Meeting Agenda

Project Title: CNYPC Building 39 Renovation
Project Number: 343230
Building(s): Primarily Building 39, w/ various other buildings on campus
Facility: Central New York Psychiatric Center
Date of Meeting: September 13, 2017
Time: 10:00 AM – 1:00 PM
Location: DASNY Field Office
Meeting Organizer: Jim Moore

Primary Meeting Objectives:
The purpose of this meeting is to describe the project, goals and to answer any questions presented by the proposers. Representatives of DASNY, the NYS Office of Mental Health and the Central New York Psychiatric Center will be available to answer questions regarding the Request for Proposal (RFP).

10:00 AM – 10:15 AM **Introductions**

- Sign-In Sheet(s)
- Introductions

10:15 AM – 10:30 AM **Project Overview**

The Building 39 Window and Ventilation Study consists of six (6) volumes that can be obtained from DASNY's website. A few highlights of the scope of work and recommendations include:

1) **General Construction**:
   - Replacement of ±1,450 existing single-glazed windows
   - Work to be performed in multiple buildings on campus to provide adequate swing space and reduce the number of temporary relocations of occupant groups

2) **MEP Upgrades**:
   - Move from existing campus steam to independent hot and chilled water
   - New mechanical ventilation, heating and cooling
   - New sprinkler, fire alarm and security upgrades

3) **Hazardous Materials**:
   - Asbestos containing materials and lead-based paint will be disturbed. No PCB containing caulk is anticipated.

4) **Phase 1 Standby Generator Building**:
   - Bids have been received and are being reviewed

5) **Recommended Phasing Strategy:** *(54 months)*
   - Phase 1 – Heating & Cooling Plants *(±9 months)*
   - Phase 2 – ~~Ward 5~~ *Wing 5* *(±9 months)*
   - Phase 3 – ~~Ward 1~~ *Wing 1* *(±9 months)*
   - Phase 4 – ~~Ward 3~~ *Wing 3* *(±9 months)*
   - Phase 5 – ~~Ward 2~~ *Wing 2* *(±9 months)*
   - Phase 6 – ~~Ward 4~~ *Wing 4* *(±9 months)*

6) Projected Cost Summary
   - Current Budget Est. = $125 - $150 million
   - Current Construction Est. = $101,664,000

10:30 AM – 10:50 AM **Proposer Questions**

10:50 AM – 1:00 PM **Security Check-In & Building Walk-Through**

- Walk to Building 39
- Tour one (1) Forensic Ward; (1) Sexual Offender Treatment Program (SOTP) Ward; Treatment Mall; Basement
- Tour of Buildings 12 & 14 *(intended use as swing space)*
  - *Also toured Cottage A*

End of Agenda

Meeting Notes

Project Title: CNYPC Building 39 Renovation
Project Number: 343230
Prepared by: Jim Moore
Date Issued: September 19, 20117

Pre-Proposal Meeting Discussion Notes & Clarifications:

Proposers are required to the refer to volumes 1 through 6 and the Request for Proposal (RFP) for a complete description of the project. The following notes provide clarification to questions asked during the pre-proposal meeting and walk-through. These notes are for informational purposes only and are not intended to conflict with the planning study or RFP, unless noted otherwise.

As pertains to the RFP process and administration:

- All subsequent correspondence during the Request for Proposal process shall be directed to DASNY's RFP Coordinator at RFPCoordinator@dasny.org.
- Items corrected in the Agenda (above) are shown in *Red*
- No additional site visits will be scheduled as part of the RFP process.
- See the Request for Proposal (RFP) 1.3 Key Events and Dates for milestone dates for submission of the RFP.
- See the RFP 2.4 Project Milestone Dates and Schedule for anticipated design and construction completion and start dates.

As pertains to the Project:

- Buildings 28 *(Director's Residence)*, 88 *(Cottage F)* and 130 *(Cottage C)* may be occupied, at least in part, by the commencement of construction. As result, it is expected that Building 12 would need to be renovated to provide sufficient swing space for Building 39 occupants. *(This differs from Volume 6 of the planning study that recommended Building 12 be maintained for storage)*.
- Per Volume 6, Section 9. Construction Cost Opinion, $101,664,00 is an escalated value.
- Windows will be fixed, non-operable, high-impact windows constructed in accordance with the requirements of the OMH Patient Safety Standards.
- BMS system upgrades and tie-ins into the existing Trane system will be required.
- The construction contract structure for the project is yet to be determined.
- CNYPC indicated the need for more single bedrooms within the Forensic Unit. Space separation for residents is required.
- There is limited area on-site for contractor parking and construction staging. Volume 6, Appendix G of the planning study provides information regarding staging.
- Temporary power requirements and responsibilities will be clarified during design.
- Refer to DASNY's Design and Construction Tools Guidelines page for BIM and clash detection requirements: https://www.dasny.org/construction/designandconstructiontools/guidelines.aspx
- Proposers should expect OMH will procure services for technical review of design documentation.

