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EPA Docket Center
Environmental Radiation Protection
Standards for Nuclear Power Operations
Advance Notice of Proposed Rulemaking Docket
Docket ID No. EPA–HQ–OAR–2013–0689
1200 Pennsylvania Avenue Northwest.
Washington, DC 20460

Gentlemen:

Subject: Docket ID No. EPA–HQ–OAR–2013–0689 - Kennecott Uranium Company Comments on the *Advance Notice of Proposed Rulemaking Environmental Radiation Protection Standards for Nuclear Power Operations Federal Register / Volume 79, Number 23 / Tuesday, February 4, 2014 / Proposed Rules*

Kennecott Uranium Company is a uranium recovery licensee and the operator and manager of the Sweetwater Uranium Project which contains one of the three (3) remaining conventional uranium mills in the United States and is located in the Great Divide Basin in Sweetwater County, Wyoming. Kennecott Uranium Company has reviewed the ***Advance Notice of Proposed Rulemaking Environmental Radiation Protection Standards for Nuclear Power Operations*** and has the following comments:

Applicability of the Environmental Radiation Protection Standards for Nuclear Power Operations to Licensed Uranium Recovery Operations

Section 161(b) of the Atomic Energy Act of 1954 (AEA) authorized the Atomic Energy Commission (AEC) to ‘‘establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property [42 U.S.C. 2201(b) (1958)].” On May 10, 1974, the Agency published an advance notice of its intent to propose standards under this authority for the uranium fuel cycle.

The Agency promulgated a regulation containing two main provisions: A dose limit to members of the public, and a radionuclide release limit to the environment. The provision specified in 40 CFR 190.10(a) limits the annual dose to any member of the public from exposures to planned releases from uranium fuel cycle facilities to 25 millirem (mrem) to the whole body, 75 mrem to the thyroid, and 25 mrem to any other organ. Additionally, the provision specified in 40 CFR 190.10(b) limits the total quantity of radioactive material releases for the entire uranium fuel cycle, per gigawatt-year of electrical energy produced, to less than 50,000 curies of krypton-85, 5 millicuries of iodine-129 and 0.5 millicuries combined of plutonium-239 and other alpha-emitting transuranic radionuclides with half-lives greater than one year. This standard does not include radon or its decay products.

The uranium fuel cycle is defined as the operations of milling of uranium ore, chemical conversion of uranium, isotopic enrichment of uranium, fabrication of uranium fuel, generation of electricity by a light-water-cooled nuclear power plant using uranium fuel, and reprocessing of spent uranium fuel to the extent that these directly support the production of electrical power for public use utilizing nuclear energy, but excludes mining operations, operations at waste disposal sites, transportation of any radioactive material in support of these operations, and the reuse of recovered non-uranium special nuclear and by-product materials from the cycle.

40 CFR 190.10(a), the dose limit of 25 millirem (mrem) to the whole body, 75 mrem to the thyroid, and 25 mrem to any other organ applies to all uranium fuel cycle facilities including licensed uranium recovery facilities, both conventional uranium mills and uranium in-situ recovery operations. This regulation does not apply to uranium mining which is exempt from licensing under the Atomic Energy Act (AEA) as specified in 10 CFR Part 40.13(b) which states:

(b) Any person is exempt from the regulations in this part and from the requirements for a license set forth in section 62 of the act to the extent that such person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material; provided, that, except as authorized in a specific license, such person shall not refine or process such ore.

Need for the Regulation

Kennecott Uranium Company believes that the regulation should be eliminated for the following reasons:

- The regulation was finalized on January 13, 1977 and was predicated upon the following events expected to occur at that time:
  - The EPA projected that well over 300,000 megawatts (300 gigawatts) of nuclear electric generating capacity would exist within the next twenty years with a growth in nuclear energy from 8% of nation's energy mix to 40 – 60%.
  - The regulation was also promulgated based upon a belief in the future availability of commercial nuclear reprocessing in the United States and the existence of a repository for final disposition for spent nuclear fuel and high-level radioactive wastes. Fuel reprocessing facilities represented the largest single predicted potential source of environmental contamination in the fuel cycle in 1977.
- None of the above described events predicted in 1977 have occurred.
  - Nuclear electric generation only accounts for 19.4% (less than half of the minimum projection in 1977, and more than three times less than the maximum projection) of the electrical energy generated in the United States in 2013 (Nuclear Energy Institute (NEI) - http://www.nei.org/Knowledge-Center/Nuclear-Statistics/US-Nuclear-Power-Plants/US-Nuclear-Generating-Statistics.
  - There is no commercial reprocessing of spent nuclear fuel in the United States.
  - There is no operating repository for final disposition for spent nuclear fuel and high-level radioactive wastes in the United States.

