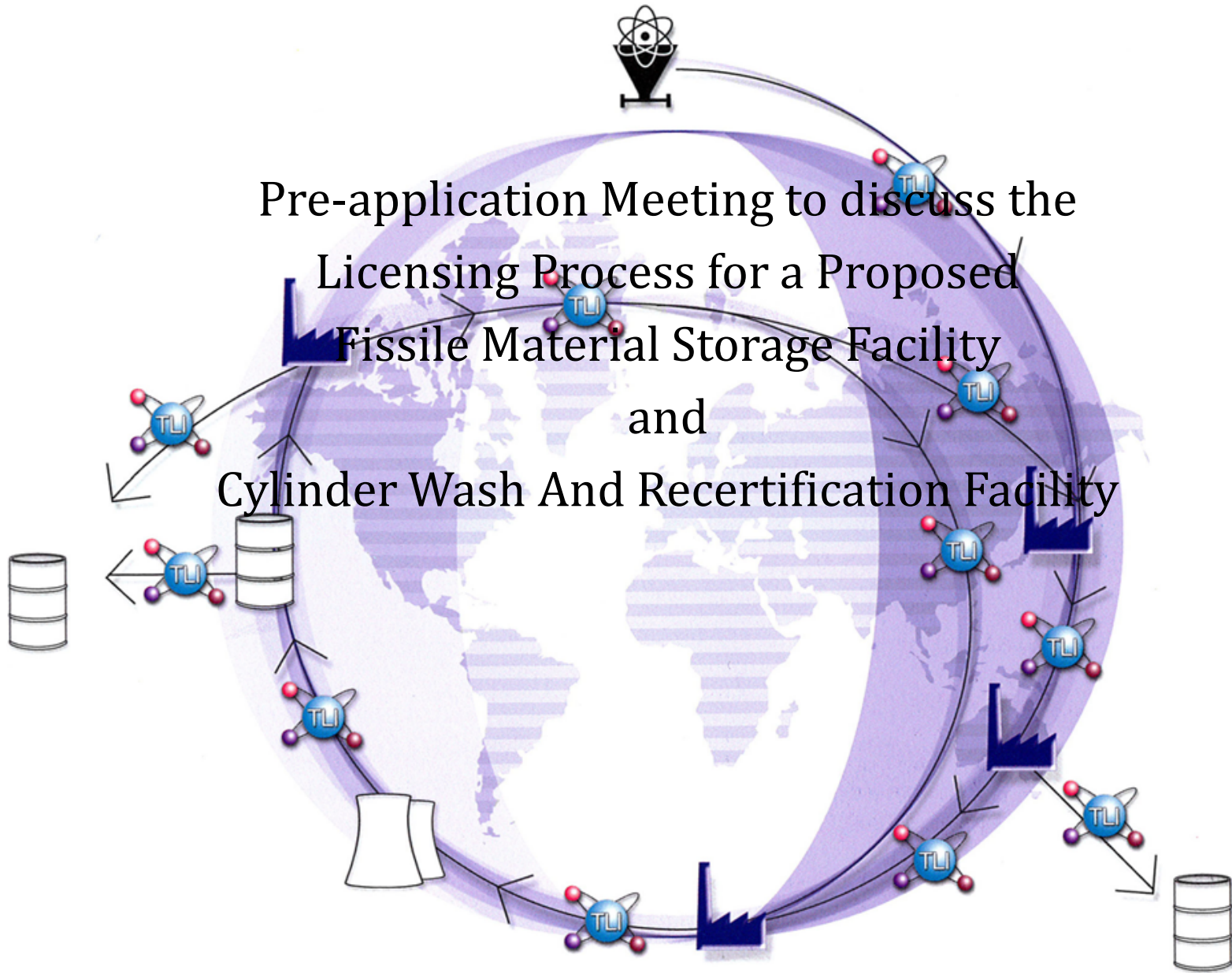


Pre-application Meeting to discuss the
Licensing Process for a Proposed
Fissile Material Storage Facility
and
Cylinder Wash And Recertification Facility





Agenda

1. Introduction to Transport Logistics International
2. Proposed plan for LEU storage facility
3. Proposed plan for cylinder wash and re-certification facility
4. Part 70 licensing