- Volume 4 of the planning study includes pre-renovation survey reports for hazardous materials dated April 2015, September 7, 2012 and May 1, 2012. Supplemental survey information will be required. The following DASNY Guidance Documents are attached:

    - *Design Kick-Off for Environmental Impacts, dated 4/17/17*
    - *Guidance for Contaminated or Impacted Soils, dated 2/20/09*
    - *Air Emission Source Permits for DASNY Projects, dated 8/25/11*
    - *Air Permitting Flow Chart for Projects Involving Boilers, dated 8/15/11*
    - *Information on Vermiculite and Asbestos, dated 10/31/14*
    - *Caulk Sampling & Analysis Guide for PCBs, dated 2/20/09*
    - *Hazardous Materials Encountered During Construction/Demolition, dated 4/16/14*

End of Notes

NEW YORK STATE OF OPPORTUNITY. DASNY WE FINANCE, BUILD AND DELIVER.	**Office of Construction** **Code Compliance Department**	**Design Kick-Off for Environmental Impacts** **Supplement to Design Kickoff Meeting Agenda** **4/17/17**

When should involvement of the Environmental Consultant begin?

- The Design Professional should retain the Environmental Consultant when the design scope of work is being developed, typically by 30%. Have the Environmental Consultant complete the environmental survey immediately following the completion of the 30% design review, so the consultant will be supplied with the most up to date scope of work for the project. Submit the completed environmental study for completion of review, prior to the 60% design submission.
- Discuss use of DASNY Term Consultants as they are already familiar with DASNY procedures, but spread the design work out over all of our term consultants, so one firm doesn't get overwhelmed with work and the quality of the product suffers.

When is an environmental assessment/survey required?

- Whenever the project impacts an existing structure/site.
  In other words an environmental assessment/survey is required for virtually ALL projects.

What environmental hazards require an assessment/survey?

- It depends on the scope of work (see DASNY guidance - Hazardous Materials Encountered during Construction/Demolition This document covers survey/sampling requirements for Asbestos, PCB caulk, Universal & Hazardous Wastes, Lead, Mold & Petroleum Contamination):

Asbestos Survey

- Required whenever the project impacts suspect materials at an existing structure.
- If a previous survey is to be utilized as a starting point, an additional inspection will be required to ensure that all impacted materials associated with the project have been surveyed. An updated survey (that attaches the previous survey) must be developed.
- Asbestos bulk sample analyses, including Vermiculite, cellulose in ceiling tiles, NOB requirements, and the other specific recent NYSDOH ELAP guidance information should be discussed.
- Potential suspect materials that are concealed behind walls, ceilings, spandrel beams, exterior walls, foundations, etc. must be assumed asbestos containing until access is obtained and confirmatory bulk samples are collected and analyzed. Discuss project impact of consultant assuming suspect materials are positive without sample analyses confirmation. This approach may add an undue cost burden to the project, due to non-ACMs being handled and abated as ACMs. Sample analyses are preferred and result in a definitive asbestos content for the suspect materials.
- Collection of bulk samples: layered analysis for sheetrock/tape/joint compound, roofing, plaster. Wall vs. ceiling materials (separate homogeneous materials).
- Additional samples may be necessary at 60% or 100% design due to changes in the project scope of work as design progresses. Additional samples may also be necessary if scope is added during construction.

Universal/Hazardous Wastes

- Universal/Hazardous Waste: Whenever such materials are scheduled to be removed/replaced. Universal wastes consist of thermostats, fluorescent lamps, used oil, batteries, etc. Fluorescent light ballasts not labeled as PCB-free must be identified as hazardous waste.

Potential Contaminated Soil

- Discuss soil screening whenever the project impacts fill materials or is associated with a UST/AST project. Also when footings, slab on grades, grade beams, piles, or other excavation is required.

Refrigerants

- Refrigerants: Whenever units holding such materials are scheduled for replacement or removal.

Mold

- Project impacted spaces to be assessed for mold at same time of other necessary assessments (e.g. asbestos, PCB caulk, etc.) by NYS licensed mold assessor. A visual assessment along with moisture content determination is typically sufficient, unless client requests laboratory analyses.

Lead

- Lead-Based Paint: Whenever the project is taking place in "Target Housing" or a Child-Occupied Facility and will disturb painted surfaces or when there is removal or stripping of lead-based paint, a lead-based paint survey should be conducted.
- Check with the client. OPWDD or OMH may require survey and design for lead paint abatement.

When should design documents be developed?

- The initial design review submission should at least be at 60% after the environmental study review, comments and responses have been completed. The 60% design submission should include all draft DEP documents, site specific variance petitions, specs, drawings, etc. Also, include all supplemental or revised survey and assessment reports if not already submitted for review. All comments must be addressed in the 100% review submission so that the project can be signed-off.