- Given the present (2014) absence of the compelling reasons for promulgation of this rule in 1977, there is no present reason for this rule to exist. In addition, adequate regulation of the nuclear fuel cycle in general and the uranium recovery industry in particular already exists and is embodied in the following other regulations:
  - ***10 CFR § 20.1301 Dose limits for individual members of the public*** which states:
    - *(a) Each licensee shall conduct operations so that -*
      (1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 mSv) in a year, exclusive of the dose contributions from background radiation, from any administration the individual has received, from exposure to individuals administered radioactive material and released under § 35.75, from voluntary participation in medical research programs, and from the licensee's disposal of radioactive material into sanitary sewerage in accordance with § 20.2003,
    - This dose limit includes doses from radon which are not included in 40 CFR Part 190 making it in effect more inclusive and more stringent that 40 CFR Part 190.
  - ***10 CFR § 20.1101 Radiation protection programs*** which states in part:
    - *(d) To implement the ALARA requirements of § 20.1101 (b), and notwithstanding the requirements in § 20.1301 of this part, a constraint on air emissions of radioactive material to the environment, excluding Radon-222 and its daughters, shall be*

established by licensees other than those subject to § 50.34a, such that the individual member of the public likely to receive the highest dose will not be expected to receive a total effective dose equivalent in excess of 10 mrem (0.1 mSv) per year from these emissions. If a licensee subject to this requirement exceeds this dose constraint, the licensee shall report the exceedance as provided in § 20.2203 and promptly take appropriate corrective action to ensure against recurrence.

- This limits doses from airborne particulates to 10 millirems per year from licensed facilities. It was incorporated in 10 CFR Part 20 following the rescission of 40 CFR Part 61 Subpart I on December 30, 1996.

- ***10 CFR § 20.1101 Radiation protection programs*** which states in part:
  - *(b) The licensee shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).*
  - This not only compels the licensee to meet the applicable dose limits but in addition assures the doses are As Low As Reasonably Achievable (ALARA). This is a more stringent standard than the dose limit alone.
- ***10 CFR § 20.1402 Radiological criteria for unrestricted use*** which states in part:
  - *A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal.*
  - This regulation applies to reclamation/remediation at all licensed sites and effectively addresses post operational doses to members of the public.
- ***10 CFR Part 40 Appendix A Criterion 6*** which states:
  - *(6) The design requirements in this criterion for longevity and control of radon releases apply to any portion of a licensed and/or disposal site unless such portion contains a concentration of radium in land, averaged over areas of 100 square meters, which, as a result of byproduct material, does not exceed the background level by more than: (i) 5 picocuries per gram (pCi/g) of radium-226, or, in the case of thorium byproduct material, radium-228, averaged over the first 15 centimeters (cm) below the surface, and (ii) 15 pCi/g of radium-226, or, in the case of thorium byproduct material, radium-228, averaged over 15-cm thick layers more than 15 cm below the surface.*

    Byproduct material containing concentrations of radionuclides other than radium in soil, and surface activity on remaining structures, must not result in a total effective dose equivalent (TEDE) exceeding the dose from cleanup of radium contaminated soil to the above standard (benchmark dose), and must be at levels which are as low as is reasonably achievable. If more than one residual radionuclide ispresent in the same 100-square-meter area, the sum of the ratios for each radionuclide of concentration present to the concentration limit will not exceed "1" (unity). A calculation of the potential peak annual TEDE within 1000 years to the average member of the critical group that would result from applying the radium standard (not including radon) on the site must be submitted for approval. The use of decommissioning plans with benchmark doses which exceed 100 mrem/yr, before application of ALARA, requires the approval of the Commission after consideration of the recommendation of the NRC staff. This requirement for dose criteria does not apply to sites that have decommissioning plans for soil and structures approved before June 11, 1999.