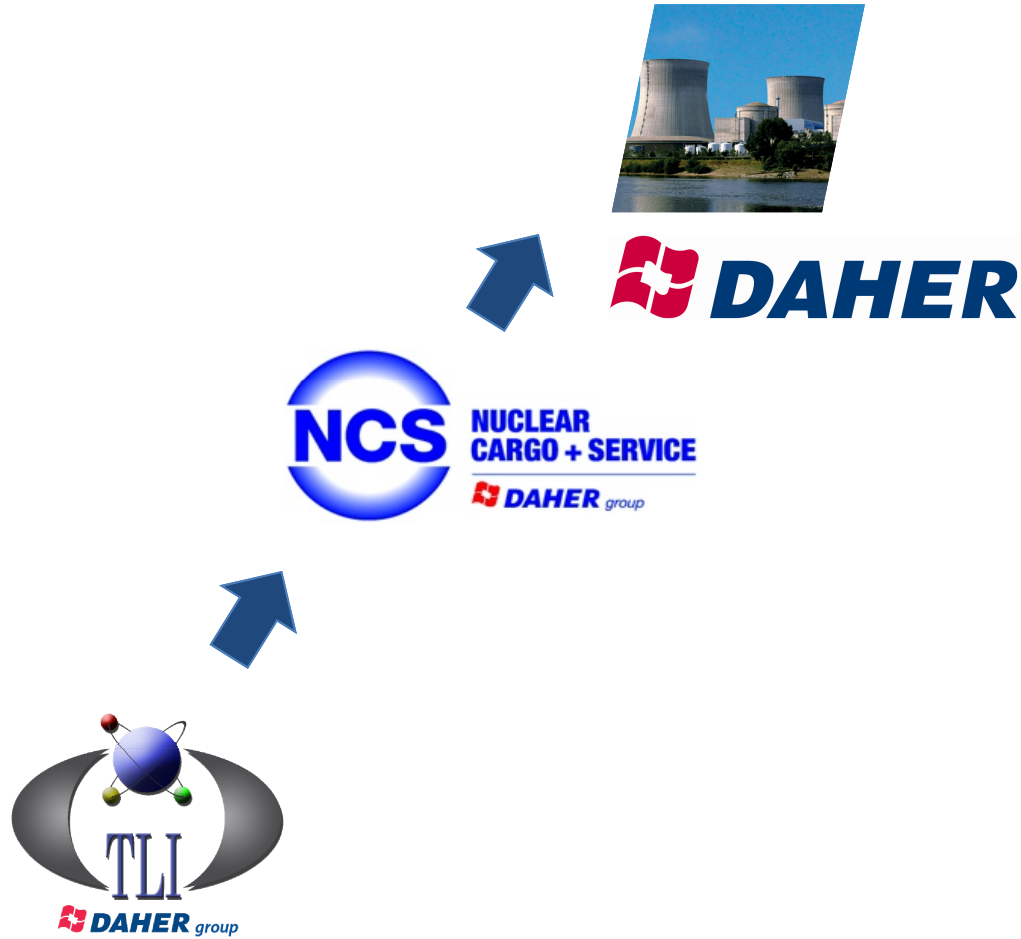
1. Transport Logistics International

Transport Logistics International, Inc. (TLI) is dedicated to offering superior management services for domestic and international movements of radioactive cargoes. TLI offers integrated service to the front and back end sectors of the nuclear fuel cycle, ensuring safe, secure and economic transport.

TLI's comprehensive portfolio of expertise provides for strict adherence to international and domestic regulations, packaging requirements and import/export controls. In addition, the company offers DOT-Compliant HAZMAT Training, consulting services associated with transportation feasibility studies, export licensing activities, package validations and antidumping order compliance.

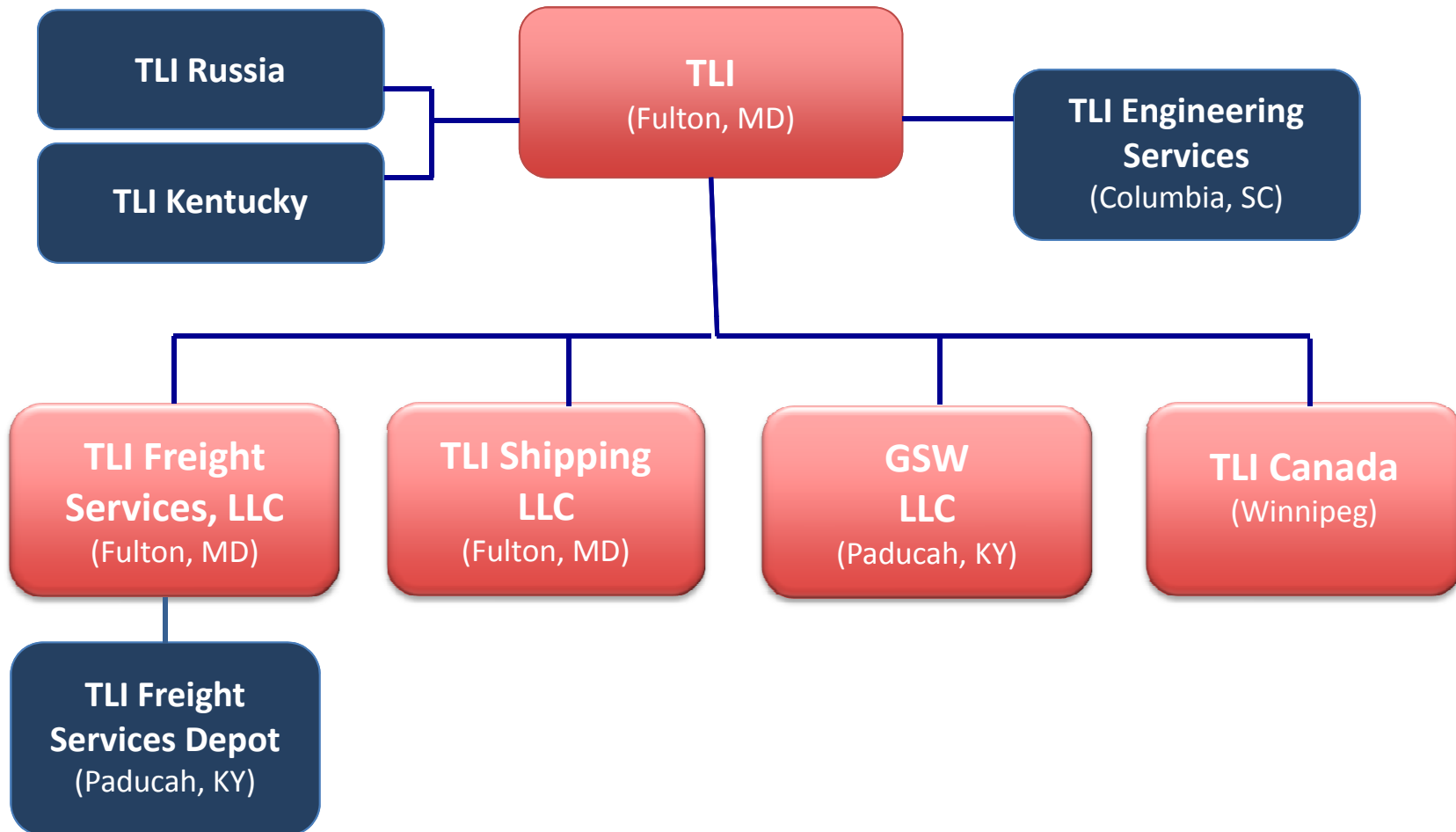


1. Transport Logistics International





1. www.tliusa.com





1. www.tliusa.com





1. Nuclear Cargo + Services (NCS)



Business units:

KBU (Front End)

BSR (Back End)

HCS (Heavy Cargo)

AT (Engineering)

SP (Trucking)

BES (Rail)

Subsidiaries:

Daher Transkem

HCS Poland (heavy cargo)

Number of Employees: 180

Location: Hanau, Germany

Specializes: Radioactive Materials Transport,
Packages, & Support



1. DAHER



1863 : Founding of DAHER
Maritime transport and merchandising of foundry products

1955 : Start of aerospace services
Aircraft and spare parts packaging

1972 : Start of nuclear activities
Setting up of cranes for nuclear power station building

1999 : Start of manufacturing in Aerospace and Defence sectors
Integration of Lhotellier-Montrichard

2007 : Start in nuclear transport
Integration of Nuclear Cargo+ Service

2010 : Nuclear Cargo+ Service acquires 90% of TLI



2011 : DAHER-SOCATA celebrates 100 years of aerospace (formation of Morane-Saulnier in 1911)

European integrated equipment and services supplier



1. DAHER

Combining “Manufacturing & Services”



A specialization in 4 strategic sectors

AEROSPACE



NUCLEAR



DEFENCE



INDUSTRY



2. Proposed Plan for LEU Storage Facility

What

- LEU material, (UF_6 , UO_2 , U_3O_8)
- Powder, pellets, finished PWR fuel assemblies and BWR bundles.
- UF_6 would be stored in ANSI N14.1 certified cylinders.
- LEU powder, pellets, and finished fuel would be stored in NRC licensed transport packages.
- Material would be consigned to the storage facility.
- The transport packages would not be opened
- No work would be done to- or with the RAM.
- Storage facility only



2. Proposed Plan for LEU Storage Facility

Where

- Estimate needing 3-5 acres for entire site
- Location not decided
- USEC / DOE property mentioned as a possibility
- Perhaps shorten the licensing process.
 - USEC Paducah is a Part 76 Licensee.
 - Would establishing the facility on DOE land also shorten the licensing process?



2. Proposed Plan for LEU Storage Facility

Why

- TLI believes that there is a need for short- and long term storage for utilities and fuel fabricators.
- Not to be storage incident to transportation (49CFR173.447)



2. Proposed Plan for LEU Storage Facility

When

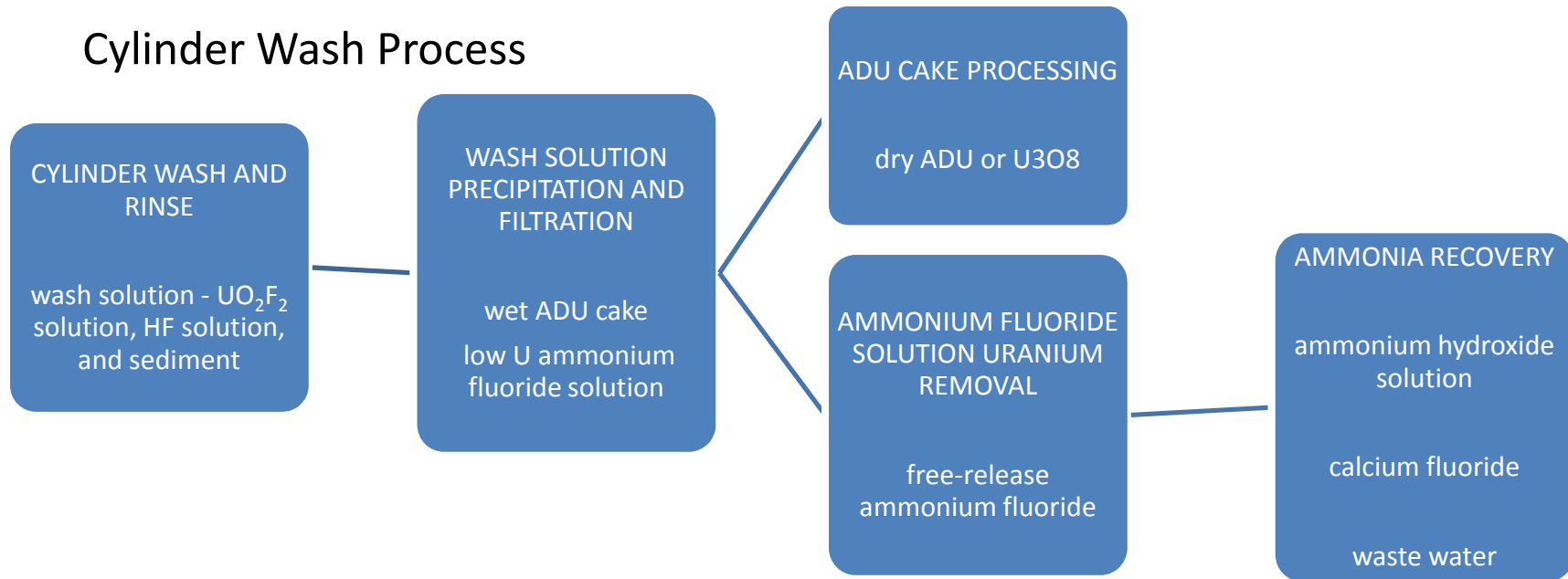
- Submit license application within 12 months.
- Complete the licensing process within 12-18 months after submitting application.
- Begin operating the facility immediately upon receiving license.