Design

- During the survey, the consultant must be cognizant of design considerations and note any special job conditions and if any site conditions require NYS or NYC site specific asbestos variances. Insist that the environmental consultants review (QC) their design documents before submitting for review to make sure the documents are complete and comprehensive, as the design reviewer shouldn't be performing this task for the consultant.
- Design drawings should include the following: details to define the scope of work, legends, abatement notes, locations and types of materials requiring abatement, etc.
- DASNY standard specifications for asbestos, mold, universal waste, hazardous waste, etc. must be utilized. The consultant must only revise the scope of work and special job conditions sections and the specific appendix that provides the variances (if applicable).
- Abatement designs must include all presumed and assumed suspect materials until access is obtained and confirmatory bulk samples are collected and analyzed.

NYC abatement projects & DEP requirements

- For CUNY projects, discuss the DEP involvement/documentation and that the asbestos abatement design will follow NYS regulations.
- For HHC, NYC Courts, other NYC owned buildings or voluntary program within NYC where DASNY doesn't hold the contracts, discuss the DEP involvement/documentation and that the asbestos abatement design will follow NYC regulations.
- Review DEP and ATRU asbestos review procedures.
- For OMH, OPWDD, SUNY, OASAS (state operated), etc. projects where DASNY issues the construction permits, asbestos abatement design must follow NYS regulations.

DASNY DORMITORY AUTHORITY STATE OF NEW YORK	**Office of Construction** **Code Compliance Department**	**Guidance for Contaminated or Impacted Soils** **2/20/09**

A. The purpose of this internal guidance is to provide DASNY staff with guidance when suspected soil contamination or spills are encountered during the course of excavations.

B. This guidance covers petroleum and hazardous materials contaminated soils, up to and including soils that become hazardous waste as a result of spills or releases. If drums, asbestos or other hazardous debris are found, contact the Code Compliance Unit.

C. DASNY staff members may encounter petroleum spills, suspected contamination or impacted soils including "urban fill" during the course of construction work in the excavation phase. These situations usually fall into several categories:

1. A site is known beforehand to be potentially contaminated, based on knowledge of existing conditions. This could be a Phase I/Phase II report, spill history, staff knowledge or other sources. Unexpected contamination may still be encountered.

2. Petroleum product is encountered unexpectedly during excavation, i.e. soil is wet with product, fuel odors are present or rainbow sheen is visible in the excavation in standing water.

3. Stain and/or odor are encountered during excavation that are not clearly petroleum product, but may be.

D. Actions to establish and report spills, and address the issue:

1. In case C.1, the specification should have been written to address the contamination. If petroleum product ("free product") is encountered, the DEC spill hotline should be called within 2 hours of discovery, and notify the Code Compliance Unit. A tank pull is one such situation (in that case, the DEC should have been notified 30 days before.)
    a. The Regional Spill Engineer may or may not elect to visit the site; if free product is in surface or ground water, a site visit is likely. This usually occurs within a few hours.
    b. Depending on the amount of free product and water present, a vacuum truck may be required to remove contaminated water, or an on-site treatment process may be required.
    c. Petroleum contaminated soil removed from the excavation must be segregated from clean soil, and stockpiled on 6 mil polyethylene sheeting, with appropriate protective measures, or may be returned to the excavation (see discussion in Item D.2 below.)

d. Soil sampling and procedures in accordance with STARS Memo #1 would then be used for soil disposition, in conjunction with other relevant DEC regulations and guidance.
e. Water samples would also be taken for appropriate disposition of wastewater.
f. If contamination is not petroleum, other procedures need to be developed in conjunction with the DEC and the Code Compliance Unit to address the contamination.

2. In case C.2, if "Free Product" is encountered unexpectedly during excavation, and it is recognizable as petroleum product by odor, wetness, sheen on the water in the excavation, or a source such as an old fuel tank is observed, again the DEC spill hotline should be called within 2 hours of discovery, and notify the Code Compliance Unit.
   a. The Regional Spill Engineer may or may not elect to visit the site, but free product in surface or ground water usually warrants a site visit.
   b. Note: guidance formalized in the 6 NYCRR 360 – 1.15(b)(8) Solid Waste Regulations allows replacement of such soil back in the excavation or another excavation within the site exhibiting the same characteristics, without further consultation with the DEC. In some cases, this may not be appropriate and the Spill Engineer would then provide input.
   c. Soil sampling and disposition would otherwise proceed as in item D.1 above.
   d. Contaminated water would also be sampled as in item D.1.
   e. Once again, non-petroleum contamination requires additional consultation with the DEC. Examples might include perchloroethylene discovered near a former dry cleaner, coal tar by-products in or near an old manufactured gas plant (MGP) site, or debris from "urban fill". These possibilities are usually known prior to the work and planned for.