- This sets the standard for remediation for licensed uranium recovery sites for radium and other radionuclides in surface soils. This requirement is a conforming regulation to 40 CFR Part 192.

- ***10 CFR Part 40 Appendix A Criterion 6*** also states:
  - *—(1) In disposing of waste byproduct material, licensees shall place an earthen cover (or approved alternative) over tailings or wastes at the end of milling operations and shall close the waste disposal area in accordance with a design [1] which provides reasonable assurance of control of radiological hazards to (i) be effective for 1,000 years, to the extent reasonably achievable, and, in any case, for at least 200 years, and (ii) limit releases of radon-222 from uranium byproduct materials, and radon-220 from thorium byproduct materials, to the atmosphere so as not to exceed an average[2] release rate of 20 picocuries per square meter per second (pCi/m^{2}s) to the extent practicable throughout the effective design life determined pursuant to (1)(i) of this Criterion.*
  - This limits radon emissions from reclaimed licensed uranium recovery sites. This requirement is a conforming regulation to 40 CFR Part 192. While 10 CFR Part 190 does not include radon or its progeny, this criterion forces licensees to construct a strong and durable cover over the tailings, limiting exposure and distribution of the tailings in the environment via erosion.

In conclusion, given the current status of the nuclear industry in the United States versus predictions made when the regulation was promulgated in 1977 and given the scope and nature of other existing regulations, Kennecott Uranium Company believes that this regulation is no longer required.

However, should the Agency decide to maintain the regulation, Kennecott Uranium Company has the following comments regarding it, in direct response to some of the questions posed by the Agency in the ***Advanced Notice of Proposed Rulemaking*** for which the Agency specifically requested comments:

A. Issue 1—Consideration of a Risk Limit To Protect Individuals. Should the Agency express its limits for the purpose of this regulation in terms of radiation risk or radiation dose?

Risk from radiation exposure is directly based upon dose. Currently doses are used to determine compliance in existing regulations such as 10 *CFR § 20.1301 Dose limits for individual members of the public, 10 CFR § 20.1101 Radiation protection programs,* and *10 CFR § 20.1402 Radiological criteria for unrestricted use.* In addition, current modeling codes such as RESRAD, MILDOS and similar codes provide results in units of dose. Continued use of dose would be simpler, create less problems for licensees and simplify any required transitioning to revised regulations. .

B. Issue 2—Updated Dose Methodology (Dosimetry). How should the Agency update the radiation dosimetry methodology incorporated in the standard?

Specifically, the Agency asks:

a. *If a dose standard is desired, how should the Agency take account of updated scientific information and methods related to radiation dose—such as the concept of committed effective dose?*

A dose standard is desired. The allowable dose is determined by the risk posed by the dose. The risks from radiation exposure have been thoroughly studied and are known. The risk from exposure is determined by the risk model employed. The current risk model used as the basis for regulation and radiation protection in the United States is the Linear No Threshold (LNT) model that assumes that for each incremental amount of exposure above zero there is a proportional amount of risk.

This model is not accepted worldwide. Included in Appendix 1 is a letter entitled *REPORT OF THE FRENCH ACADEMY OF SCIENCES, "THE DOSE-EFFECT RELATIONSHIP AND ESTIMATING THE CARCINOGENIC EFFECTS OF LOW DOSES OF IONIZING RADIATION* prepared by the Advisory Committee on Nuclear Waste. This letter discusses the French Academy of Sciences Report stating:

The French Academy report, based on current data, raises doubts about the validity of using the LNT theory to estimate carcinogenic risks at doses less than 10 rem (< 100 mSv) and is even more skeptical of such estimates at doses less than 1 rem (< 10 mSv).

Kennecott Uranium Company requests that the Agency consider new data including information from the French Academy of Sciences that is showing that Linear No Threshold (LNT) may not be valid at low doses such as those that might be received by a member of the general public from a licensed fuel cycle facility including a licensed uranium recovery facility.