3. Proposed Plan for Cylinder Wash and Recertification Facility

What

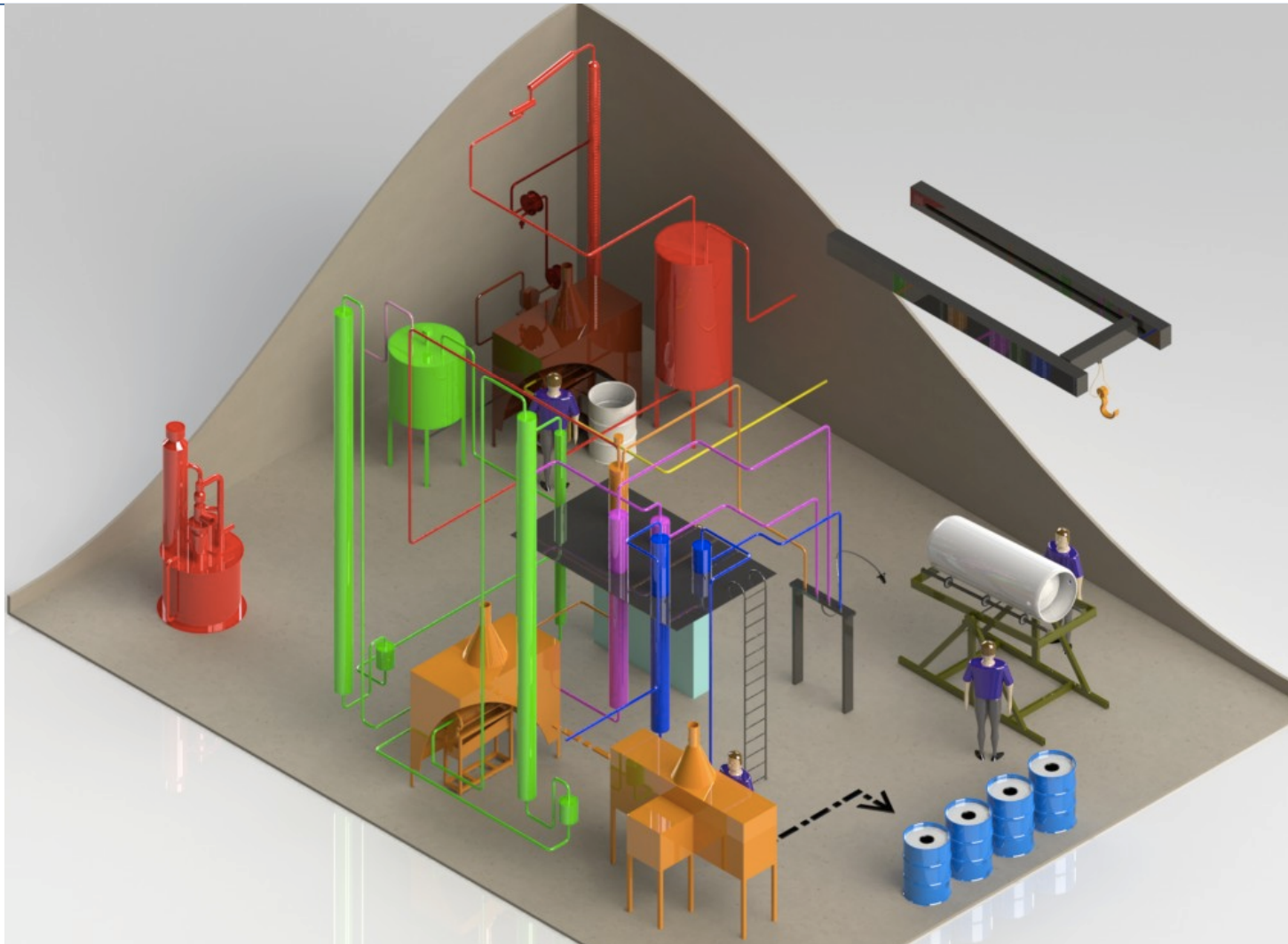
Cylinder Wash Process



Separate systems for 30B and 48Y

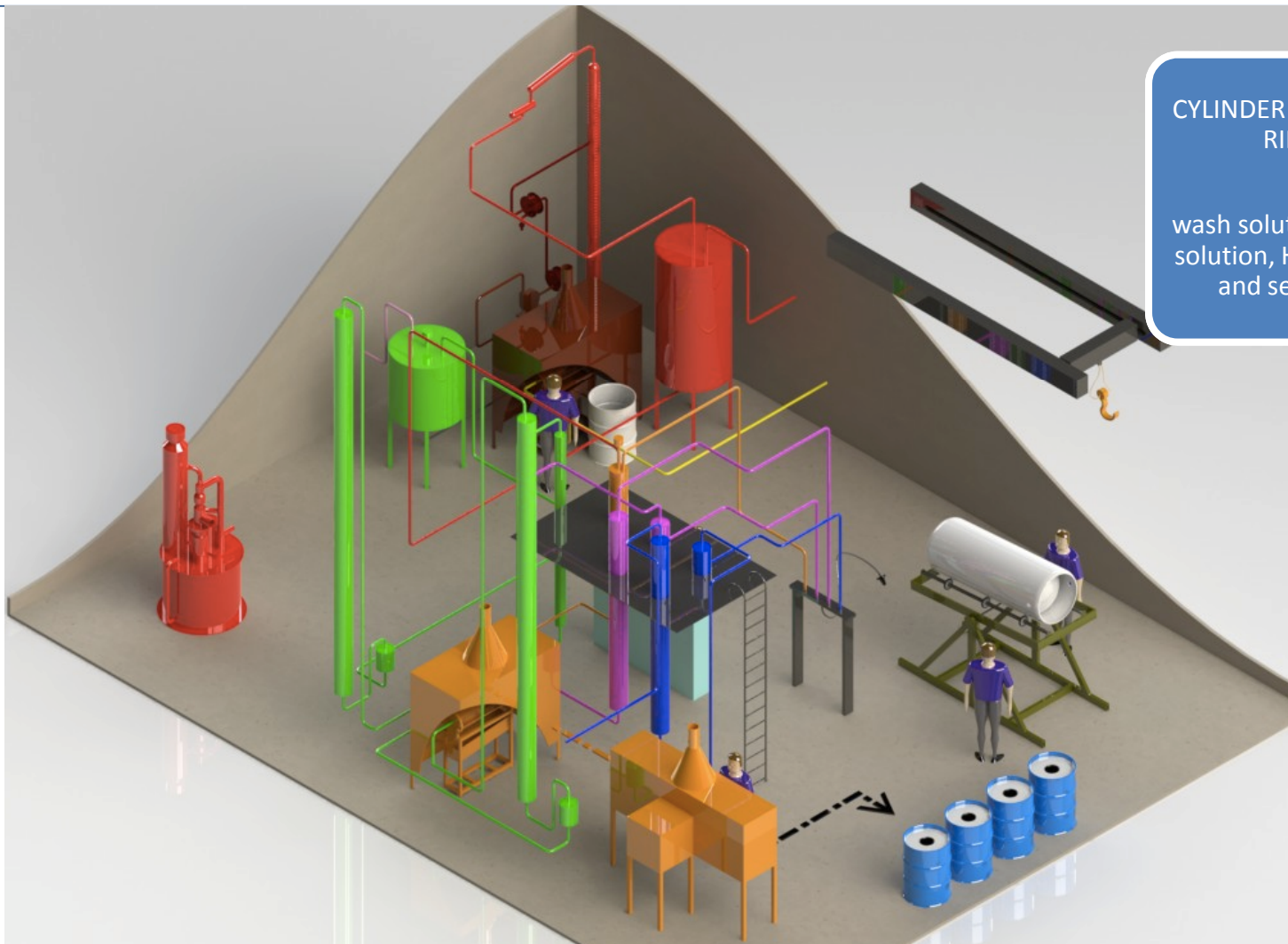


3. Proposed Plan for Cylinder Wash and Recertification Facility





