AREVA

10 CFR 70.5

November 23, 2009

AES-O-NRC-09-00200-0

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

AREVA Enrichment Services LLC
Eagle Rock Enrichment Facility
NRC Docket No: 70-7015

Subject: Supplemental Response AREVA Enrichment Services LLC Environmental Report for the Eagle Rock Enrichment Facility; Preconstruction Activities Supplemental Information; and Other Matters – Amount of Uranium in Liquid Waste Effluents, Treated Domestic Sanitary Wastewater Sampling, and Liquid Effluent Collection and Treatment System Evaporator Sediment Sampling.

On April 23, 2009, AREVA Enrichment Services LLC (AES) submitted a revised License Application to the U.S. Nuclear Regulatory Commission (NRC) to construct and operate the Eagle Rock Enrichment Facility (EREF) in Bonneville County, Idaho (Ref. 1).

On September 14, 2009, the NRC transmitted to AES Requests for Additional Information (RAI) for the AES exemption request related to commencement of construction (Ref. 2). On October 15, 2009, AES submitted the response to the NRC RAIs related to commencement of construction (Ref. 3). Subsequently, the NRC requested additional information regarding the AES response. Enclosure 1.1 provides the AES response to the additional information regarding preconstrucion activities requested by the NRC. Enclosure 2.1 provides the markup pages of the EREF ER.

On August 10, 2009, the NRC transmitted to AES RAIs regarding the EREF Environmental Report (ER) (Ref. 4). On September 9, 2009, AES submitted the response to the NRC ER RAIs (Ref. 5). Subsequently, the NRC requested additional information regarding other matters including the amount of uranium in liquid waste effluents, treated domestic sanitary wastewater sampling, and Liquid Effluent Collection and Treatment System evaporator sediment sampling. Enclosure 1.2 provides the AES response regarding the amount of uranium in liquid waste effluent. There are no markup pages to the EREF ER for this response. Enclosure 1.3 provides the AES response regarding treated domestic sanitary wastewater sampling. Enclosure 2.2 provides the markup pages of the EREF ER. Enclosure 1.4 provides the AES response regarding Liquid Effluent Collection and Treatment System evaporator sediment sampling. Enclosure 2.3 provides the markup pages of the EREF ER.

AREVA ENRICHMENT SERVICES LLC
Solomon Pond Park - 400 Donald Lynch Boulevard, Marlborough, MA 01752
Tel. : 508 229 2100 - Fax : 508 573 6610 - www.areva.com

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Enclosures 2.1, 2.2, and 2.3 provide markup pages for the EREF ER. The EREF License Application will be revised to include the markups of the Environmental Report provided in Enclosures 2.1, 2.2, and 2.3 in Revision 2 of the EREF License Application.

If you have any questions regarding this submittal, please contact me at (508) 573-6554.

Respectfully,

Jim A. Kay
Licensing Manager

References:

1) S. Shakir (AES) Letter to the U.S. Nuclear Regulatory Commission, Revision 1 to License Application for the Eagle Rock Enrichment Facility, dated April 23, 2009.
2) B. Reilly (U.S. Nuclear Regulatory Commission) Letter to Jim Kay, Licensing Manager, Eagle Rock Enrichment Facility, AREVA Enrichment Services LLC, Request for Additional Information for AREVA Enrichment Services Eagle Rock Enrichment Facility, Exemption Request Related to Commencement of Construction, dated September 14, 2009.
3) J. Kay (AES) Letter to the U.S. Nuclear Regulatory Commission, Response to Requests for Additional Information – AES Eagle Rock Enrichment Facility Exemption Request Related to Commencement of Construction (TAC L32730), dated October 15, 2009.
4) B. Reilly (U.S. Nuclear Regulatory Commission) Letter to Jim Kay, Licensing Manager, Eagle Rock Enrichment Facility, AREVA Enrichment Services LLC, Request for Additional Information - AREVA Enrichment Services LLC Environmental Report for the Eagle Rock Enrichment Facility, dated August 10, 2009.
5) J. Kay (AES) Letter to the U.S. Nuclear Regulatory Commission, Response to Requests for Additional Information – AREVA Enrichment Services LLC Environmental Report for the Eagle Rock Enrichment Facility, dated September 9, 2009.

Enclosures:

1) Responses to NRC Supplemental Requests for Additional Information
2) Marked up Pages for the EREF Environmental Report

Commitments:

The EREF License Application will be revised to include the markups of the Environmental Report provided in Enclosures 2.1, 2.2, and 2.3 in Revision 2 of the EREF License Application.