In addition, Kennecott Uranium Company requests that the agency consider the following information from the United States that demonstrates the low risks form radiation exposure that would be applicable to radiation from any source within the nuclear fuel cycle:

- *Nuclear shipyard worker study (1980–1988): a large cohort exposed to low-dose-rate gamma radiation Sponsler, R and Cameron, J.R, 2005 - Int. J. Low Radiation, Vol. 1, No. 4, 2005*
    - The Abstract states: *This paper is a summary of the 1991 Final Report of the Nuclear Shipyard Worker Study (NSWS), a very comprehensive study of occupational radiation exposure in the US. The NSWS compared three cohorts: a high-dose cohort of 27,872 nuclear workers, a low dose cohort of 10,348 workers, and a control cohort of 32,510 unexposed shipyard workers. The cohorts were matched by ages and job categories. Although the NSWS was designed to search for adverse effects of occupational low dose-rate gamma radiation, few risks were found. The high-dose workers demonstrated significantly lower circulatory, respiratory, and all-cause mortality than did unexposed workers. Mortality from all cancers combined was also lower in the exposed cohort.*
    - This paper included in Appendix 2 examines a large cohort of workers exposed to low dose gamma radiation and concludes that the exposed workers demonstrated lower mortality than unexposed workers. This undermines the Linear No Threshold (LNT) model and the assumption that for each incremental amount of exposure there is an associated incremental risk.
- *Integrated Molecular Analysis Indicates Undetectable DNA Damage in Mice after Continuous Irradiation at ~400-fold Natural Background Radiation Olipitz, W et al 2012 ENVIRONMENTAL HEALTH PERSPECTIVES*
    - This paper concludes, *"Exposure to radiation is inevitable. Here, we have assessed the impact of long-term low dose-rate radiation on genomic stability using several highly sensitive end points for DNA damage and DNA damage responses. Using some of the most sensitive techniques available, low dose-rate radiation (approximately 400-fold natural background radiation) over five weeks, does not impact DNA base lesion levels, micronuclei formation, HR frequency or expression of DNA damage response genes.* "
    - This paper included in Appendix 3 presents detailed research that examines potential damage on the molecular level in cells from radiation and again casts doubt upon the basic assumptions of LNT.

Kennecott Uranium Company requests that the Agency consider the following papers that are specific to the licensed uranium recovery industry that show the inherent low risks related to radiation from that portion of the nuclear fuel cycle:

- *Mortality among a cohort of uranium mill workers: an update Pinkerton, L.E., et al 2003 Occupational and Environmental Medicine 2004;61:57–64*
    - This paper concludes, "*Mortality from all causes was less than expected, which is largely accounted for by fewer deaths from heart disease than expected. Mortality from all malignant neoplasms was also less than expected."*
    - This paper included in Appendix 4 examines a cohort of 1484 uranium mill workers who would comprise a group subject to exposures higher than members of the general public.