3. Proposed Plan for Cylinder Wash and Recertification Facility

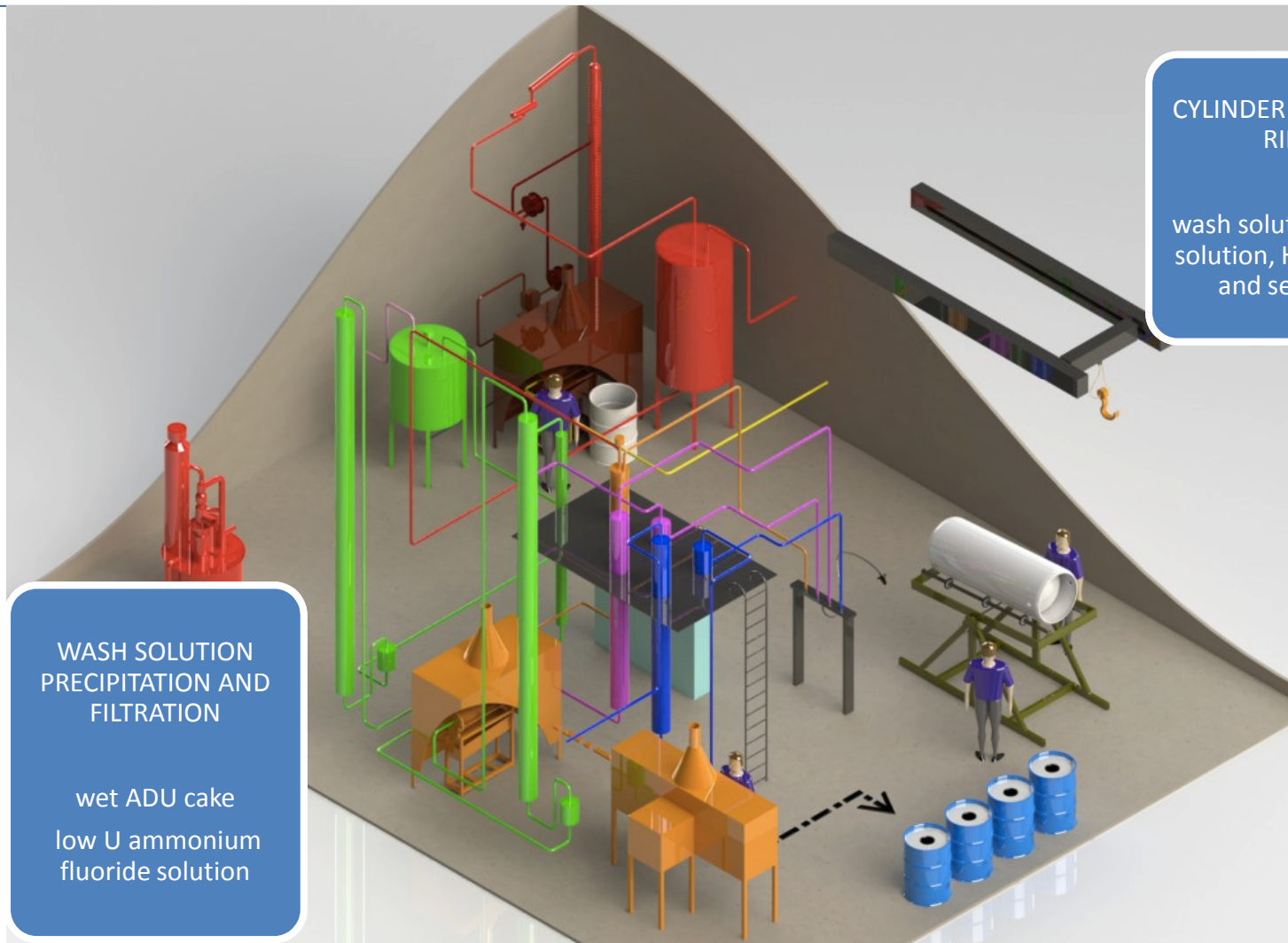


CYLINDER WASH AND RINSE

wash solution - UO_2F_2 solution, HF solution, and sediment