3. In case C.3, at many sites apparent soil staining and/or odor are encountered, frequently a fuel-oil or gasoline odor. Several steps can be taken to ascertain whether a "spill" exists. Call the Code Compliance Unit for assistance with this evaluation.
   a. If the soil is wet with "product", odor is pretty clearly fuel oil or gasoline and/or there is a sheen in water in the excavation, go to D.2 above. This is a reportable spill.
   b. If the soil isn't wet, put some in a jar or bucket of water and shake it; observe for sheen.
   c. Obtain a Photo-Ionization Detector (PID) organic vapor analyzer or other appropriate instrument and check for organic vapors > 10 ppm in the excavation (per DEC SPOTS #14.) The DASNY Environmental Term Consultants can provide the testing services needed.

d. If both are negative, then a "spill report" is not appropriate. If it's questionable, a call to the Regional Spill Engineer may be appropriate. In New York City such discoveries are common and discovery of old releases or staining without free product is usually not reportable. On Long Island, with its vulnerable aquifers, the Spill Engineer may prefer to report it. Each DEC Region may have sensitive aquifer or natural areas where reporting is desired. Again, the Code Compliance Unit will assist in this decision.
e. If no odor exists, the staining may be natural, or unrelated to petroleum products.
f. In any of these cases, if soil is to be disposed off site, soil samples may be appropriate per STARS Memo #1.

E. Follow-up on soils: once STARS Memo #1 analyses have been performed the soil can generally be classified, in coordination with the Code Compliance Unit and DEC, if required. Other standards such as 6 NYCRR 375 may also apply or will be used as guidance, but in general the soil will be found to be in one of three (3) conditions:

1. Hazardous Waste : if the "Maximum Possible Contaminant Concentration" (MPCC) by calculation, then a TCLP test is required to confirm this; or if contamination levels exceed those of 6 NYCRR 370 defining hazardous waste, then the soil must be disposed as Hazardous Waste. A new EPA ID No. is needed if the facility doesn't have one or doesn't wish to be the "generator." The soil must go to a RCRA permitted TSDF facility.

2. The soil may be non-hazardous, petroleum contaminated soil. In that case, it may go to any NYS-permitted landfill that accepts such soil, or another permitted location.

3. The soil may be "Clean", not requiring additional action.

DASNY DORMITORY AUTHORITY STATE OF NEW YORK	**Office of Construction** **Code Compliance Department**	**Air Emission Source Permits for DASNY Projects** **8/25/11**

1. General Requirements: *Any air emission source to be built or modified at any facility in New York State must be evaluated to determine if an air permit is required*, or if an exemption from permitting must be obtained, to be incorporated into the facility permit prior to the start of construction. The facility itself typically has, or will be required to have, a permit covering all of its sources. The start of construction is usually identified as the installation of foundations where the source will be installed, or the ordering of the equipment that is the source of air emissions. *It is essential to assess permit requirements in the early design stages of a project, since this may be critical to construction schedules.*

   Some emission sources may be "exempt", such as kitchen hoods, hot water heaters, or ventilation fans that are part of a large campus or institution; but these may still be required to be identified in a facility-wide air permit. A small boiler or generator may even require a specific permit or approval, as described below. The primary emissions of concern include particulate matter (PM), nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO2), and volatile organic compounds (VOC); other limited contaminants include asbestos fibers and lead. Specific requirements follow. Combustion sources in particular, such as boilers or emergency generators, are strictly regulated. A boiler permitting flowchart is attached for guidance.

2. Rules and Regulations:
   a. Title 6, New York Codes Rules and regulations, Parts 200, 201, 227, and 231, among others.
   b. Title 40, Code of Federal regulations, Parts 50, 51, 60 and 61, among others
   c. Title 15, Rules of the City of NY; or other local jurisdictions (e.g., Rockland and Westchester Co.)

3. Definitions:
   a. An Emission source ('source') is defined by the U.S. Environmental Protection Agency (the EPA) and the New York State Department of Environmental Conservation (the DEC) as "any apparatus, contrivance or machine capable of causing emission of any air contaminant to the outdoor atmosphere".
   b. An air contaminant is any "chemical, dust, fume, gas, mist, odor, smoke, vapor, pollen or any combination thereof." 'Source' and 'Contaminant' are very broadly interpreted by DEC and EPA.
   c. A Facility is a group of emission sources on contiguous or adjacent properties, under common ownership or control. A hospital or college campus consisting of many separate buildings would generally be a "facility", even if streets separate some of the buildings or sources.

4. Source Permits: Some examples of sources installed on DASNY projects include "Combustion sources", such as boilers, emergency generators, gas-fired heaters or hot water heaters; and coating or painting operations. Many of these are exempt from permitting, but some are not, and still others require controls; either for a particular unit, or for the facility overall. Facility staff must be contacted to assess the requirements of the facility overall. Code Compliance staff can also look up facility status.
   a. Boilers are the primary examples of emission sources needing permits on DASNY projects.