- *Cancer and Noncancer Mortality in Populations Living Near Uranium and Vanadium Mining and Milling Operations in Montrose County, Colorado, 1950-2000, Boice, J.D. et al 2007 Radial. Res. 167.711-726*
    - This paper concludes, "*Between 1950 and 2000, a total or 1,877 cancer deaths occurred in the population residing in Montrose County, compared with 1,903 expected based on general population rates for Colorado (SMRn • 0.99) there were 11,837 cancer deaths in the five comparison counties during the same 51-year period compared with 12,135 expected (SMRco 0.98). There was no difference between the total cancer mortality rates in Montrose County and those in the comparison counties (RR = 1.01; 95% CI 0.96-1.06)."*
    - This paper included in Appendix 5 discusses mortality among members of the general public/residents in Montrose County, Colorado the home of the Uravan Uranium Mill and concludes that there was no difference in cancer mortality between Montrose County and its neighbors.
- *Cancer mortality in a Texas county with prior uranium mining and milling activities, 1950–2001 Boice, J.D., et al 2003 Journal Radiological Protection **23** (2003) 247–262*
    - This paper concludes, "*Overall, 1223 cancer deaths occurred in the population residing in Karnes County from 1950 to 2001 compared with 1392 expected based on general population rates for the US. There were 3857 cancer deaths in the four control counties during the same 52 year period compared with 4389 expected. There was no difference between the total cancer mortality rates in Karnes County and those in the control counties (RR = 1.0; 95% confidence interval 0.9–1.1). There were no significant increases in Karnes County for any cancer when comparisons were made with the US population, the State of Texas or the control counties. In particular, deaths due to cancers of the lung, bone, liver and kidney were not more frequent in Karnes County than in the control counties. These are the cancers of a priori interest given that uranium might be expected to concentrate more in these tissues than in others. Further, any radium intake would deposit primarily in the bone and radon progeny primarily in the lung. Deaths from all cancers combined also were not increased in Karnes County and the RRs of cancer mortality in Karnes County before and in the early years of operations (1950–64), shortly after the uranium activities began (1965–79) and in two later time periods (1980–89, 1990–2001) were similar, 1.0, 0.9, 1.1 and 1.0, respectively. No unusual patterns of cancer mortality could be seen in Karnes County over a period of 50 years, suggesting that the uranium mining and milling operations had not increased cancer rates among residents*."
    - Karnes County, Texas hosted three (3) uranium mills being the Deweeseville (Falls City) Mill, the Conoco Conquista Mill and the Chevron Pannamaria Mill. This paper included in Appendix 6 concludes that these operations did not increase cancer mortality among members of the public in Karnes County, Texas as compared to those in four (4) control counties.
- *A cohort study of uranium millers and miners of Grants, New Mexico, 1979–2005 Boice, J.D., et al, 2008 JOURNAL OF RADIOLOGICAL PROTECTION*
    - This paper concludes, "*No statistically significant elevation in any cause of death was seen among the 904 non-miners employed at the Grants uranium mill. Among 718 mill workers with the greatest potential for exposure to uranium ore, no statistically significant increase in any cause of death of a priori interest was seen, i.e., cancers of the lung, kidney, liver, or bone, lymphoma, non-malignant respiratory disease, renal disease or liver disease. Although the population studied was relatively small, the follow-up was long (up to 50 yrs) and complete.*
    - This paper included in Appendix 7 examined among other things a cohort of 718 uranium millers, a maximally exposed group, concluding that there was no statistically significant increase in cancers of *a priori* interest. This area contained a number of licensed uranium recovery facilities including the Bluewater, L-Bar, Homestake/United Nuclear Partners, United Nuclear-Churchrock and Ambrosia Lake mills.

<u>Kennecott Uranium Company requests that the Agency consider the following paper included in Appendix 8:</u>

- *Five-Hundred Life-Saving Interventions and Their Cost-Effectiveness Tengs, T.O., 1995 Risk Analysis. Vol. 15, No. 3. I995*
  - This paper included in Appendix 8 discusses the cost effectiveness of various life saving interventions in terms of dollars per year of life saved. This paper shows that radionuclide emission controls at Nuclear Regulatory Commission (NRC) licensed and uranium fuel cycle facilities are among the highest cost interventions per year of life saved as shown below:

881	Radionucfide emission control at NRC-licensed and non-DOE facilities	$2,600,000,000
881	Radionuclide emission control at uranium fuel cycle facilities	$34,000,000,000

Regulatory interventions to further reduce exposures and resulting dose and risk are very costly. Such monies would yield greater improvements in the quality of life and longevity if spent elsewhere.

In conclusion, the evidence as presented in these above described appendices shows that the risks from radiation in general, and in particular from licensed uranium recovery operations, are low. These papers also contradict the concept that any incremental increase in radiation dose at low levels is accompanied by increased risk and a higher mortality rate.

C. Issue 3—Radionuclide Release Limits. The Agency has established individual limits for release of specific radionuclides of concern. Based on a concept known as collective dose, these standards limit the total discharge of these radionuclides to the environment. The Agency is seeking input on: Should the Agency retain the radionuclide release limits in an updated rule and, if so, what should the Agency use as the basis for any release limits?