3. Proposed Plan for Cylinder Wash and Recertification Facility

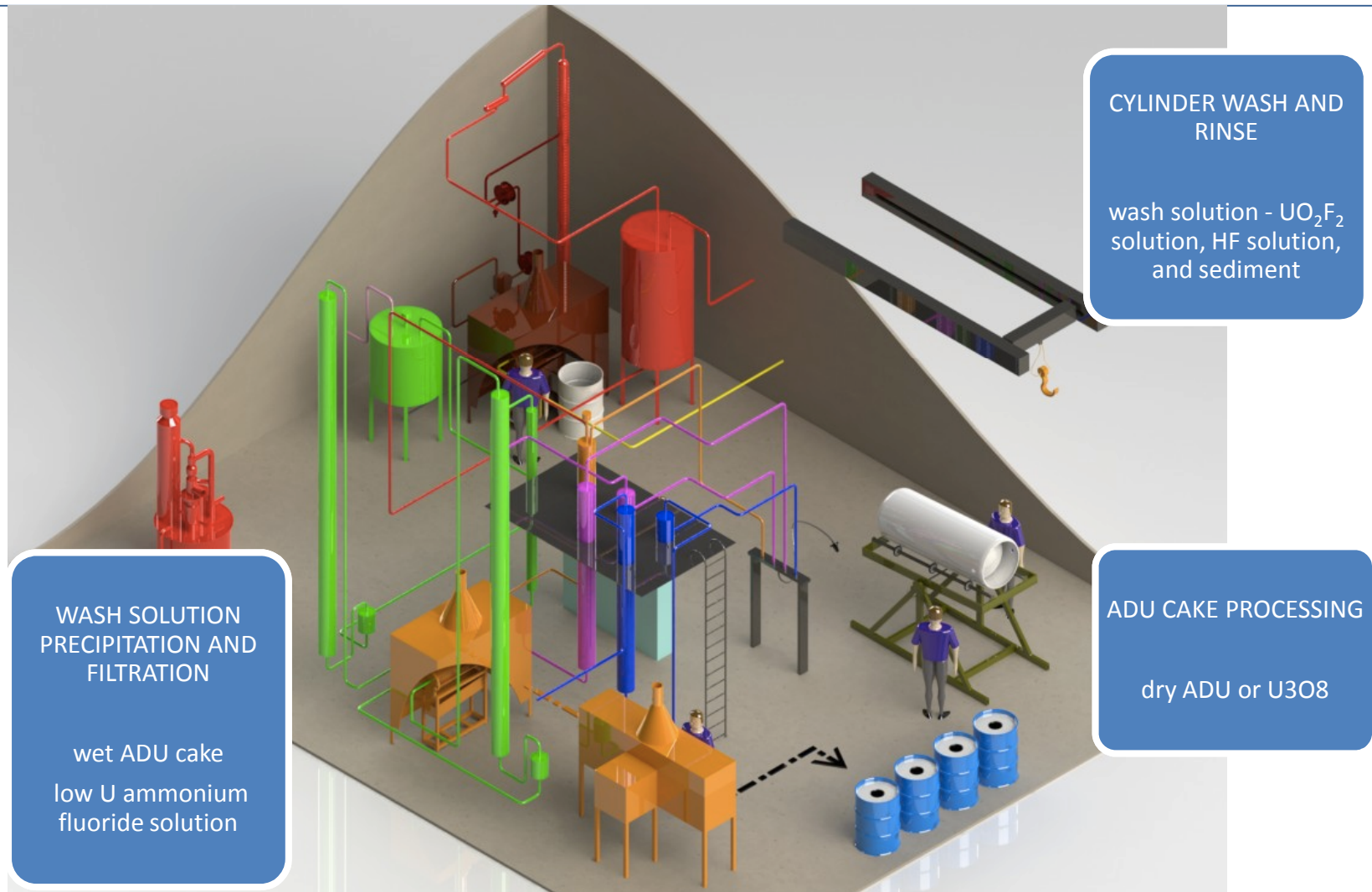


CYLINDER WASH AND RINSE
wash solution - UO_2F_2 solution, HF solution, and sediment

WASH SOLUTION PRECIPITATION AND FILTRATION
wet ADU cake
low U ammonium fluoride solution



