

pg 112 – Cyanide waste feed – if there are no POHC's, how will destruction efficiency be measured?

— Cyanides will not be destructed in incineration of 2000°F because,

NaCN bp = 2700°F KCN bp > 2700°F

∴ Cyanides will not vaporize – instead they will pass through the incinerator to the process scrubber

— Since there is a basic environment in the scrubber, the danger of producing HCN gas is less, however this possibility should not be overlooked.

— Pretreatment with Cl_2 and NaOH would be more effective.

note: (Region V has prohibited incineration of cyanides at concentrations > 500 ppm.

PRATT & WHITNEY
MAIN ST.
E. HARTFORD

- designs, manufactures, assembles and tests aircraft jet engines and engines components.

- wastes from - fabricating
  - cleaning
  - finishing
  - coating
  - testing and research

RECIEVES OFFSITE WASTES (pg 4)

tetrachloroethylene
111 trichloroethane

≈ 11,000 offsite

① recycling by distillation of spent listed solvents. - 110,000 gal
② transportation
③ storage. - TANKS - CONTAINERS.
④ treatment — waste water — to NPDES
— to incinerator ~~(2)~~ pg 5 → 1 closed

Waste Descriptions

pg 11-12-19 — need more detailed analysis — percentages of components - yearly volumes. of each type of acid/alkali - liquid/solid/sludge.

pg

~~Is waste typically the same or does it change?~~

Page 22 - Pits/ponds/lagoons and similar resevoirs?

Waste Analysis (23)

What is this "constant composition? pg 23
TEST METHODS?

? → ~~waste analys~~

What does Haz. Waste Man. facility consist of?

Security

statement of 25 legibility of signs? PICKY?

Inspection

pg. 28 – check pallets (~~[illegible]~~?) STORAGE AREA
clean sumps? HOW.

pg 32 – check PET readings (BU) – incinerator

INSPECTION OF EMERGENCY EQUIPMENT / SAFETY EQUIP / ~~[illegible]~~ done by Fire dept. pg 45A

Contingency Plan

– Documentation of Emg Coord. quali. & authority? PICKY

pg 39 – when will PA system go in – local evacuation order inadequate
– Map of Evacuation plan.

~~pg 42 – Appendix B? – see such annual~~

pg 42 and Appendix B – what incompatibles does PEW have?

pg 44-46 – Statement of equip capabilities
– Map showing location of equip.

(description of location of facilities copy
# of duplicate copies
I.D of person to make changes
procedure to make changes

pg 39 – procedure for equipment shutdown in emergency? → manually operated pg 54
44 – any kind of alarm system in plant? (fire, etc.)
voice from PA system. accessable @ possible site of emergency.

~~pg 54~~

pg 54 – "If a transporter cannot be immediately emptied it is stored in a transporter storage pad" even if this truck does not carry the corresponding waste – ~~any danger~~ is there any danger of incompatibles coming in contact (acid/alkali)

Tank Storage
2 Partial / total

pg 55 – what does "signs posted where applicable" mean
need # location
~~55 – what special unloading procedures are used to prevent accident~~
55 – what are the travel routes once off RTS 1-84 or RT 2.

Personnel Training ✓

Closure Plan & Cost Estimate

VICKY? NOTE → – does not expect to close in ~~near~~ future? no estimated year of closure
– need trackable intervening closure activities (timetable)

TANKS
pg 67 step 4 – drain washwater to where?
pg 68 step 8 – what's the "appropriate manner" of disposal of water
elaborate on partial vs. total closure for tank storage.

INCINERATOR
pg 69 – can you be sure all haz waste will be burned off wall – will ash or refractory be tested for hazardous wastes

Cost Estimate
– ~~estim~~ itemize where costs come from – decontamination / manpower / equipment / transport /

need location and # of copies of closure plan
~~where kept~~
who will amend it
how will all copies be amended

Financial Assurance

→ wording?

Storage of containers

— aisle space?

① WAP / Cl solvents — containment - 125 ft³ — 935 gal = 17 drums HOLD 170

② PAINTS — 32 ft³ — 239 gal = 4.3 drums HOLD 43

③ CHEM Products — 32 ft³ — 239 gal = 4.3 drums HOLD 43

→ since 60% liquid / 40% solid HOLD 72 drums ✱

— any excess goes with WAP / Cl ?

remaining 3 can accomodate 43 barrels.