CC:
Breeda Reilly, U.S. NRC Senior Project Manager
Steve Lemont, U.S. NRC Senior Project Manager

PRECONSTRUCTION ACTIVITIES

NRC Questions:

1. It seems odd that only 10% of the Air Quality impacts (which are primarily impacts from fugitive dust emissions overall) are assumed to occur during preconstruction when most of the earthmoving will be conducted during the preconstruction activities. Land Use and Geology and Soils both show preconstruction impacts to be 95% as might be expected.

2. For Ecological resources, 95% of the impacts were assumed to occur during preconstruction. This assumption is based on land disturbance. However, noise impacts during construction activities can also have a significant impact, especially since these latter activities will occur over a longer time period.

3. Use of time duration for assigning transportation impacts between preconstruction and construction is not appropriate. The level of impact is dependent on the number of average additional vehicle trips on a daily, weekly, or monthly basis caused by the action as well as the time duration.

4. Waste management impacts are primarily based on the volume of different types of waste generated from a particular action. Since preconstruction and construction activities will be significantly different, the relative amount and types of waste will be different. Therefore, separation of preconstruction and construction impacts on a time basis is not appropriate.

5. Separation of preconstruction and construction impacts on a time basis is also not appropriate for Socioeconomics and Public and Occupational Health. In both cases, impacts are strongly associated with the number of workers involved as well as the timeframe.

AES Response:

The following responses are provided for the five questions:

1. The previous estimated impact looked only at construction duration. As discussed during the conference call with the NRC Staff on November 13, 2009, fugitive dust emissions will peak during pre-construction activities during topsoil removal and stock piling. It is estimated that 20 % of the dust emissions will occur during this period with another peak occurring at the end of heavy construction during final site grading and removal of any remaining stock piles.

2. Loss of habitat is the major impact to ecological sources. In addition, noise and fugitive emissions also impact neighboring habitat for both local community and migratory species. The impact from loss of habitat due to site ground disturbance accounts for 95% of the ecological impact with noise and fugitive emissions accounting for 20% of the impact during the pre-construction period.

3. Transportation impacts were reevaluated based on the number of construction workers present, truck shipments and construction period duration. Based on the percentage of

pre-construction workers compared to the peak number of workers estimated on site related to all phases of development for EREF, and the approximate number of truck deliveries and waste shipments per day, it is estimated that 60% of the impact to transportation will occur during pre-construction. Environmental Tables 3.4-15, 3.4-16, 4.2-3 and 4.2-4 provide the basis for the number of construction workers, truck deliveries and waste shipments per construction year. The first year of construction activities provided in these tables is representative of pre-construction activities.

4. The types of wastes generated during pre-construction including vehicle and heavy construction equipment maintenance wastes (petroleum products) and solid waste from packing materials will be similar to that generated during construction. However, construction wastes will also include wastes such as waste paints, solvents, thinners, organics, adhesives, resins, sealers, caulking and pesticides have greater toxicity. These wastes will likely be classified as hazardous wastes. See ER Section 3.12.2.2. The annual volume of wastes generated during construction will also be greater. The receipt of components, building materials, equipment, supplies and other material needed for construction will involve the generation of a greater volume of solid wastes from packaging materials than during preconstruction. Efforts to recycle these wastes as appropriate will be implemented.

   Based on the preliminary schedule to initiate many of the construction activities early on, the impact from waste during pre-construction will account for an estimated 10 % of the total impact. Waste during this time period will mainly consist of petroleum products generated during vehicle and equipment maintenance activities, packing material, paper and scrap lumber. Metal waste from scrap rebar and sheet metal will only account for a small fraction of the waste during this period and will increase significantly during the construction period. Soil and rock stock piles are not expected to be removed from the site during the pre-construction period.

5. The Socioeconomics and Public and Occupational Health impacts are based on the percentage of pre-construction workers compared to the peak number of workers estimated on site related to all phases of development for EREF associated with construction duration. This impact is estimated to be 60% during pre-construction consistent with the impact for Transportation.

The previous response sent in the AES October 15, 2009 letter to the NRC (Ref. 3) has been superseded by this response.

Associated EREF License Application Revisions:

The EREF License Application will be revised as follows to incorporate this RAI response:

ER Section 8.5 will be revised to add a discussion on the pre-construction versus construction environmental impacts along with a new table showing the degree of impact in each category analyzed in the Environmental Report.