- If smaller than 10 million BTUs per hour heat input (often stated as 10 mmBTU/hr) then the boiler will not typically require a DEC or EPA permit, but still may require a permit or certificate from the code enforcement official.
- In NYC, units > 350,000 BTU/hr typically require certificates. For wood or coal, boilers ≥ 1 mmBTU/hr require permits.
- Even a small boiler must still be reviewed in the context of the entire facility; if an entire facility has a limit on NOx emissions for example, as is common in NY City, then all sources must be taken into account. In that case, even facility gas-fired hot water heater emissions must be counted.

b. Emergency Generators are technically "exempt" from NYS permitting, but are still required to meet EPA emission standards – the manufacturers are required to meet these standards, limiting NOx, PM, and other emissions. Emergency generators are limited to 500 hours per year of operation, and may not be used to reduce "peak" energy costs at times of high demand. Hours must be tracked to demonstrate that the units qualify for the exemption, including hours of operation for routine testing. Many EPA-required permit conditions now apply, even though they are NYS "exempt".

5. DEC Facility Permits – These permits, when required, govern air emissions at the entire facility. It may be a "State Facility Permit" or a "Title V Permit" in NY. These permits fulfill both State and Federal air quality requirements, and involve monitoring of emissions from all sources; exempt sources are also identified and emissions may be monitored. It is important to discuss the details of the Facility Permit with the Facility contacts. This should be identified as part of the design criteria, at the start of the project design phase. It may be critical to the project construction schedule.

6. Specific Sources and Controls or Authorizations:
   a. Emergency Generators. The DEC defines "Emergency Generators" as those providing electricity, heat and, fire protection services (such as diesel fire pumps) when normal sources of power are not available. Generating power for a remote site where "line service" is not available would not be emergency power. As noted above, these sources must still meet EPA and DEC emission limits, and be identified in the "Facility Permit", if the facility has one. Prior to ordering the equipment, the Design Professional must assess the facility permit status, and meet with the facility representatives to assess potential impacts. Specific requirements for generators according to size are found in the reference DEC regulations.
   b. Boilers. As noted above, boilers generally require State and local permits or authorizations, and may also be EPA-regulated. Permit planning should commence early in the design review process.

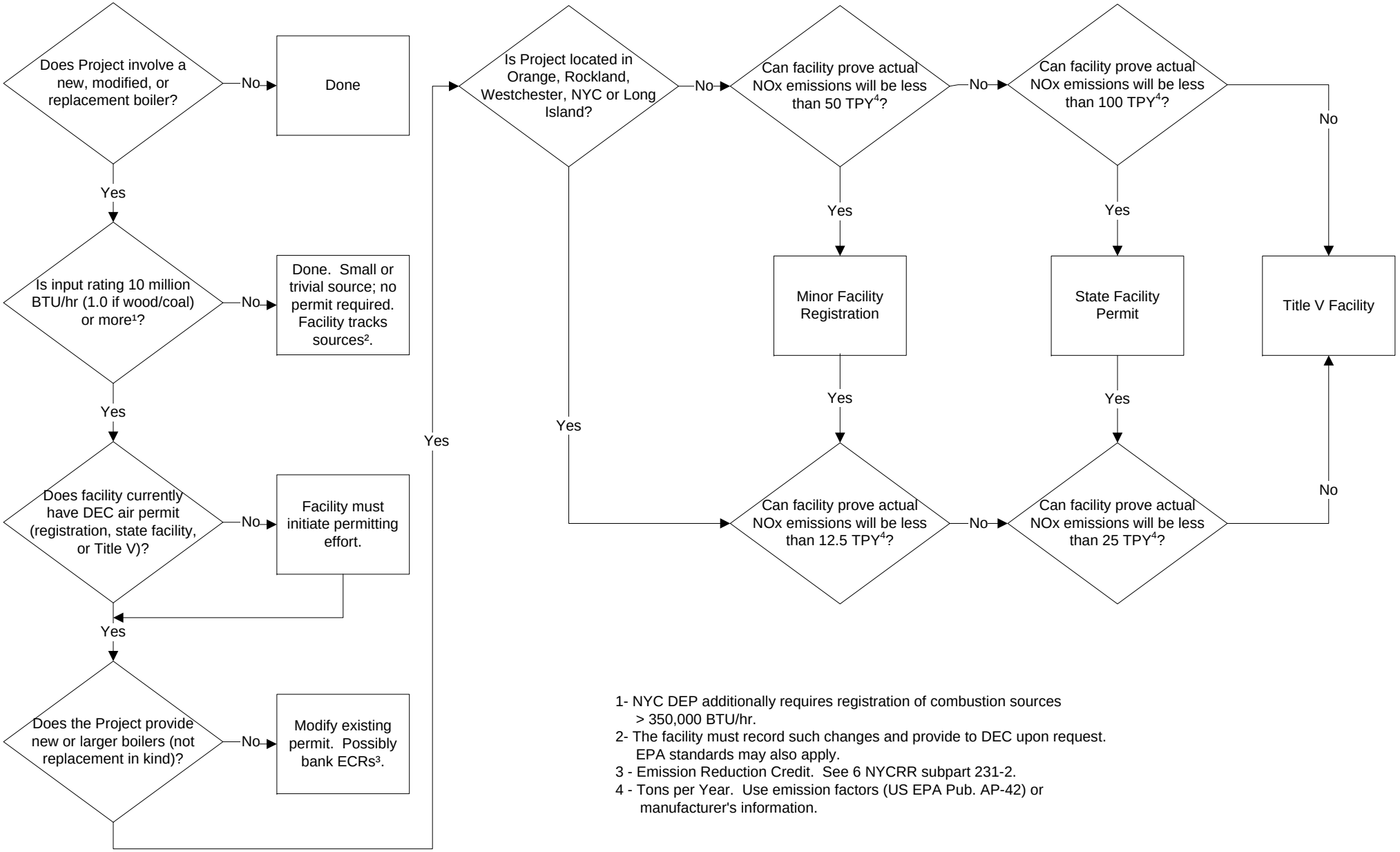
7. NYC DEP Permits – Separate permits are required in NY City for Combustion Sources (e.g. generators and boilers), as well as Rockland and Westchester Counties as noted above.
   a. Any combustion source >350,000 BTU/hr requires a registration with the NYC DEP. If fuel-oil fired, the DOB also requires a registration for the tank, independent of the NYS DEC registration.