✱ pg 99A Exhibit DD doesn't total up drums or make special notation for drums of free liquid — HOW DOES THIS HELP AVOID EXCEEDING MAX'S IN THOSE AREAS?

CHECK — any incompatibles? / any ignitables? (kerosene)

TRANSPORTERS

pg 100 — are areas designated ACID (blue) / ALKALI (gray) / CN (red) to avoid incompatibles stored in same compartment

~~where are transporters unloaded — IN THE are tankers and barrels~~

where are transporters unloaded
where are barrels unloaded
> in the tanker loading area?

pg 53

what are traffic routes from truck to storage? and vice-versa

does this area have impervious base and containment?

check ✱ → containment volume — calculations showed have compensation for drums

pg 101D – Incompatibles are in non adjacent separate compartments
– so...

Transport Storage

alkali	CN	acid

Alkali/Acid incom.
Acid/Cyanide incom
~~Alkali/Cyanide incom~~.

pg 102 Crush space in Barrel/Transport Storage area?
NEED MORE.

STORAGE TANKS

pg 105 Are Tanker and Transport already areas the same place?

Is this where drums are unloaded

Check Deb

INCINERATOR – liquid injection

pg 113 – No PCHC's ?

2 Table A-1 → Certain Waste Tanks excluded?
Page 8 → none of the activities in reclaim area under scope?
(ei) Page 30 - why change page when not mentioned in NOD
no change → Page 23 — Mentioned but no change!

WALL THINNING?

~~PERSONEL TRAINING (ai) - description of job~~

PG. 65 - didn't justify 180 days
PG 74 - Wind Rose

PG 99 LIMIT TO HOW HIGH YOU CAN STACK CONTAINERS SP-I (170)

Containment — ~~1500 gallons~~
125 ft³ - ~~935 gallons~~

17
55) 9350
55
385
385

WHERE IN REGS.

PG 102(F) — Aisle Space? — Figure M-1 ~~[illegible]~~ NONFLAMMABILITY?
Figure M-3 needs aisle space for inspection
~~BARREL - CONTAINER OR TANK~~
~~M-2 and M-4~~? → TRANSPORTER? → Container or Tank
PORTABLE ← Aisle Space

239.5
4
9580
935
1892

239
125) 29928
250
492
375
1178
1125
~~1350~~
32
1870
2806
29920

43
55) 2395
220
195

700
950
1200
2850

	cont	vol	
I	1200	~~3750~~	375
II	950	~~2250~~ 3000	24
III	700	~~3000~~ 2250	1500
		9000	750
			9000

99A → WAX cont. → 935 gallons — 170 barrels = 9350 gallons
CHEMICAL 32 ft³ = 239½ gallons — 43
PAINT 239½ gallons — 43 barrels = 2395 gallons
OTHER 2 239½ — 43
239½ — 43
1892 TOTAL cont. — 342 barrels

CONTAINER STORAGE BLDG - 5 COMP. — 350 BARRELS
TRANS. STORAGE PAD - 3 COMP — 24 TRANS
BARREL/TRANS STORAGE PAD — 1 COMP — 88 BARRELS or 10 TRANS.
~~BARREL~~

INCINERATOR
page 112 — second sentence
page 113 — second sentence — CN? — no principle waste

what → 2 samples 113 → 115

Fugitive waste?
POWER FAILURE?

Deb Kyling

PRATT & WHITNEY

Destruction of cyanides

NaCN bp = 2700°F

KCN bp > 2700°F

∴ cyanides will not vaporize – instead they will pass through the incinerator to the process scrubbers.

Because there is a basic environment in the scrubber (packed tower) the danger of producing HCN gas is less, however this possibility should not be overlooked.

The scrubber effluent will most likely contain high concentrations of NaCN and KCN which must be disposed of properly.

In essence, cyanidides will not be destructed so incineration is not a good solution to the disposal problem. Pretreatment with Cl_2 and NaOH would be more efficient.

$$2KCN + Cl_2 + NaOH \text{ (or lime)} \longrightarrow K(CO_3)_2 + N_2 + H_2O$$

— Region V has prohibited incineration of cyanides at concentrations > 500 ppm.

$Ca(OH)_2$ $Ca(CO_3)_2$