Commitments:

The EREF License Application will be revised to include the markups to ER Section 8.5 and Table 8.5-1 provided in Enclosure 2.1 in Revision 2 of the EREF License Application.

AMOUNT OF URANIUM IN LIQUID WASTE EFFLUENTS

NRC Question:

The NEF [National Enrichment Facility] EIS provides estimates of the amount of uranium in liquid waste effluents, but the EREF does not have similar values.

AES Response:

The estimate of the amount of uranium in liquid waste effluents is not provided for the EREF because the EREF does not discharge liquid effluent to an evaporative basin like the NEF. The EREF liquid effluents are sent to an evaporator for vaporization and final discharge to the atmosphere (refer to ER 3.12.1.3).

ER Table 3.12-4, Estimated Annual Liquid Effluent, provides the annual Total Effluent Discharged to Atmosphere by Evaporation via Liquid Effluent System Evaporator, and includes the estimated annual atmosphere distillate release of uranium in ER Table 3.12-4, Footnote 2. As stated in ER Table 3.12-4, Footnote 2: "Total annual effluent to atmosphere by evaporation via liquid effluent system evaporator is approximately 59,100 L (15,625 gal) with total uranic input approximately 114 kg (251 lb). Effluents are treated to remove uranic content by precipitation, filtration, and evaporation and discharged to atmosphere. The anticipated atmospheric distillate release is expected to be < 0.0356 g/yr (1.26E-03 oz/yr) of total uranium. The EREF design precludes operational process discharges from the plant to surface or groundwater."

Associated EREF License Application Revisions:

The response to the RAI does not require any changes or additions to be made to the EREF License Application.

Commitments:

None

TREATED DOMESTIC SANITARY WASTEWATER SAMPLING

NRC Question:

For use in the Monitoring section write-up of the EIS, it's not clear where the treated domestic sanitary wastewater samples would be collected. Please clarify.

AES Response:

The Domestic Sanitary Sewage Treatment Plant is not intended to process any uranium bearing waste waters from the EREF. In order to ensure that no incidental contamination is introduced into the sanitary waste effluents from the plant, semi-annual samples of both treated solid residues and clarified liquid effluents will be collected at the Domestic Sanitary Sewage Treatment Plant and analyzed for uranium isotopic content. The analysis of the treated solid fraction of the sanitary sewage will identify insoluble uranic materials that would have been concentrated in the sewage treatment process. Analysis of the liquid fraction of the effluent being discharged from the treatment plant will look for any soluble uranic content in the treatment plant in a location before the processed waste water is introduced into the Cylinder Storage Pads Storm Water Retention Basins.

If plant related uranium radioactivity is detected in either the solid or liquid fraction of the sewage treatment plant effluent, an investigation to identify the source of the contamination will be initiated immediately and corrective actions implemented to preclude additional contamination being released to the Domestic Sanitary Sewage Treatment Plant.

ER Table 6.1-3, Radiological Environmental Monitoring Program, will be revised to clarify the sampling and analysis of Domestic Sanitary Sewage Treatment Plant effluents.

Associated EREF License Application Revision:

The EREF License Application will be revised as follows:

- ER Table 6.1-3 will be revised to clarify the sampling and analysis of Domestic Sanitary Sewage Treatment Plant effluents.

Commitment:

The EREF License Application will be revised to include the ER Table 6.1-3 markups provided in Enclosure 2.2 in Revision 2 of the EREF License Application.

LIQUID EFFLUENT COLLECTION AND TREATMENT SYSTEM EVAPORATOR SEDIMENT SAMPLING

NRC Question:

Also for the Monitoring section [write-up of the EIS], will sediment in the treatment system [Liquid Effluent Collection and Treatment System] evaporator be sampled periodically?

AES Response:

Prior to the final evaporation treatment stage, liquid wastes have undergone two stages of precipitation and filtration to remove the substantial portion of uranium content in the process water. Liquid feed to the evaporator is performed on a batch basis and comes from the 5 m^3 (1,320 gal) filtrates collection tank downstream of the fluorine filtration stage. Liquid samples are taken from this collection tank and analyzed for uranium content and fluorine concentration to determine if the processed liquid needs to be recycled through the treatment system before being fed to the final evaporator process stage. The evaporator concentrates will be sampled and analyzed for isotopic uranium content for each batch of waste bottoms generated by the evaporator.

The final selection of evaporator type will be made during detail design of the Liquid Collection and Treatment System. The sample extraction point from the evaporator concentrates stream will be determined as part of the design detail.