Kennecott Uranium Company requests that the Agency should not, if revising the regulation, use any release limits, but only consider dose to individual members of the general public. Just because a radionuclide is released into the environment does not mean that it will results in a dose to an individual and an associated risk. In order for an individual to receive a dose from a radionuclide, there must be a pathway by which that individual can be exposed. If there is no pathway for exposure to occur there will be no dose and no associated risk. Licensed uranium recovery facilities are often in highly remote areas with members of the public residing at considerable distances, which greatly reduces the pathway for exposure to occur.

The Agency should not use collective doses. In a letter dated January 11, 2007 from the Advisory Committee on Nuclear Waste included in Appendix 1, entitled REPORT *OF THE FRENCH ACADEMY OF SCIENCES, "THE DOSE-EFFECT RELATIONSHIP AND ESTIMATING THE CARCINOGENIC EFFECTS OF LOW DOSES OF IONIZING RADIATION"* and included in Appendix 1, collective dose is discussed. The letter states, *"...collective dose is useful as a management tool for work planning and assessing worker exposure (ALARA), but should not be used as a risk assessment tool. Cancer risks for individuals or groups cannot be estimated using collective dose, nor can potential future cancer risk be projected from estimates of dose."*

Collective dose should not be used.

D. Issue 4—Water Resource Protection. How should a revised rule protect water resources?

Ground water at licensed uranium recovery facilities is already protected by 40 CFR Part 192, Subparts D and E (48 FR 45926; October 7, 1983) which apply during operations and prior to the end of closure of the operation and by the Nuclear Regulatory Commission's (NRC's) conforming regulations in 10 CFR Part 40 Appendix A Criterion 5A to 5D, Criterion 7A and Criterion 13.
Groundwater related to licensed uranium recovery operations is already adequately protected and thoroughly regulated via the following regulations:

- 40 CFR Part 192 – Subpart D – Standards for Management of Uranium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954 as amended
- 10 CFR Part 40 Appendix A Criterions 5, 7 and 13 – Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction of Concentration of Source Material from Ores Processed Primarily for their Source Material Content
- 40 CFR Part 144 – Underground Injection Control Program – (Applies to in-situ uranium recovery operations)

Further regulation of groundwater at uranium recovery sites is not necessary.

F. Issue 6: New Nuclear Technologies—What new technologies and practices have developed since 40 CFR part 190 was issued, and how should any revised rule address these advances and changes?

The nuclear industry in the United States has largely stagnated since 40 CFR Part 190 was promulgated,; ie no new technologies have materially changed the US nuclear fuel cycle since 1977. In 1977, when the rule was written, an attempt was made to design the rule for future growth of the nuclear industry in the United States, specifically to address doses from a nuclear power generation industry predicted to expand from 8% of nation's energy mix to 40 – 60% and a domestic spent fuel reprocessing industry. The nation's nuclear reactors only generate 19.4% of the nation's electricity and there is no large scale commercial spent fuel reprocessing industry in the United States. Given the inability to successfully predict the status of the United State's nuclear industry in 2014 in 1977 (thirty-six (36) years earlier), there is no compelling reason to attempt to create a regulation that will address technologies that may not mature in the future. Such technologies include the development of a thorium fuel cycle, new reactor designs or small modular reactors. These can readily be addressed if and when they develop commercially.

In conclusion, Kennecott Uranium Company believes that given the present state of the nuclear industry in the United States, including the existing regulations described above, there no longer is a need for 40 CFR Part 190. Should the Agency, however, decide that the regulation is still required and proceed with modifying the existing regulation, Kennecott Uranium Company requests that the Agency consider new information from the French Academy of Sciences, as well as recent publications described above that show that at the low doses being addressed by 40 CFR Part 190, there does not appear to be the associated incremental increases in risk associated with increases in dose that form the basis of the Linear No Threshold (LNT) model used in the United States to relate dose to risk.

Kennecott Uranium Company appreciates the opportunity to comment on this Advanced Notice of Proposed Rulemaking. If you have any questions please do not hesitate to contact me.

Sincerely yours,

Oscar A Paulson

Oscar Paulson
Facility Supervisor

cc: Rich Atkinson
Katie Sweeney