b. Any combustion source >2.8 million BTU/hr requires a DEP Certificate to Operate (CTO). The CTO takes significantly more information, and more time to process by DEP. Forms and details are found at http://www.ci.nyc.ny.us/html/dep/html/air/index.shtml

Dormitory Authority State of New York
Code Compliance Department

Air Permitting Flow Chart
Projects Involving Boilers

Internal Screening Use Only



1- NYC DEP additionally requires registration of combustion sources > 350,000 BTU/hr.
2- The facility must record such changes and provide to DEC upon request. EPA standards may also apply.
3 - Emission Reduction Credit. See 6 NYCRR subpart 231-2.
4 - Tons per Year. Use emission factors (US EPA Pub. AP-42) or manufacturer's information.

8/15/11

DASNY DORMITORY AUTHORITY STATE OF NEW YORK	**Office of Construction** **Code Compliance Department**	**Information on Vermiculite and Asbestos** **10/31/14**

History

The majority of the world's supply of vermiculite came from the mine located near Libby, Montana, that was closed in 1990 due to high levels of asbestos contamination. Since there is no mechanism to visually distinguish between vermiculite from the Libby mine versus other mines, as well as evidence of inaccuracies by analytical methods used to rule out asbestos contamination, EPA's continued guidance is to assume this material may be contaminated with asbestos. Accordingly, NYS Industrial Code Rule 56 lists vermiculite insulation as a suspect miscellaneous asbestos-containing material.

Typical uses of vermiculite included attic insulation and block fill insulation. Also, vermiculite was used as a component in a variety of other products (e.g. plasters, fireproofing, pipe insulations), and is still used today in some of these products.

New Installations

Regarding new installations of materials that contain vermiculite (e.g. fireproofing, plasters, various insulations), manufacturer information must be obtained (federally compliant MSDS) that indicates no asbestos or less than 1% asbestos in the product. Please note that as per OSHA regulations, all hazardous constituents (including carcinogens) must be reported down to concentrations of 0.10% on the manufacturer's MSDS for the product. **If the MSDS does not list asbestos, the product can be regarded as non-ACM.**

Provided the building owner retains the MSDS for the installed products, the newly installed material that contains vermiculite will not have to be bulk sampled and analyzed for future renovations or demolitions, as NYS DOL accepts manufacturer documentation such as an MSDS in lieu of bulk sample analysis. For future renovation or demolition work, the MSDS must be provided to the firm performing the required asbestos survey, for inclusion with their asbestos survey report.

Existing Materials

Please note that for existing materials, even though ACM fireproofing and plasters were banned in the mid 1970s, these materials may have been installed after that date which contain asbestos contaminated vermiculite.

Please note that as per NYS DOH Environmental Laboratory Approval Program (ELAP), existing vermiculite containing materials used for thermal systems insulation, surfacing materials and other miscellaneous materials (including but not limited to: surfacing material, plaster, pipe lagging, troweled-on fireproofing and sprayed-on fireproofing) that contain vermiculite at concentrations less than 10% should undergo bulk sample analysis.

Materials that contain vermiculite at concentrations greater than or equal to 10% must be identified and handled as ACM, except for sprayed-on fireproofing (SOF-V) which must be analyzed as per approved ELAP methodologies. Also, existing vermiculite attic fill, block fill and other loose bulk vermiculite materials must be handled as ACM.

Here is pertinent text from the recently revised NYS DOH ELAP guidance on vermiculite materials:

"You are reminded that this interpretation of vermiculite-related guidance does not prohibit the use or application of vermiculite materials, but instead applies during renovation and/or demolishing of structures when the origin of the vermiculite material is unknown. Note that NYS Industrial Code Rule 56-5.1(c) allows for other documentation, such as manufacturer documentation that adequately documents that a material is non-ACM (e.g., MSDS compliant with all pertinent federal regulations through EPA and Occupational Safety and Health Administration (OSHA)), in lieu of bulk sample analysis. This documentation, along with any available documentation indicating the origin of the vermiculite material being used, should be shared with the building owner(s) for future reference and consideration during renovation and/or demolishing that may be required at their building in order to avoid future concerns."