ER Section 3.12.2.1.2.8 will be revised to clarify the sampling and analysis of evaporator concentrates for isotopic uranium content for each batch of waste bottoms generated by the evaporator.

Associated EREF License Application Revision:

The EREF License Application will be revised as follows:

- ER Section 3.12.2.1.2.8 will be revised to clarify the sampling and analysis of evaporator concentrates for isotopic uranium content for each batch of waste bottoms generated by the evaporator.

Commitment:

The EREF License Application will be revised to include the ER Section 3.12.2.1.2.8 markup provided in Enclosure 2.3 in Revision 2 of the EREF License Application.

PRECONSTRUCTION ACTIVITIES

Markup Pages of the EREF Environmental Report

LIST OF TABLES

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earthwork will likely be the period of highest emissions with the greatest number of construction vehicles operating on an unprepared surface. However, no more than 14% of the site, or about 240 ha (592 acres), will be involved in this type of work. Airborne dust will be controlled through the use of BMPs such as surface water sprays (when required), by ensuring trucks' loads and soil piles are covered, and by promptly removing construction wastes from the site. The application of water sprays for dust suppression will be applied only when required so that water resources can be conserved to the maximum extent possible.

Construction of the EREF is expected to have generally positive socioeconomic impacts on the region. No radioactive releases (other than natural radioactive materials, for example, in soil) will result from site development and facility construction activities.

⇒ Insert for Section 8.5

Insert at the End of ER Section 8.5:

Pre-construction activities are those that are not considered construction activities under the definition of construction currently provided in 10 CFR 51.4. AES considers the following activities and facilities as pre-construction:

- Clearing the site
- Site grading and erosion control
- Excavating the site including rock blasting and removal
- Installing parking areas
- Constructing the storm water detention pond
- Constructing highway access roadways and site roads
- Installing utilities (e.g., temporary and permanent power) and storage tanks
- Installing fences for investment protection (not used to implement the Physical Security Plan)
- Installing construction buildings, offices (including construction trailers), warehouses and guardhouses

Table 8.5-1 provides estimates of the percentage of impacts attributable to pre-construction and construction activities as well as a summary of the basis for the estimates and a qualitative impact significance level.

The estimated pre-construction and construction related impacts presented in the table were based on the following factors:

- Construction Area - The area that will be impacted for pre-construction and construction activities is estimated to be approximately 240 ha (592 acres) which includes 53.6 ha (132.5 acres) used for temporary construction activities. It is assumed that pre-construction activities of clearing, grubbing and site preparation will impact 95% of the land area to be occupied by both pre-construction and construction structures and activities.

- Construction Duration – Pre-construction activities (i.e., work that can be performed without any prior NRC approval) is estimated to occur during the first 8 months or approximately 10% of the 84 month construction schedule.

- Construction Workforce – The pre-construction workforce is approximately 60%, which the percentage of pre-construction workers compared to the peak number of workers estimated on site related to all phases of EREF site development.

- Water Usage - The quantity of water to be used for pre-construction is estimated to be 10% of the total construction water requirements based on ER Table 3.4-15 and additional information. Pre-construction activities were assumed to use eight months of Year 1 (2011) water usage to align with the assumption that pre-construction activities comprise 10% of the construction duration.

The qualitative significance levels in Table 8.5-1, denoted as SMALL, MODERATE, or LARGE, were assigned based on deployment and effective implementation of mitigation measures and controls required by local, state and federal regulations. The significance levels are defined in 10 CFR 51, Subpart A, Appendix B, Table B-1, Footnote 3:

- SMALL - Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
- MODERATE - Environmental effects are sufficient to alter noticeably, but not to destabilize, any important attribute of the resource.
- LARGE - Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

Table 8.5-1: Summary of Pre-construction and Construction Related Impacts

Potential Impact (ER Section Reference)	Significance[a]	Estimated Impacts (%)		Basis of Estimate
		Pre-Construction[b]	Construction	
Land Use (Section 4.1 and 5.1.1)	SMALL	95	5	Based on the proposed EREF site area of 240 ha (592 ac), including the temporary area of 53.6 ha (132.5 ac), being disturbed during pre-construction and construction activities. Greater than 80% of the property would remain undeveloped and current activities on nearby properties would not change.
Transportation (Section 4.2 and 5.1.2)	MODERATE	60	40	Based on the percentage of pre-construction workers compared to the peak number of workers estimated on site related to all phases of development for EREF, as listed in ER Tables 3.4-15 and 3.4-16, and the approximate number of truck deliveries and waste shipments per day as listed in ER Tables 4.2-3 and 4.2-4. Impact due to increased highway traffic associated with construction duration.