3. Proposed Plan for Cylinder Wash and Recertification Facility





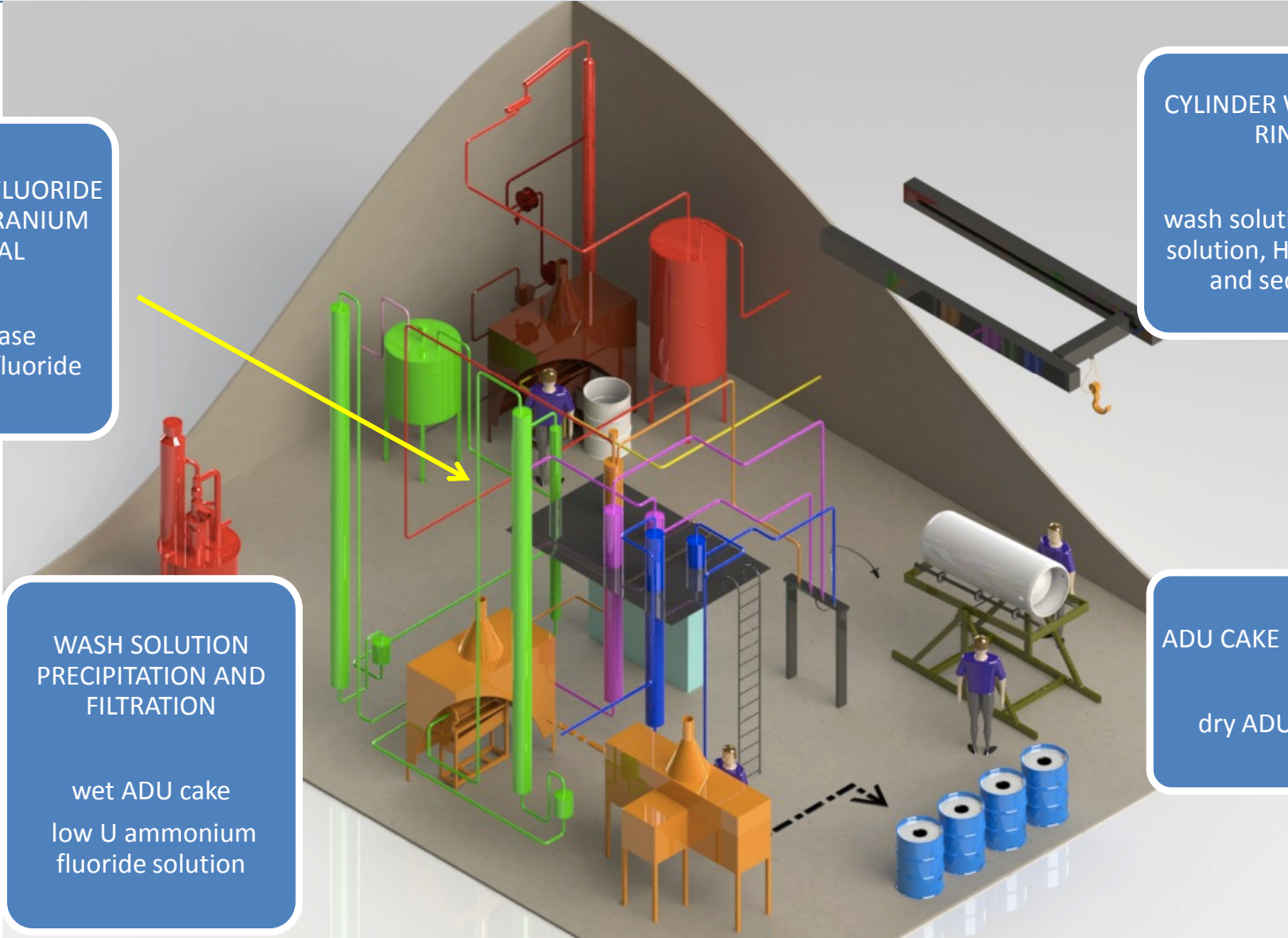
3. Proposed Plan for Cylinder Wash and Recertification Facility

AMMONIUM FLUORIDE
SOLUTION URANIUM
REMOVAL

free-release
ammonium fluoride

WASH SOLUTION
PRECIPITATION AND
FILTRATION

wet ADU cake
low U ammonium
fluoride solution



CYLINDER WASH AND
RINSE

wash solution - UO_2F_2
solution, HF solution,
and sediment

ADU CAKE PROCESSING

dry ADU or U_3O_8



3. Proposed Plan for Cylinder Wash and Recertification Facility

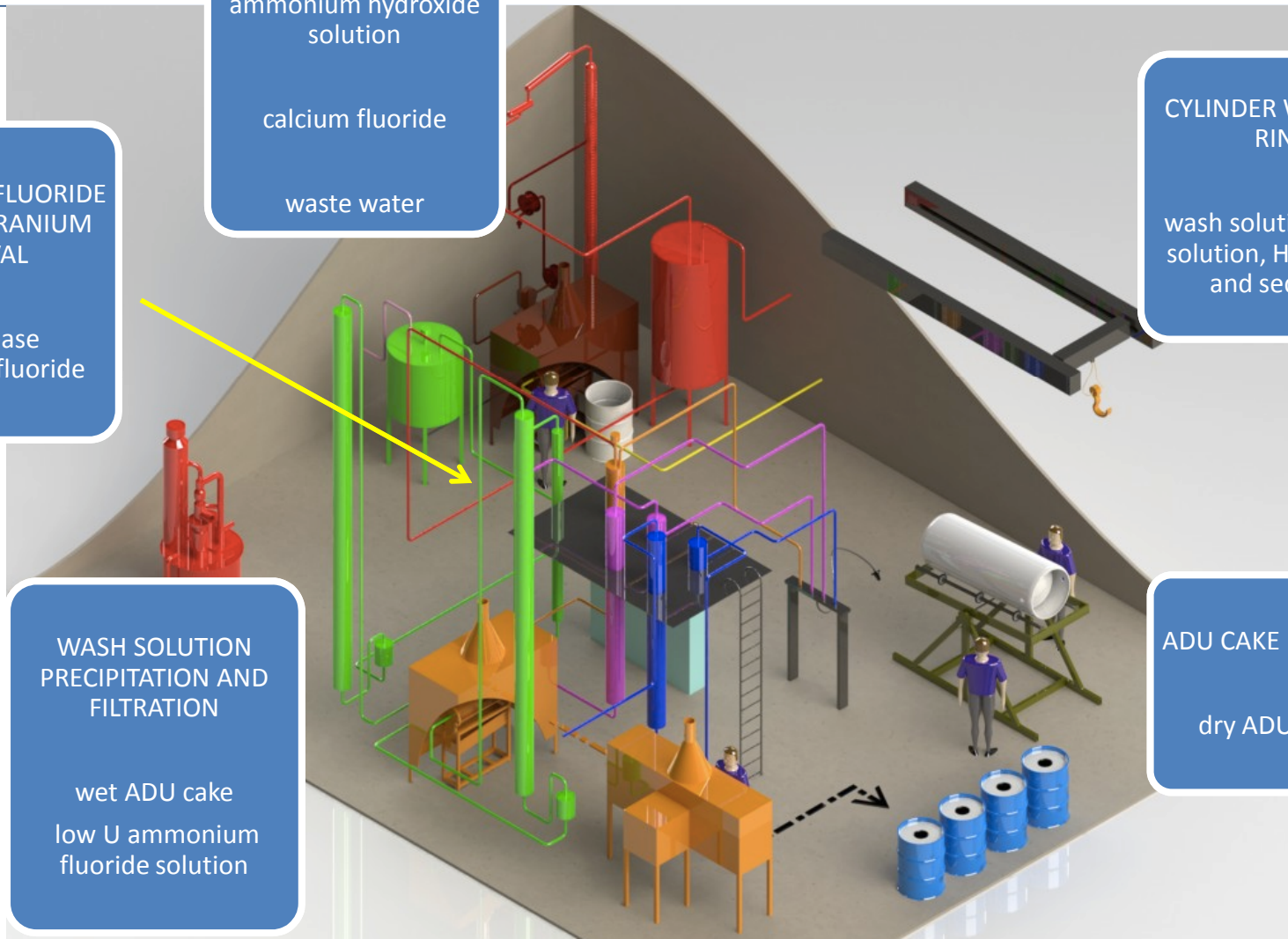
AMMONIUM FLUORIDE SOLUTION URANIUM REMOVAL
free-release ammonium fluoride