ELAP ANALYSIS UPDATE

On July 22, 2014 NYS DOH Environmental Laboratory Approval Program (ELAP) announced the approval of two new analysis methods for determining asbestos content in sprayed-on fireproofing containing vermiculite (SOF-V). If during an asbestos inspection, bulk samples of sprayed-on fireproofing are collected and found to contain vermiculite in any concentration, bulk samples of the material must be further analyzed by one of the approved methods for SOF-V to determine that the suspect material is not an ACM.

The two methods are: RJ Lee method LAB.055.1 & DOH developed method 198.8. Use of either analysis methodology is acceptable to determine asbestos content in SOF-V. Laboratory pricing for use of these new analysis methods has been established with DASNY procurement.

As a reminder, all loose fill vermiculite attic insulation, block fill and other loose vermiculite materials are still to be identified and handled as ACM, as no approved ELAP analysis methodology exists for these materials. Please note that consistent with DASNY's previous approach, materials found to contain vermiculite in concentrations greater than 10% other than SOF-V (plasters, pipe insulations, troweled-on fireproofing, etc.), should continue to be identified and handled as ACM. Nothing changes with the approach for these materials.

A. Consultant shall review the site history, including building age, asbestos project files and discussions with custodians, for renovations including removal and repair of caulks. Sampling of caulk is not required for buildings built after 1980, or where a subject caulk was removed and replaced after 1980.

B. Consultant shall inspect the project area to determine the location, quantity, condition and accessibility of caulks. At a minimum, individuals performing the inspection shall be certified NYS Asbestos Inspectors.

C. Consultant shall note the floor of the building, room number, location (e.g., interior, exterior, window frame, joint, etc.), color and use (e.g., caulk or glazing compound) of each caulk homogeneous material.

D. Consultant shall provide DASNY with representative PCB analytic results for each caulk or glazing compound. Representative samples shall be collected and analyzed as follows:

1. Identity of each homogeneous material based upon:
   a. Floor and section of the building (e.g. west wing, 6^{th} floor)
   b. Color of the caulk
   c. Location (e.g., interior, exterior, window frame, etc.)
   d. Age of building (i.e., sections of buildings constructed at different times must be treated as separate homogeneous materials).
   e. Use (caulk or glazing compound)
   f. If an area has been repaired or renovated, it must be treated as a separate homogeneous material, except as noted in item 1 above.

2. The Consultant shall collect three (3) sub-samples of each homogeneous material in order to form a composite sample of approximately 10 grams. Each sub-sample shall be placed in a separate container to submit to the laboratory.

3. The Laboratory shall create one (1) composite sample of each homogeneous material from equal mass portions ($\pm$ 5%) of the three (3) sub-samples for extraction via an EPA method such as methods 3540, 3541 or 3550, and analysis via EPA Method 8082. Results for Arochlors listed below will be reported based on a PCB detection limit of 1 ppm.
   (1) Arochlor 1016
   (2) Arochlor 1221
   (3) Arochlor 1232
   (4) Arochlor 1242
   (5) Arochlor 1248
   (6) Arochlor 1254
   (7) Arochlor 1260

4. The Consultant shall report the analytic results and characterization of each homogenous material based upon the analytical results and EPA's regulatory threshold (50 ppm). Reports must contain:
   a. Cover Sheet with all project specific information
   b. Detailed written summary
   c. Complete Summary table describing each material sampled, sample number, floor and location, total PCB concentration in PPM, comments)
   d. Lab analytical reports
   e. Chain of custody documents
   f. Lab certifications
   g. Sample location sketches

DASNY DORMITORY AUTHORITY STATE OF NEW YORK	**Office of Construction** **Code Compliance Department**	**Hazardous Materials Encountered During Construction/Demolition** **4/16/14**

A. ASBESTOS

1. Follow DASNY Asbestos Abatement Procedures.
2. No construction date limitations for asbestos surveys, as many ACMs may still be purchased and installed today. See Asbestos Bans document.
3. AHERA Standards to be used for surveys.
4. NOB'S (floor tile, roofing materials, mastics, etc.): 2 samples must be analyzed by TEM analysis to confirm non-ACM.
5. Ceiling Tiles with cellulose – 2 samples must be analyzed using NOB analyses to confirm non-ACM .
6. Existing materials with Vermiculite (FP, plasters, etc.) – See Information on Vermicuite and Asbestos regarding current interpretation and DASNY policy.
7. Allow for analysis and report turnaround time. Plan ahead; fast turnaround time will incur premium cost.
8. Provide an accurate scope of work to asbestos consultants to get an accurate survey and no change orders. Changes in scope requires additional input from inspection firm regarding impact to additional ACMs
9. Consideration should be given to utilization of DASNY's Asbestos Term Consultants, who are familiar with DASNY's procedures and for whom rates and term contracts have been established.
   a. Only use firms identified as "Design Firms" for design work.
10. Use the DASNY Standard Asbestos Removal Specification.