Potential Impact (ER Section Reference)	Significance[a]	Estimated Impacts (%)		Basis of Estimate
		Pre-Construction[b]	Construction	
Geology and Soils (Section 4.3 and 5.1.3)	SMALL	95	5	Geology impacts based on pre-construction land use, during which the majority of blasting may occur to develop foundations. Greater than 80% of the property would remain undeveloped and current activities on nearby properties would not change. Soils impacts based on the pre-construction area impacted as described previously in Land Use. Potential short-term erosion during pre-construction, but enhanced afterward due to soil stabilization.
Water Resources (Section 4.4 and 5.1.4)	SMALL	10	90	Based on the quantity of water to be used during pre-construction being 10% of the total water requirement, as shown in ER Table 3.4-15.
Ecological Resources (Section 4.5 and 5.1.5)	SMALL	95	5	Based on the pre-construction area impacted, as described previously in Land Use, and the effects of noise and fugitive emissions occurring principally during pre-construction. Impact is to both local community and migratory species.

Potential Impact (ER Section Reference)	Significance[a]	Estimated Impacts (%)		Basis of Estimate
		Pre-Construction[b]	Construction	
Air Quality (Section 4.6 and 5.1.6)	SMALL	20	80	Based on fugitive dust emissions, of which approximately 20% are expected during pre-construction, with the remainder occurring evenly for the remainder of the planned construction duration.
Noise (Section 4.7 and 5.1.7)	SMALL	20	80	Based on approximately 20% percent of noise, due to earth-moving equipment and blasting, occurring during pre-construction, with the remainder occurring evenly over the planned construction duration.
Historic and Cultural Resources (Section 4.8 and 5.1.8)	SMALL	95	5	Based on the percentage of the pre-construction area impacted during pre-construction estimated to be 95%, as described previously in Land Use, with potential historic properties being identified and mitigation plans established prior to land clearing and other pre-construction activities.
Visual/Scenic Resources (Section 4.9 and 5..19)	SMALL	10	90	Based on the assumption that aesthetic and scenic quality impacts will be small during pre-construction.
Socioeconomic (Section 4.10 and 5.1.10)	SMALL	60	40	Based on the percentage of pre-construction workers compared to the peak number of workers estimated on site related to all phases of development for EREF. Impact due to increased number of people associated with construction duration.

Potential Impact (ER Section Reference)	Significance[a]	Estimated Impacts (%)		Basis of Estimate
		Pre-Construction[b]	Construction	
Environmental Justice (Section 4.11 and 5.1.11)	SMALL	10	90	Based on the planned 84 months of construction, of which approximately 10% is for pre-construction.
Public and Occupational Health (Section 4.12 and 5.1.12)	SMALL	60	40	Based on the percentage of pre-construction workers compared to the peak number of workers estimated on site related to all phases of development for EREF.
Waste Management (Rad/NonRad) (Section 4.13 and 5.1.13)	SMALL	10	90	Based on the estimated waste type and volume, as described in ER Section 3.12.2.2, during the planned 84 months of construction, of which approximately 10% occurs during pre-construction.

Notes:

a) The qualitative significance levels of SMALL, MODERATE, or LARGE have been assigned based on 10 CFR 51, Subpart A, Appendix B, Table B-1, Footnote 3:

- SMALL - Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
- MODERATE - Environmental effects are sufficient to alter noticeably, but not to destabilize, any important attribute of the resource.
- LARGE - Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

b) "Construction," as defined in 10 CFR 50.2 "Definitions" refers to the construction of "safety-related structures, systems, or components (SSCs) of a facility". For the EREF, construction is defined as work that can only be performed with the issuance of the NRC Materials License.