AMMONIA RECOVERY
ammonium hydroxide solution
calcium fluoride
waste water

CYLINDER WASH AND RINSE
wash solution - UO_2F_2 solution, HF solution, and sediment

WASH SOLUTION PRECIPITATION AND FILTRATION
wet ADU cake
low U ammonium fluoride solution

ADU CAKE PROCESSING
dry ADU or U_3O_8

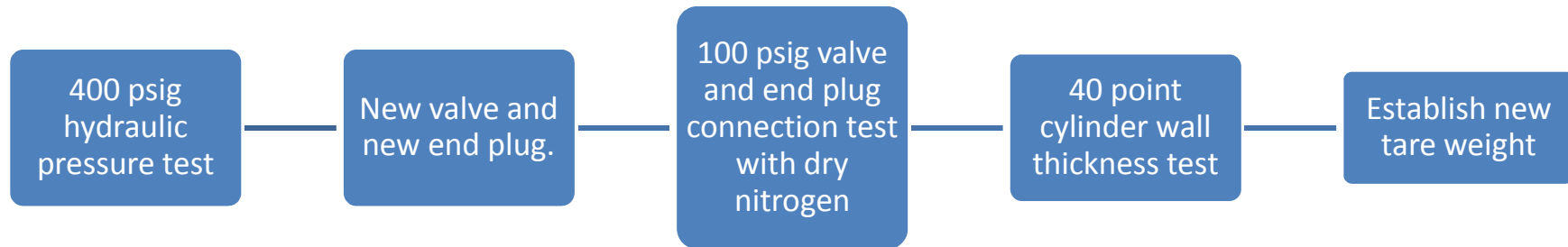




3. Proposed Plan for Cylinder Wash and Recertification Facility

What

Cylinder Recertification Process





3. Proposed Plan for Cylinder Wash and Recertification Facility

Why

- Large number of cylinders that need washing and recertification.
- No single facility dedicated to cylinder wash and recertification



3. Proposed Plan for Cylinder Wash and Recertification Facility

When

- Coordinate with NRC to determine best time to submit (while the storage facility application is in review).
- Install wash and rinse facilities at risk during license review process.
- Complete licensing process and have the facility in operation within 12 months of submittal of application.



4. Part 70 Licensing

New Licenses

A company that wishes to operate a fuel cycle material facility must submit an application to the NRC. This application must demonstrate how the facility will be operated to ensure adequate safety and safeguards in accordance with NRC licensing regulations found in [10 CFR Parts 30, 40, 70, 73, 74, and 76](#).

PART 30—RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

PART 40--DOMESTIC LICENSING OF SOURCE MATERIAL

PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

PART 73—PHYSICAL PROTECTION OF PLANTS AND MATERIALS

PART 74--MATERIAL CONTROL AND ACCOUNTING OF SPECIAL NUCLEAR MATERIAL

PART 76—CERTIFICATION OF GASEOUS DIFFUSION PLANTS



4. Part 70 Licensing

§ 70.64 Requirements for new facilities or new processes at existing facilities.

- (1) Quality standards and records.
 - (2) Natural phenomena hazards
 - (3) Fire protection
 - (4) Environmental and dynamic effects
 - (5) Chemical protection
 - (6) Emergency capability
 - (7) Utility services.
 - (8) Inspection, testing, and maintenance.
 - (9) Criticality control
 - (10) Instrumentation and controls.
- (b) Facility and system design and facility layout must be based on defense-in-depth practices.¹ The design must incorporate, to the extent practicable:
- (1) Preference for the selection of engineered controls over administrative controls to increase overall system reliability; and
 - (2) Features that enhance safety by reducing challenges to items relied on for safety.



4. Part 70 Licensing

License Application Organization (from NUREG 1520)

- CH 1: General Information
- CH 2: Organization and Administration
- CH 3: Integrated Safety Analysis (ISA)
- CH 4: Radiation Protection
- CH 5: Nuclear Criticality Safety
- CH 6: Chemical Process Safety
- CH 7: Fire Safety
- CH 8: Emergency Management
- CH 9: Environmental Protection
- CH 10: Decommissioning
- CH 11: Management Measures