B. PCB CAULK

1. Caulk and glazing compounds must be sampled for PCBs.
2. Follow the Caulk Sampling & Analysis Guide for PCBs.
3. PCBs are known to be common in caulk and glazing compounds pre-1980.
4. Use the same survey/inspection for PCB caulk as asbestos to minimize cost.
5. Analysis time is longer than ACM.
6. Cost is typically $60-100, but can composite the 3 samples.
7. Handling and disposal of PCBs (>50 ppm)in New York State is as Hazardous Waste.
8. PCB caulk can be removed from building materials before their non-regulated disposal thereby reducing disposal cost. However, EPA requires use of NACE #2 visual standard for inspection of cleanliness of non-porous (metal) surfaces, which requires bare metal results similar to sandblasting.
9. If project impacts to soil adjacent to structure with PCB caulk, soil sampling necessary in-situ to determine Waste disposal and PPE requirements.
10. If both ACM and PCBs are present, the DASNY asbestos spec must be used for removal, AND the DASNY PCB caulk spec for disposal.
11. If caulks or glazing compounds contain PCBs, use DASNY Standard Specification Non-Liquid PCB Material Removal.

C. UNIVERSAL & HAZARDOUS WASTES

1. Obtain inventory of Universal Wastes (i.e. Fluorescent Lamps, Mercury Switches/thermostats, etc.) Note: New DEC recycling law in effect requires removed mercury thermostats to be recycled.
2. Obtain inventory of Hazardous Materials/Wastes (i.e. PCB Light Ballasts, contaminated soil that exceeds hazardous waste criteria.)
3. Universal and Hazardous Wastes must be labeled and handled per DASNY Universal and Hazardous Waste Specs and DEC Regs.
4. Tanks and spills from tanks can become hazardous waste based on soil or liquid waste analyses. See Petroleum Contamination below.
5. Obtain site-specific information from SEQR Report. This may need additional data for disposal facilities. OBTAIN IT WELL AHEAD OF TIME- to avoid BIG change orders.
6. Consult with QA/Code Compliance Unit to assess handling and disposal options early in design.
7. Use the DASNY Standard Specification Identification and Disposal of Hazardous Waste or Removal and Disposal of Universal Waste and Fluorescent Lamps.

D. LEAD ABATEMENT – ONLY IF REQUIRED

1. Incidental presence of lead based paint does NOT necessarily require survey or lead abatement work. Ask QA/Code Compliance before you obtain a survey to avoid unnecessary costs.
2. Obtain a survey if the scope of work involves a direct impact to lead surfaces (i.e. stripping/scraping lead paint).
3. Obtain a survey to meet HUD Standards, if required (i.e. child-occupied facility.)
4. Lead contaminated waste or soil must be tested for disposal using the TCLP test.
5. If hazardous waste, see the Hazardous Waste Spec and handle materials as required.
6. If non-hazardous, material can be disposed as any C&D Debris, at permitted/ approved facility.
7. If lead abatement is required, use the DASNY Standard Lead Abatement Specification.

E. MOLD

1. Obtain a survey if the scope of work impacts suspected mold contaminated surfaces and materials.
2. Air samples are generally not used as part of a survey, since mold spores are commonly present in all air samples, indoor or outdoor, and are generally not conclusive.

3. A visual assessment along with moisture content determination is sufficient, unless client requests laboratory analyses.
4. Tape press, swabs, and other samples can be used if necessary to rule out molds or determine if materials are contaminated, if visual evidence is not conclusive.
5. Use the DASNY Standard Mold Remediation Specification.

F. PETROLEUM CONTAMINATION

1. Determine if there are known petroleum tanks or spills that will be impacted by the scope of work.
2. If tanks and/or spills are known to be present, review the SEQR reports or investigations performed to characterize the site.
3. Use DEC Petroleum-Contaminated Soil Guidance.
4. Consult with QA/Code compliance if there is an unexpected discovery of tanks or suspected contamination. DEC databases can be reviewed to determine if contamination is from a prior, known spill.
5. Incidentally discovered petroleum contamination in many cases can be returned to the excavation, or re-used on-site. Call QA/Code Compliance to assess options.
6. Remedial and/or disposal options are affected by current DEC knowledge of a spill and its location. Different DEC Regions have different sensitivities and policies.
7. Follow the Guidance for Contaminated or Impacted Soils.

POTENTIAL ISSUES TO BE AWARE OF DURING CONSTRUCTION

G. SMOKE DETECTORS

1. Can be disposed of as part of normal municipal solid waste stream. Do not accumulate units on worksite, puncture or dismantle units prior to disposal.

H. HIGH PRESSURE SPRAY POLYURETHENE FOAM (SPF)

1. Negative pressurized containment required. Negative pressure HEPA ventilation required if exhaust location accessible. PPE required for workers including use of supplied air respirators during application. Installer responsible for securing components and equipment on-site. Installer responsible for disposal of waste generated as part of application.