TREATED DOMESTIC SANITARY WASTEWATER SAMPLING

Markup Page of the EREF Environmental Report

Table 6.1-3 Radiological Environmental Monitoring Program
(Page 1 of 1)

Sample Type/Location	Minimum Number of Sample Locations	Sampling and Collection Frequency	Type of Analysis
Continuous Airborne Particulate	5	Continuous operation of air sampler with sample collection as required by dust loading but at least biweekly. Quarterly composite samples by location.	Gross beta/gross alpha analysis each filter change. Quarterly isotopic analysis on composite sample.
Vegetation	9	1 to 2-kg (2.2 to 4.4-lb) samples collected semiannually	Isotopic analysis [a]
Groundwater	10	4-L (1.06-gal) samples collected semiannually	Isotopic analysis [a]
Basins	1 from each of 3 basins [b]	4-L (1.06-gal) water sample/1 to 2-kg (2.2 to 4.4-lb) sediment sample collected quarterly	Isotopic analysis [a]
Soil	9	1 to 2-kg (2.2 to 4.4-lb) samples collected semiannually	Isotopic analysis [a]
Domestic Sanitary Sewage Treatment Plant	1	~~1 to 2-kg (2.2 to 4.4-lb) solid fraction sample semiannually~~ 4-L (1.06-gal) water fraction/1 to 2-kg (2.2 to 4.4-lb) solid fraction; samples collected semiannually [c]	Isotopic analysis [a]
TLD	18	Quarterly	Gamma and neutron dose equivalent

Notes:

[a] Isotopic analysis for Uranium.

[b] Site Stormwater Detention Basin and Cylinder Storage Pads Stormwater Retention Basins.

Note: Physiochemical monitoring parameters are addressed separately in ER Section 6.2, Physiochemical Monitoring.

[c] Both treated residual solids and clarified liquids are collected from the Domestic Sanitary Sewage Treatment Plant.

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LIQUID EFFLUENT COLLECTION AND TREATMENT SYSTEM EVAPORATOR SEDIMENT SAMPLING

Markup Page of the EREF Environmental Report

to determine the quantity of uranium present, packaged, labeled, and shipped either to a CVRF or a radioactive waste disposal facility.

Metallic items containing hazardous materials are collected at the location of the hazardous material. The items are wrapped to contain the material and taken to the Solid Waste Collection Room.

The items are then cleaned onsite if practical. If onsite cleaning cannot be performed then the items are sent to a hazardous waste processing facility for offsite treatment or disposal.

3.12.2.1.2.7 Laboratory Waste

Small quantities of dry solid hazardous wastes are generated in laboratory activities, including small amounts of unused chemicals and materials with residual hazardous compounds. These materials are collected, sampled, and stored in the Solid Waste Collection Room.

Precautions are taken when collecting, packaging, and storing these wastes to prevent accidental reactions. These materials are shipped to a hazardous waste processing facility where the wastes will be prepared for disposal.

Some of the hazardous laboratory waste may be radioactively contaminated. This waste is collected, labeled, stored, and recorded as mixed waste. This material is shipped to a licensed facility qualified to process mixed waste for ultimate disposal.

3.12.2.1.2.8 Evaporator

The evaporator concentrate will be sampled and analyzed for isotopic uranium content for each batch of waste bottoms generated by the evaporator.

Treated aqueous effluent is evaporated in an evaporator. Evaporation produces a chemically decontaminated gaseous effluent. The concentrate, composed of residual impurities, is periodically drained and constitutes a low volume liquid effluent that is removed, analyzed, processed, and disposed of.

3.12.2.1.2.9 Depleted UF_6

The enrichment process yields depleted UF_6 streams with assays of up to 0.4 $^{w}/_{o}$ ^{235}U. The approximate quantity and generation rate for depleted UF_6 is 15,270 MT (16,832 tons) per year. This equates to approximately 1,222 depleted uranium tails cylinders of UF_6 per year. The depleted uranium tails cylinders will be temporarily stored onsite before transfer to a processing facility for subsequent reuse or disposal. The depleted uranium tails cylinders are stored in the outdoor storage areas known as the Full Tails Cylinder Storage Pads.

The Full Tails Cylinder Storage Pads consist of outdoor storage areas with concrete saddles on which the cylinders rest. A mobile transporter transfers cylinders from the Blending, Sampling and Preparation Building to the Full Tails Cylinder Storage Pads. Depleted uranium tails cylinder transport between the Separations Building modules and the storage area is discussed in the Integrated Safety Analysis Summary Section 3.4.11.2, Cylinder Transport within the Facility. Refer to Section 4.13.3, Waste Disposal Plan, for information regarding the EREF depleted UF_6 management practices and the disposition plan for depleted uranium tails cylinders.

The potential environmental impacts from direct radiation exposure from the depleted uranium tails cylinders are described in Section 4.12.2.1.3, Direct Radiation Impacts. For the purposes of the dose calculation in that section, the Full Tails Cylinder Storage Pads have a capacity of 33,638 containers. A detailed discussion on the environmental impacts associated with the

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